

U.S. Department of Transportation

National Highway Traffic Safety Administration

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# 2017 FARS/CRSS Coding and Validation Manual

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# Introduction

NHTSA has collected motor vehicle traffic crash data since the early 1970s to support its mission to reduce motor vehicle traffic crashes, injuries, and deaths on our Nation's trafficways. The two data systems included in this Coding and Validation Manual are the **Fatality Analysis Reporting System** (FARS) and the **Crash Report Sampling System (CRSS)**.

#### FARS

FARS contains data derived from a census of fatal motor vehicle traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public and must result in the death of at least one person (occupant of a vehicle or a non-motorist) within 30 days of the crash. FARS was conceived, designed, and developed by the National Center for Statistics and Analysis (NCSA) of the National Highway Traffic Safety Administration in 1975 to provide an overall measure of highway safety, to help identify traffic safety problems, to suggest solutions, and to help provide an objective basis to evaluate the effectiveness of motor vehicle safety standards and highway safety programs.

#### CRSS

CRSS builds on the retiring, long running National Automotive Sampling System General Estimates System (NASS GES). CRSS is a sample of police-reported motor vehicle traffic crashes involving all types of motor vehicles, pedestrians, and cyclists, ranging from property-damage-only crashes to those that result in fatalities. CRSS is used to estimate the overall crash picture, identify highway safety problem areas, measure trends, drive consumer information initiatives, and form the basis for cost and benefit analyses of highway safety initiatives and regulations. The target population of the CRSS is all policereported traffic crashes of motor vehicles (motorcycles, passenger cars, SUVs, vans, light trucks, medium or heavy-duty trucks, buses, etc.). The CRSS target population is the same as the previous NASS GES target population.

# **Crash vs. Accident**

The National Highway Traffic Safety Administration (NHTSA) has adopted the policy to use the term *Crash*. Accordingly, the term *Crash* is used throughout this manual.

As used in this manual, *Crash* shall always refer to a **Motor Vehicle Traffic Accident** as rigorously defined in the <u>American National Standard Institute (ANSI) D16.1 – The Manual on Classification of Motor</u> <u>Vehicle Traffic Accidents (2007)</u>. Incidents or scenarios involving collision events, and those involving non-collision events, as defined in ANSI D16.1, are included.

Collision events include those involving a motor vehicle and fixed objects (poles, walls, buildings, barriers, bridge supports, etc.) and those involving a motor vehicle and non-fixed objects (pedestrians, animals, pedal cyclists, other motor vehicles, etc.).

Besides scenarios involving a collision, a crash also shall include non-collision scenarios such as the following:

- A single motor vehicle on a roadway catches fire
- A motor vehicle runs off of a trafficway and is immersed in a body of water
- An occupant of a motor vehicle is injured by falling from that vehicle while it is in motion or on a roadway
- An occupant of a motor vehicle is injured by shifting cargo or flying objects within that vehicle during emergency handling / braking
- A vehicle suffers damage from a pavement irregularity (loose plate, high manhole, pot hole, etc.)
- And others

Consult ANSI D16.1, Manual on Classification of Motor Vehicle Traffic Accidents (The ANSI Manual) for a more precise and complete presentation of these concepts. As a minimum, the following ANSI D16.1 terms should be well understood to properly select and classify cases for FARS and CRSS. The paragraph reference numbers from the ANSI Manual are provided to aid look-up.

- 2.2.1 Trafficway
- 2.4.1 Harmful Event
- 2.4.2 Deliberate Intent
- 2.4.3 Legal Intervention
- 2.4.4 Unstabilized Situation
- 2.4.5 Cataclysm
- 2.4.6 Accident
- 2.4.9 Transport Accident
- 2.4.12 Motor Vehicle Accident
- 2.4.17 Road Vehicle Accident
- 2.4.18 Traffic Accident
- 2.4.19 Non-traffic Accident
- 2.4.22 Motor Vehicle Traffic Accident

# 2017 FARS / CRSS Manual Changes Summary

Below is a list of elements that have substantial changes for 2017. These changes, as well as others, are highlighted throughout the manual by **bold/italic** type.

#### IT IS RECOMMENDED THAT YOU REVIEW THE ENTIRE MANUAL FOR ALL CHANGES

#### Intro Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>103</u>	FARS		Х	Global "PAR" and/or "accident" changes.
	Submission			
	Instructions			
<u>204</u>	<u>How to</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	Structure a Case			

#### **Crash Level Changes**

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>C4</u>	<u>Number of</u> <u>Vehicle Forms</u> <u>Submitted</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>C6 / C7</u>	<u>County / City</u>		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>C8</u>	<u>Crash Date</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>C9</u>	<u>Crash Time</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>C10</u>	<u>Trafficway</u> <u>Identifier</u>	X	Х	<ul> <li>Dated Note Removed</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Added Hyperlink to USPS standard abbreviations</li> <li>Added Remarks to clarify not to include punctuation at the end of the suffix abbreviation</li> </ul>
<u>C12</u>	Land Use and Functional System		Х	• Global "PAR" and/or "accident" changes.
<u>C13</u>	<u>Ownership</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>C16</u>	<u>Milepoint</u>		X	<ul> <li>Updated Remarks to clarify the Source information and to distinguish between Milepoints and Mile Posts</li> <li>Revised Remarks: 9999.8 (Not Reported)</li> </ul>
<u>C17</u>	Global Position		Х	<ul> <li>Global changes regarding "Not Reported"</li> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>C18</u>	<u>Crash Events –</u> <u>Areas of Impact</u> <u>(This Vehicle)</u>	Х		• New Attribute: 20 (Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other)

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>C18</u>	<u>Crash Events –</u> <u>Sequence of</u> <u>Events</u>	Х		<ul> <li>New Attribute: 91 (Unknown Object Not Fixed)</li> <li>New Attribute: 93 (Unknown Fixed Object)</li> </ul>
<u>C18</u>	<u>Crash Events –</u> <u>Areas of Impact</u> (Other Vehicle)	Х		<ul> <li>New Attribute: 20 (Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other)</li> </ul>
<u>C19</u>	<u>First Harmful</u> <u>Event</u>	X	X	<ul> <li>New Attribute and Remarks: <i>91 (Unknown Object Not Fixed)</i></li> <li>New Attribute and Remarks: <i>93 (Unknown Fixed Object)</i></li> <li>Revised Remarks: 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set in Motion from/by Another Motor Vehicle In-Transport)</li> <li>Dated Note Removed</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Removed Remarks "Guidelines for PAR Combination Attributes"</li> </ul>
<u>C20</u>	<u>Manner of</u> <u>Collision</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>C21</u>	Relation to Junction		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>C22</u>	<u>Type of</u> Intersection		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>C23</u>	<u>Relation to</u> <u>Trafficway</u>		X	<ul> <li>Revised Remarks: 01 (On Roadway)</li> <li>Revised Remarks: 04 (On Roadside)</li> <li>Global changes regarding "Not Reported"</li> <li>Revised Remarks: Default rules for the location of Ditches, Culverts, Embankments, and Fences.</li> </ul>
<u>C25</u>	Light Condition		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>C26</u>	<u>Atmospheric</u> <u>Conditions</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>C28</u>	Rail Grade Crossing Identifier		Х	Added Hyperlink to the Federal Railroad Administration Office of Safety Analysis
<u>C32</u>	Related Factors - Crash Level		Х	• Global "PAR" and/or "accident" changes.
<u>C33</u>	<u>Interstate</u> <u>Highway</u>		Х	• Global "PAR" and/or "accident" changes.
<u>C34</u>	<u>Stratum</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>C35</u>	Police Jurisdiction		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
	Additional State		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	<u>Information</u>			

## Vehicle Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>V3</u>	<u>Vehicle Number</u> – Vehicle Level		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>V4</u>	<u>Number of</u> Occupants		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>V5</u>	Unit Type		Х	• Global "PAR" and/or "accident" changes.
<u>V6</u>	<u>Hit-And-Run</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>V7</u>	<u>Registration</u> <u>State</u>	X	Х	<ul> <li>Revised Attribute and New Remarks: 98 (Other Registration (includes Native American Indian Nations)</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
	<u>Vehicle</u> <u>Make/Model</u> <u>Overview</u>		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>V9</u>	Vehicle Make		Х	<ul> <li>Removed Remarks regarding Hit-and-Run vehicles for 99 (Unknown Make)</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>V10</u>	<u>Vehicle Model</u>		Х	<ul> <li>New Attribute: 707 (Electric Motorcycle)</li> <li>Removed Remarks regarding Hit-and-Run Vehicles</li> <li>Global changes regarding "Not Reported"</li> </ul>

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>V11</u>	Body Type	X	X	<ul> <li>Removed Attribute and Remarks for <del>30 Compact Pickup</del></li> <li>Removed Attribute and Remarks for <del>31 Standard Pickup</del></li> <li>New Attribute and Remarks for <b>34 (Light Pickup)</b></li> <li>Revised Attribute Name and Remarks: 80 (<i>Two Wheel</i> Motorcycle <i>[excluding motor scooters]</i>)</li> <li>Revised Attribute Name and Remarks: 81 (Moped <i>or f</i> motorized bicycle)</li> <li>Revised Attribute Name and Remarks: 82 (Three-wheel Motorcycle <i>or Moped – not All Terrain Vehicle [2 Rear Wheels]</i>)</li> <li>Revised Attribute Name and Remarks: 83 (Off-road Motorcycle) <del>(2 wheel)</del></li> <li>New Attribute and Remarks for <i>84 (Motor Scooter)</i></li> <li>New Attribute and Remarks for <i>85 (Unenclosed Three Wheel Motorcycle / Unenclosed Autocycle [1 Rear Wheel]</i>)</li> <li>New Attribute and Remarks for <i>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle [1 Rear Wheel]</i>)</li> <li>New Attribute and Remarks for <i>87 (Unknown Three Wheel Motorcycle Type)</i></li> <li>Revised Attribute Name and Remarks: 88 (Other motored cycle type [mini-bikes, motor scooters, pocket motorcycles "pocket bikes"])</li> <li>Revised Remarks: 90 (ATV/ATC [All-Terrain Cycle])</li> <li>New Attribute and Remarks for <i>96 (Recreational Off-Highway Vehicle)</i></li> <li>Revised Remarks: 97 (Other Vehicle Type)</li> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>V12</u>	<u>Vehicle Model</u> Year		Х	<ul> <li>Global changes regarding "Not Reported"</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>V13</u>	Vehicle Identification Number		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> <li>Remove Remarks regarding Hit-and-Run for Unknown</li> </ul>
<u>V15</u>	<u>Trailer Vehicle</u> Identification <u>Number</u>		Х	<ul> <li>Global changes regarding "Not Reported"</li> <li>Global "PAR" and/or "accident" changes.</li> </ul>

## 2017 FARS / CRSS Manual Changes Summary

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
V16	Jackknif <u>e</u>	VALUES	X	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
V17	Motor Carrier		X	Global changes regarding "Not Reported"
	Identification			• Global "PAR" and/or "accident" changes.
	Number			• Revised Remarks: " <del>Buses</del> <b>Vehicles</b> with 9 or more
				seats (including the driver)" under qualifying vehicles.
				• Revised Remarks: 00/0s (Not Applicable)
				Revised Remarks: 88/8s (None)
				• Example removed from 99/9s (Unknown)
				• Revised Note under 77/7s (Not Reported)
<u>V18</u>	GVWR / GCWR			Global changes regarding "Not Reported"
				<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
				<ul> <li>Revised Remarks: 0 (Not Applicable)</li> </ul>
				<ul> <li>Revised Remarks: 1 (10,000 lbs. or less)</li> </ul>
				Dated Note Removed
<u>V19</u>	<u>Vehicle</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	Configuration			<ul> <li>Dated Note Removed</li> </ul>
				<ul> <li>Revised Remarks: 19 (Truck More Than 10,000</li> </ul>
				lbs., Cannot Classify)
				• Revised Remarks: 20 (Bus/Large Van [seats for 9-
				15 people, including driver])
				<ul> <li>Revised Remarks: 21 (Bus [seats for more than 15 occupants, including driver])</li> </ul>
<u>V20</u>	<u>Cargo Body</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	<u>Type</u>			<ul> <li>Revised Remarks: 01 (Van/Enclosed Box)</li> </ul>
				<ul> <li>Revised Remarks: 22 (Bus)</li> </ul>
				<ul> <li>Revised Remarks: 96 (No Cargo Body Type)</li> </ul>
				<ul> <li>Revised Remarks: 97 (Other)</li> </ul>
				Dated Note Removed
<u>V21</u>	Hazardous		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	Materials			Dated Note Removed
	Involvement/			
<u></u>	Placard Bus Use		X	• Clobal shanges regarding "Net Departed"
			X	Global changes regarding "Not Reported"     Clobal changes regarding "Not Reported"
<u>V23</u>	Special Use			Global changes regarding "Not Reported"     Clobal changes regarding "Not Reported"
<u>V24</u>	Emergency Motor Vehicle		X	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
	Use			
<u>V25</u>	Travel Speed		X	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>V25</u> V26	Underride/		X	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>v20</u>	<u>Override</u>			<ul> <li>Global PAR and/or accident changes.</li> <li>2 Dated Notes Removed</li> </ul>

## 2017 FARS / CRSS Manual Changes Summary

ELEMENT #	ELEMENT NAME	NEW/ REVISED	NEW/ REVISED	COMMENTS
		VALUES	REMARKS	
<u>V29</u>	Areas of Impact	Х	Х	<ul> <li>Revised Remarks: 14 (Undercarriage)</li> </ul>
	<u>– Initial Contact</u>			<ul> <li>New Remarks for Set-In-Motion Attributes</li> </ul>
	<u>Point</u>			<ul> <li>Revised Remarks:19 (Other Objects Set-in- Motion)</li> </ul>
				<ul> <li>New Attribute and Remarks: 20 (Object Set in Motion, Unknown if Cargo/Vehicle Parts or</li> </ul>
				Other)
				Global changes regarding "Not Reported"
<u>V29</u>	Areas of Impact		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	<u>– Damaged</u>			<ul> <li>Dated Note Removed</li> </ul>
	<u>Areas</u>			
<u>V30</u>	Extent of		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
	<u>Damage</u>			
<u>V31</u>	Vehicle Removal		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
				<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>V32</u>	Sequence of	Х	Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
	<u>Events</u>			<ul> <li>Revised general Remarks</li> </ul>
				<ul> <li>Revised Remarks: 61 (Equipment Failure)</li> </ul>
				<ul> <li>Revised Remarks: 63 (Fan Off Roadway – Right)</li> </ul>
				<ul> <li>Revised Remarks: 64 (Fan Off Roadway – Left)</li> </ul>
				<ul> <li>Revised Remarks: 79 (Ran Off Roadway – Direction Unknown)</li> </ul>
				Revised Remarks: 66 (Downhill Runaway)
				Revised Remarks: 54 (Motor Vehicle In-Transport
				Strikes or is Struck by Cargo, Persons, or Objects
				Set in Motion from/by Another Motor Vehicle In- Transport)
				Dated Note Removed
				• New Attribute and Remarks: <b>91 (Unknown Object</b> <b>Not Fixed)</b>
				<ul> <li>Removed Remarks "Guidelines for PAR Combination Attributes"</li> </ul>
				<ul> <li>New Attribute and Remarks: 93 (Unknown Fixed Object)</li> </ul>
<u>V33</u>	Most Harmful	Х	Х	Dated Note Removed
	Event			<ul> <li>New Attribute and Remarks: 91 (Unknown Object Not Fixed)</li> </ul>
				<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
				Removed Remarks "Guidelines for PAR
				Combination Attributes"
				<ul> <li>New Attribute and Remarks: 93 (Unknown Fixed Object)</li> </ul>
				<ul> <li>Revised Remarks: 99 (Unknown)</li> </ul>

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>V34</u>	<u>Related Factors</u> - Vehicle Level		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>

## **Driver Level Changes**

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>D5</u>	Driver's License	Х	Х	<ul> <li>This element is now a FARS Only element</li> </ul>
	<u>State</u>			<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>D6</u>	<u>Driver's Zip</u> <u>Code</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>D7</u>	Non-CDL License Type/Status		Х	• 2 Dated Notes Removed
<u>D14, D15,</u> <u>D16, D17,</u> <u>D18</u>	Driver Level Counters		Х	<ul> <li>Removal of Example Out-of-State Driver Data Response form and Remarks</li> </ul>
<u>D21</u>	<u>Violations</u> <u>Charged</u>		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>D22</u>	<u>Speeding</u> <u>Related</u>		Х	<ul> <li>Revised Remarks: 5 (Yes, Specifics Unknown)</li> </ul>
<u>D23/NM14</u>	<u>Condition</u> (Impairment) at <u>Time of Crash</u>	X	X	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> <li>Revised Attribute Name and Remarks: 04 (Paraplegic or Restricted to in a Wheelchair)</li> <li>Removed Remarks regarding Hit-and-Run Drivers for 99 (Unknown if Impaired)</li> </ul>
<u>D24</u>	<u>Related Factors</u> <u>- Driver Level</u>	X	X	<ul> <li>New Attribute and Remarks: 55 (Improper Management of Vehicle Controls [Specify:])</li> <li>New Attribute and Remarks: 56 (Object Interference with Vehicle Controls [Specify:])</li> <li>New Attribute and Remarks: 57 (Driving with Tire-Related Problems)</li> <li>New Attribute and Remarks: 60 (Alcohol and/or Drug Test Refused)</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Revised Remarks: 48 (Making Other Improper Turn)</li> </ul>

## Precrash Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
	<u>Precrash</u> <u>General Rules</u>		Х	<ul> <li>Revised Note regarding Pre-Impact Stability</li> </ul>
<u>PC4</u>	<u>Contributing</u> <u>Circumstances,</u> <u>Motor Vehicle</u>		x	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Revised Remarks: 01 (Tires)</li> <li>Revised Remarks: 09 (Other Lights)</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC5</u>	<u>Trafficway</u> <u>Description</u>	X	Х	<ul> <li>Revised Attribute Name and Remarks: 2 (Two-Way, Divided, Unprotected (Painted &gt;4 Feet) Median)</li> <li>Revised General Remarks regarding channelized lanes</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC6</u>	<u>Total Lanes in</u> <u>Roadway</u>		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC7</u>	Speed Limit		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC8</u>	<u>Roadway</u> <u>Alignment</u>		Х	<ul> <li>Revised General Remarks regarding channelized lanes</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC9</u>	Roadway Grade		Х	<ul> <li>Revised General Remarks regarding channelized lanes</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC10</u>	<u>Roadway</u> Surface Type		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
PC11	Roadway Surface Conditions		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC12</u>	Traffic Control Device		Х	<ul> <li>Revised Updates to General Remarks</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC13</u>	<u>Device</u> Functioning		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC14</u>	Driver's Vision Obscured By		Х	• Global "PAR" and/or "accident" changes.
<u>PC15</u>	Driver Maneuvered to Avoid		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>PC16</u>	Driver Distracted By		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> <li>Removed remarks regarding hit-and-run drivers from 99 (Unknown if Distracted)</li> </ul>
<u>PC18</u>	<u>Critical Event –</u> <u>Precrash</u> (Category)		Х	<ul> <li>Revised Remarks: 5 (Pedestrian or Pedalcyclist or Other Non-Motorist)</li> </ul>
<u>PC19</u>	<u>Critical Event –</u> Precrash (Event)		Х	<ul> <li>Revised Remarks: 83 (Pedalcyclist or Other Non- Motorist in Road)</li> </ul>
<u>PC20</u>	Attempted Avoidance Maneuver		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>PC21</u>	<u>Pre-Impact</u> <u>Stability</u>		Х	Revised Remarks: 9 (Precrash Stability Unknown)
<u>PC22</u>	Pre-Impact Location		Х	<ul> <li>Revised General Remarks</li> <li>Revised Remarks: 4 (Departed Roadway)</li> </ul>
<u>PC23</u>	<u>Crash Type</u>		Х	<ul> <li>Revised Remarks for Configuration C, and Crash Types 11, 12, 13, 14, 15, 16</li> <li>Global "PAR" and/or "accident" changes.</li> </ul>

## Person (Motor Vehicle Occupant) Level Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>P4/NM3</u>	Person Number		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>P5/NM5</u>	<u>Age</u>		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P6/NM6</u>	<u>Sex</u>		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P7</u>	Person Type		X	<ul> <li>Revised General Remarks</li> <li>New Remarks for 01 (Driver of a Motor Vehicle In- Transport)</li> <li>New Remarks for 02 (Passenger of a Motor Vehicle In-Transport)</li> <li>New Remarks for 03 (Occupant of a Motor Vehicle Not In-Transport)</li> </ul>
<u>P8/NM8</u>	Injury Severity		X	<ul> <li>Revised General Remarks</li> <li>Revised Remarks: 1 (Possible Injury)</li> <li>New Remarks for 5 (Injured, Severity Unknown)</li> <li>3 Dated Notes Removed</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P9</u>	Seating Position		X	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Revised Remarks: 52 (Other Passenger in Unenclosed Passenger or Cargo Area)</li> <li>Global changes regarding "Not Reported"</li> </ul>

## 2017 FARS / CRSS Manual Changes Summary

ELEMENT #	ELEMENT NAME	NEW/ REVISED	NEW/ REVISED	COMMENTS
		VALUES	REMARKS	
<u>P10</u>	<u>Restraint</u> <u>System / Helmet</u> <u>Use</u>	X	X	<ul> <li>Attribute and Remarks Removed: <del>00 (Not</del> <u>Applicable</u>)</li> <li>Attribute and Remarks Removed: <del>07 (None Used)</del></li> <li>New Attribute and Remarks: <b>20 (None Used / Not Applicable</b>)</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Note Removed from under 02 (Lap Belt Only Used)</li> <li>New Remarks: 04 (Child Restraint Type Unknown)</li> <li>Global changes regarding "Not Reported"</li> <li>2 Dated Notes Removed</li> </ul>
<u>P11</u>	Any Indication of Mis-Use of Restraint System/ Helmet Use		Х	<ul> <li>Revised Remarks: 0 (No)</li> <li>Revised Remarks: 1 (Yes)</li> </ul>
<u>P12</u>	<u>Air Bag</u> <u>Deployed</u>		X	<ul> <li>Attribute and Remarks Removed: <del>00 (Not</del> <u>Applicable</u>)</li> <li>Attribute and Remarks Removed: <del>28 (Switched Off)</del></li> <li>Revised General Remarks</li> <li>New Remarks: 01 (Deployed-Front)</li> <li>New Remarks: 02 (Deployed-Side (door, seatback))</li> <li>New Remarks: 03 (Deployed-Curtain (roof))</li> <li>New Remarks: 07 (Deployed-Other (knee, airbelt, etc.))</li> <li>Revised Remarks: 08 (Deployed-Combination)</li> <li>Revised Remarks: 09 (Deployment-Unknown Location)</li> <li>Revised Remarks for 98 (Not Reported)</li> <li>Global changes regarding "Not Reported"</li> <li>Revised Remarks: 99 (Deployment Unknown)</li> <li>Remarks Removed: FARS Special Instruction</li> </ul>
<u>P13</u>	Ejection		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P16/NM15</u>	Police Reported Alcohol Involvement		Х	Global "PAR" and/or "accident" changes.

ELEMENT #		NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>P17/NM16</u>	<u>Method of</u> <u>Alcohol</u> <u>Determination</u> <u>by Police</u>		X	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>P18/NM17</u>	<u>Alcohol Test</u> <u>Status</u>	X	Х	<ul> <li>Attribute and Remarks Removed: 1 (Test Refused)</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P18/NM17</u>	<u>Alcohol Test</u> <u>Type</u>		X	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Revised Remarks: Coding Hierarchy</li> <li>Revised Remarks: 02 (Breath Test[AC])</li> <li>Revised Remarks: 10 (Preliminary Breath Test [PBT])</li> <li>Global changes regarding "Not Reported"</li> </ul>
P18/NM17	<u>Alcohol Test</u> <u>Result</u>		Х	<ul> <li>Revised General Remarks</li> <li>Global changes regarding "Not Reported"</li> <li>2 Dated Notes Removed</li> <li>New examples added</li> <li>Revised Remarks: 998 (Positive Reading with No Actual Value)</li> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>P19/NM18</u>	Police Reported Drug Involvement		Х	Global "PAR" and/or "accident" changes.
<u>P20/NM19</u>	Method of Drug Determination by Police		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>P21/NM20</u>	Drug Test Status	X	X	<ul> <li>Attribute and Remarks Removed: 1 (Test Refused)</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P21/NM20</u>	Drug Test Type		X	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P21/NM20</u>	Drug Test Result		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>P22/NM21</u>	Transported to First Medical Facility by		X	<ul> <li>Updated General Remarks</li> <li>Revised Remarks: 0 (Not Transported)</li> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> <li>Dated Note Removed</li> <li>CRSS Special Instruction Removed</li> </ul>
<u>P26</u>	Related Factors - Person (MV Occ) Level	Х	Х	<ul> <li>New Attribute and Remarks: 10 (Alcohol and/or Drug Test Refused)</li> <li>Global "PAR" and/or "accident" changes.</li> </ul>

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>NM4</u>	Vehicle Number of Motor Vehicle Striking Non-Motorist	Х		• Revised Element Name
<u>NM7</u>	Person Type		Х	<ul> <li>Revised Remarks: 05 (Pedestrian)</li> <li>Revised Remarks: 06 (Bicyclist)</li> <li>Revised Remarks: 10 (Persons In/On Buildings)</li> </ul>
<u>NM9</u>	<u>Pedestrian/Bike</u> <u>Typing</u>		Х	<ul><li> Revised Definition</li><li> Revised Remarks</li></ul>
<u>NM10</u>	Non-Motorist Location at Time of Crash		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> <li>Global changes regarding "Not Reported"</li> </ul>
<u>NM11</u>	Non-Motorist Action/ Circumstances		Х	<ul> <li>Global changes regarding "Not Reported"</li> </ul>
<u>NM12</u>	Non-Motorist Contributing Circumstances		Х	<ul> <li>Global "PAR" and/or "accident" changes.</li> </ul>
<u>NM13</u>	<u>Non-Motorist</u> <u>Safety</u> <u>Equipment</u>	X	Х	• CHANGES TO STRUCTURE OF ELEMENT, ATTRIBUTES, AND REMARKS
<u>NM14/D23</u>	<u>Condition</u> (Impairment) at Time of Crash	X	Х	<ul> <li>Revised Attribute Name: 04 (Paraplegic or Restricted to in a Wheelchair)</li> </ul>
<u>NM17/P18</u>	<u>Alcohol Test</u> <u>Status</u>	X		<ul> <li>Attribute Removed: 1 (Test Refused)</li> </ul>
<u>NM20/P21</u>	Drug Test Status	Х		Attribute Removed: 1 (Test Refused)
<u>NM25</u>	Related Factors - Person (Not a <u>MV Occ) Level</u>	X	Х	<ul> <li>New Attribute and Remarks: 10 (Alcohol and/or Drug Test Refused)</li> </ul>

## Person (Not A Motor Vehicle Occupant) Level Changes

#### Supplemental Data Elements Changes

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
	Supplemental		Х	Removed Remarks regarding Coding Forms
	Data Elements			
	<u>Title page</u>			
<u>SP2</u>	<u>Fatal Injury at</u>		Х	<ul> <li>Removed Remarks regarding Coding Forms</li> </ul>
	<u>Work</u>			

ELEMENT #	ELEMENT NAME	NEW/ REVISED VALUES	NEW/ REVISED REMARKS	COMMENTS
<u>SP3</u>	<u>Race/ Hispanic</u> Origin	Х	Х	<ul> <li>Revised Attribute Name: 03 (American Indian (includes Alaska Native Aleuts and Eskimos))</li> </ul>
				Removed Remarks regarding Coding Forms

NEED HELP IN CODING? CONTACT NISR THROUGH THE CDAN HELPDESK

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definitions
<u>C1</u>	State Number	FARS Only	This element identifies the state in which the crash occurred.
<u>C2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>C3</u>	Number of Forms Submitted for Persons Not in MV	Case Structure	This element records the number of Person Level (Not a Motor Vehicle Occupant) forms that are applicable to this case.
<u>C4</u>	Number of Vehicle Forms Submitted	Case Structure	This element records all contact motor vehicles which the officer has reported on the <i>Police Crash Report</i> as a unit involved in the crash.
<u>C5</u>	<u>Number of Person Forms</u> <u>Submitted</u>	Case Structure	This element records the number of Person Level (Motor Vehicle Occupant) forms that are applicable to this case.
<u>C6</u>	<u>County</u>	FARS Only	This element refers to the location of the unstabilized event with regard to the County.
<u>C7</u>	City	FARS Only	This element refers to the location of the unstabilized event with regard to the City.
<u>C8</u>	Crash Date	FARS/CRSS Day – FARS Only	This element identifies the date on which the crash occurred.
<u>C9</u>	Crash Time	FARS/CRSS	This element identifies the time at which the crash occurred.
<u>C10</u>	Trafficway Identifier	FARS Only	This element captures the identity (name) of the trafficway on which the crash occurred.
<u>C11</u>	Route Signing	FARS Only	This element identifies the route signing of the trafficway on which the crash occurred.
<u>C12 (a/b)</u>	Land Use and Functional System	FARS Only	<ul> <li>Land Use: The classification of the segment of the trafficway on which the crash occurred based on FHWA-approved adjusted Census boundaries of small urban and urbanized areas.</li> <li>Functional System: This element identifies the functional classification of the segment of the trafficway on which the crash occurred.</li> </ul>

#### **Crash Level Elements**

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definitions
<u>C13</u>	<u>Ownership</u>	FARS Only	This element identifies the entity that has legal ownership of the segment of the trafficway on which the crash occurred.
<u>C14</u>	National Highway System	FARS Only	This element identifies whether or not this crash occurred on a trafficway that is part of the National Highway System.
<u>C15</u>	<u>Special Jurisdiction</u>	FARS Only	This element identifies if the location on the trafficway where the crash occurred qualifies as a Special Jurisdiction even though it may be patrolled by state, county, or local police (e.g., all State highways running through Indian reservations are under the jurisdiction of the Indian reservation).
<u>C16</u>	<u>Milepoint</u>	FARS Only	This element identifies the milepoint nearest to the location where the crash occurred.
<u>C17</u>	Global Position	FARS/CRSS	This element identifies the location of the crash using Global Position coordinates.
<u>C18</u>	Crash Events	FARS/CRSS	The Crash Events table records in chronological sequence, the set of events resulting from an unstabilized situation that constitutes a motor vehicle traffic crash.
<u>C19</u>	First Harmful Event	FARS/CRSS	The First Harmful Event is defined as the first injury or damage producing event of the crash.
<u>C20</u>	Manner of Collision	FARS/CRSS	This element identifies the orientation of two motor vehicles in-transport when they are involved in the First Harmful Event of a collision crash. If the First Harmful Event is not a collision between two motor vehicles in-transport it is classified as such.
<u>C21 (a/b)</u>	Relation to Junction	FARS/CRSS	The coding of this data element is done in two subfields and based on the location of the first harmful event of the crash. It identifies the crash's location with respect to presence in an interchange area and the crash's location with respect to presence in or proximity to components typically in junction or interchange areas.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definitions
<u>C22</u>	Type of Intersection	FARS/CRSS	This element identifies and allows separation of various intersection types.
<u>C23</u>	Relation to Trafficway	FARS/CRSS	This element identifies the location of the crash as it relates to its position within or outside the trafficway based on the First Harmful Event.
<u>C24</u>	<u>Work Zone</u>	FARS/CRSS	This data element captures that this was a "Work Zone Accident" as defined in <u>ANSI D16.1, 7th Edition</u> . If the crash qualifies as a "Work Zone Accident" then the type of work activity is identified.
<u>C25</u>	Light Condition	FARS/CRSS	This element records the type/level of light that existed at the time of the crash as reported in the case materials.
<u>C26</u>	Atmospheric Condition	FARS/CRSS	This element identifies the prevailing atmospheric conditions that existed at the time of the crash as recorded on the <i>Police Crash Report</i> .
<u>C27</u>	School Bus Related	FARS/CRSS	This data element indicates if a school bus, or motor vehicle functioning as a school bus, is related to the crash.
<u>C28</u>	Rail Grade Crossing Identifier	FARS Only	This element identifies if the crash occurred in or near a Rail Grade Crossing.
<u>C29</u>	Notification Time EMS	FARS Only	Notification Time EMS is the time Emergency Medical Service was notified.
<u>C30</u>	<u>Arrival Time EMS</u>	FARS Only	Arrival Time EMS is the time Emergency Medical Service arrived on the crash scene.
<u>C31</u>	EMS Time at Hospital	FARS Only	EMS Time at Hospital is the time Emergency Medical Service arrived at the treatment facility to which it was transporting victims of the crash.
<u>C32</u>	Related Factors - Crash Level	FARS/CRSS	This element identifies factors related to the crash expressed by the investigating officer.
<u>C33</u>	Interstate Highway	CRSS Only	This element identifies whether or not the crash occurred on an interstate highway. Interstate highway is a Federal Highway Administration classification.
<u>C34</u>	<u>Stratum</u>	CRSS Only	The CRSS stratum applicable to this <i>Police Crash Report</i> .
<u>C35</u>	Police Jurisdiction	CRSS Only	The number (range 1 through 120) of the police jurisdiction from which the <i>Police Crash Report</i> was originally sampled.

Vehicle Level Elements
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2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>V1</u>	State Number	FARS Only	This element identifies the state in which the crash occurred.
<u>V2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>V3</u>	Vehicle Number	Case Structure FARS/CRSS	This element identifies the number assigned to this vehicle in the crash.
<u>V4</u>	Number of Occupants	FARS/CRSS	This element identifies the number of occupants in each vehicle.
<u>V5</u>	Unit Type	FARS/CRSS	This element identifies the type of unit that applies to this motor vehicle at the time it became an involved vehicle in the crash and was reported as a unit on the <b>Police Crash Report.</b>
<u>V6</u>	<u>Hit-And-Run</u>	FARS/CRSS	This element refers to cases where a vehicle is a contact vehicle in the crash and does not stop to render aid (this can include drivers who flee the scene on foot).
<u>V7</u>	Registration State	FARS Only	This element identifies the state in which this vehicle was registered.
<u>V8</u>	Registered Vehicle Owner	FARS Only	This element is used to determine the type of registered owner of the vehicle.
<u>V9</u>	Vehicle Make	FARS/CRSS	This element identifies the make (manufacturer) of this vehicle.
<u>V10</u>	Vehicle Model	FARS/CRSS	This element identifies the model of this vehicle within a given make.
<u>V11</u>	Body Type	FARS/CRSS	This element identifies a classification of this vehicle based on its general body configuration, size, shape, doors, etc.
<u>V12</u>	Vehicle Model Year	FARS/CRSS	This element identifies the manufacturer's model year of this vehicle.
<u>V13</u>	<u>Vehicle Identification</u> <u>Number</u>	FARS/CRSS	This element records the vehicle identification number (VIN) of a single vehicle or the power unit of a combination vehicle.
<u>V14</u>	Vehicle Trailing	FARS/CRSS	This element identifies whether or not this vehicle had any attached trailing units or was towing another motor vehicle.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>V15</u>	Trailer Vehicle Identification Numer	FARS/CRSS	This element records the vehicle identification number (VIN) of any trailing units of a combination vehicle.
<u>V16</u>	<u>Jackknife</u>	FARS/CRSS	This element identifies if this vehicle experienced a "jackknife" anytime during the unstabilized situation.
<u>V17</u>	Motor Carrier Identification Number	FARS/CRSS	This element records the issuing authority and motor carrier identification number if applicable to this vehicle.
<u>V18</u>	<u>GVWR/GCWR</u>	FARS/CRSS	This element identifies the gross vehicle weight rating of this vehicle when applicable.
<u>V19</u>	Vehicle Configuration	FARS/CRSS	This element identifies the general configuration of this vehicle when applicable.
<u>V20</u>	Cargo Body Type	FARS/CRSS	This element identifies the primary cargo carrying capability of this vehicle when applicable.
<u>V21</u>	Hazardous Material Involvement/Placard	FARS/CRSS	This element identifies the presence of hazardous cargo for this vehicle and records information about the hazardous cargo when present.
<u>V21 (1)</u>	Hazardous Material Involvement/Placard - HM1	FARS/CRSS	This element indicates whether the vehicle was carrying hazardous materials - involvement.
<u>V21 (2)</u>	Hazardous Material Involvement/Placard - HM2	FARS/CRSS	This element indicates the presence of hazardous materials and whether the vehicle displayed a hazardous materials placard.
<u>V21 (3)</u>	Hazardous Material Involvement/Placard - HM3	FARS/CRSS	This element indicates the 4-digit identification number.
<u>V21 (4)</u>	Hazardous Material Involvement/Placard - HM4	FARS/CRSS	This element indicates the single-digit hazardous material class number for the vehicle.
<u>V21 (5)</u>	Hazardous Material Involvement/Placard - HM5	FARS/CRSS	This element indicates whether or not any hazardous cargo was released from the cargo tank or compartment.
<u>V22</u>	<u>Bus Use</u>	FARS/CRSS	This data element describes the common type of bus service this vehicle was being used for at the time of the crash or the primary use for the bus if not in service at the time of the crash.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>V23</u>	<u>Special Use</u>	FARS/CRSS	This data element identifies if a special use is applicable to this vehicle at the time it was involved in the crash.
<u>V24</u>	Emergency Motor Vehicle Use	FARS/CRSS	Emergency Motor Vehicle Use indicates operation of any motor vehicle that is legally authorized by a government authority to respond to emergencies with or without the use of emergency warning equipment, such as a police vehicle, fire truck or ambulance while actually engaged in such response.
<u>V25</u>	<u>Travel Speed</u>	FARS/CRSS	This element records the speed the vehicle was traveling prior to the occurrence of the crash as reported by the investigating officer.
<u>V26</u>	Underride/Override	FARS Only	This element indicates whether an underride or override occurred during the crash involving this vehicle.
<u>V27</u>	Rollover	FARS/CRSS	This element identifies whether a rollover or overturn occurred during the crash involving this vehicle.
<u>V28</u>	Location of Rollover	FARS/CRSS	This element identifies the location of the trip point or start of the vehicle's roll.
<u>V29</u>	<u>Areas of Impact - Initial</u> <u>Contact Point</u>	FARS/CRSS	This subfield identifies the area on this vehicle that produced the first instance of injury to non-motorists or occupants of this vehicle, or that resulted in the first instance of damage to other property or to this vehicle.
<u>V29</u>	Areas of Impact - Damaged Areas	FARS/CRSS	This subfield identifies all the areas on this vehicle that were damaged in the crash as reflected in the case materials.
<u>V30</u>	Extent of Damage	FARS/CRSS	This element indicates the amount of damage sustained by this vehicle in this crash as indicated in the case materials based on an operational damage scale.
<u>V31</u>	Vehicle Removal	FARS/CRSS	This data element describes the mode in which the vehicle left the scene of the crash.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>V32</u>	<u>Sequence of Events</u>	FARS/CRSS	The events in sequence related to this motor vehicle, regardless of injury and/or property damage. Code each event for this vehicle in the order in which they occur, time wise, from the <b>Police Crash</b> <b>Report</b> narrative and diagram.
<u>V33</u>	<u>Most Harmful Event</u>	FARS/CRSS	This element identifies the event that resulted in the most severe injury or, if no injury, the greatest property damage involving this motor vehicle.
<u>V34</u>	Related Factors - Vehicle Level	FARS/CRSS	This element identifies factors related to this vehicle expressed by the investigating officer.
<u>V35</u>	Fire Occurrence	FARS/CRSS	This element identifies whether or not a fire in any way related to the crash occurred in this vehicle.

#### **Driver Level Elements**

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>D1</u>	State Number	FARS Only	This element identifies the state in which the crash occurred.
<u>D2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>D3</u>	Vehicle Number - Driver Level	Case Structure	This element identifies the vehicle number associated with this driver.
<u>D4</u>	Driver Presence	FARS/CRSS	This element identifies whether or not a driver was present in this vehicle at the onset of the unstabilized situation.
<u>D5</u>	Driver's License State	FARS Only	This element identifies the state of issue for the license held by this driver.
<u>D6</u>	Driver's Zip Code	FARS/CRSS	This element identifies the zip code of this driver's area of residence.
<u>D7</u>	Non-CDL License Type / Status	FARS Only	This element identifies in two subfields the type of license held by this driver and the status of the license at the time of the crash.
<u>D8</u>	Commercial Motor Vehicle License Status	FARS Only	This element indicates the status for a driver's Commercial Driver's License (CDL) if applicable.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>D9</u>	Compliance with License Endorsements	FARS Only	This element indicates whether the vehicle driven at the time of the crash requires endorsement(s) on a Commercial Driver's License (CDL) and whether this driver is complying with the CDL endorsements.
<u>D10</u>	License Compliance with Class of Vehicle	FARS Only	This element refers to the type of license possessed or not possessed by the driver for the class of vehicle being driven at the time of the crash.
<u>D11</u>	Compliance with License Restrictions	FARS Only	This element identifies if a driver was compliant with restrictions on their license.
<u>D12</u>	Driver Height	FARS Only	This element identifies a driver's height.
<u>D13</u>	Driver Weight	FARS Only	This element identifies a driver's weight.
<u>D14</u>	Previous Recorded Crashes	FARS Only	This element records any previous crashes for this driver. Count only the events occurring within five years from the crash date.
<u>D15</u>	Previous Recorded Suspensions and Revocations	FARS Only	This element records any previous license suspensions or revocations for this driver. Count only the events occurring within <b>five years</b> from the crash date.
<u>D16</u>	Previous DWI Convictions	FARS Only	This element records any previous DWI convictions for this driver. Count only the events occurring within <b>five years</b> from the crash date.
<u>D17</u>	Previous Speeding Convictions	FARS Only	This element records any previous Speeding convictions for this driver. Count only the events occurring within <b>five years</b> from the crash date.
<u>D18</u>	Previous Other Moving Violation Convictions	FARS Only	This element records any other previous moving violations or convictions for this driver. Count only the events occurring within <b>five years</b> from the crash date.
<u>D19</u>	Date of FIRST Crash, Suspension, Conviction	FARS Only	This element identifies the date of the first crash, suspension, or conviction recorded in elements D14 through D18. Count only dates of events occurring within <b>five years</b> from the crash date.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>D20</u>	Date of LAST Crash, Suspension, Conviction	FARS Only	This element identifies the date of the last crash, suspension, or conviction recorded in elements D14 through D18. Count only dates of events occurring within <b>five years</b> from the crash date.
<u>D21</u>	Violations Charged	FARS/CRSS	This element identifies all violations, citations, and infractions noted as charged to this driver in this crash.
<u>D22</u>	Speeding Related	FARS/CRSS	This element identifies if the driver's speed was related to the crash as identified by law enforcement.
<u>D23</u>	<u>Condition (Impairment) at</u> <u>Time of Crash</u>	FARS/CRSS	This element identifies physical impairments to this driver or non- motorist which may have contributed to the cause of the crash as identified by law enforcement.
<u>D24</u>	Related Factors - Driver Level	FARS/CRSS	This element identifies factors related to this driver expressed by the investigating officer.

#### **Precrash Level Elements**

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>PC1</u>	State Number	FARS Only	This element identifies the state in which the crash occurred.
<u>PC2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>PC3</u>	Vehicle Number - Precrash Level	Case Structure	This element identifies the number assigned to this vehicle in the crash.
<u>PC4</u>	Contributing Circumstances, Motor Vehicle	FARS/CRSS	This element describes the possible pre- existing motor vehicle defects or maintenance conditions that may have contributed to the crash.
<u>PC5</u>	Trafficway Description	FARS/CRSS	This element identifies the value indicated in the case materials which best describes the trafficway flow just prior to this vehicle's critical precrash event.
<u>PC6</u>	Total Lanes in Roadway	FARS/CRSS	This element identifies the value indicated in the case materials which best describes the number of roadway lanes just prior to this vehicle's critical precrash event.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>PC7</u>	Speed Limit	FARS/CRSS	This element identifies the value indicated in the case materials which best represents the speed limit just prior to this vehicle's critical precrash event.
<u>PC8</u>	Roadway Alignment	FARS/CRSS	This element identifies the value indicated in the case materials which best represents the roadway alignment prior to this vehicle's critical precrash event.
<u>PC9</u>	Roadway Grade	FARS/CRSS	This element identifies the value indicated in the case materials which best represents the roadway grade prior to this vehicle's critical precrash event.
<u>PC10</u>	Roadway Surface Type	FARS Only	This element identifies the value indicated in the case materials which best represents the roadway surface type prior to this vehicle's critical precrash event.
<u>PC11</u>	Roadway Surface Conditions	FARS/CRSS	This element identifies the value indicated in the case materials which best represents the roadway surface condition prior to this vehicle's critical precrash event.
<u>PC12</u>	Traffic Control Device	FARS/CRSS	This element identifies the <b>sign or signal</b> indicated in the case materials which best describes the traffic controls in the vehicle's environment just prior to this vehicle's critical precrash event.
<u>PC13</u>	Device Functioning	FARS/CRSS	This element identifies the functionality of the traffic control device recorded for this vehicle in the element Traffic Control Device.
<u>PC14</u>	Driver's Vision Obscured By	FARS/CRSS	This data element records impediments to a driver's visual field that were noted in the case materials.
<u>PC15</u>	Driver Maneuvered to Avoid	FARS/CRSS	This data element identifies the thing(s) the driver attempted to avoid while the vehicle was on the road portion of the trafficway, just prior to the <u>First Harmful</u> <u>Event</u> for this vehicle.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>PC16</u>	Driver Distracted By	FARS/CRSS	This element identifies the attribute(s) which best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. Distraction from the primary task of driving occurs when drivers divert their attention from the driving task to some other activity. Also, driving while daydreaming or lost in thought is identified as distracted driving by NHTSA. Physical conditions/ impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) are not identified as distractions by NHTSA.
<u>PC17</u>	Pre-Event Movement (Prior to Recognition of Critical Event)	FARS/CRSS	This element identifies the attribute that best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took no action or had no time to attempt any evasive maneuvers.
<u>PC18</u>	Critical Event - Precrash (Category)	FARS/CRSS	This element identifies the category of the event that was critical to this vehicle being involved in the crash.
<u>PC19</u>	<u>Critical Event - Precrash</u> (Event)	FARS/CRSS	This element identifies the critical event which made the crash imminent (i.e., something occurred which made the collision possible).
<u>PC20</u>	Attempted Avoidance Maneuver	FARS/CRSS	This element identifies movements/ actions taken by the driver, within a critical crash envelope, in response to a <u>Critical Precrash Event</u> .
<u>PC21</u>	Pre-Impact Stability	FARS/CRSS	This element assesses the stability of the vehicle <b>after</b> the critical event, but <b>before</b> the impact.
<u>PC22</u>	Pre-Impact Location	FARS/CRSS	This element assesses the location of the vehicle after the critical event, but before the <u>First Harmful Event</u> for this vehicle.
<u>PC23</u>	<u>Crash Type</u>	FARS/CRSS	This element describes the type of crash this in-transport vehicle was involved in based on the <u>First Harmful Event</u> and the precrash circumstances.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>P1</u>	State Number	FARS Only	This element identifies the state in which the crash occurred.
<u>P2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>P3</u>	Vehicle Number - Person Level	Case Structure	This element identifies the vehicle number associated with this motor vehicle occupant.
<u>P4</u>	Person Number	Case Structure	This element identifies a number for the motor vehicle occupant in consecutive order for the vehicle they occupied.
<u>P5</u>	Age	FARS/CRSS	This element identifies the person's age, in years, with respect to the person's last birthday.
<u>P6</u>	Sex	FARS/CRSS	This element identifies the sex of the person involved in the crash.
<u>P7</u>	Person Type	FARS/CRSS	This element describes the role of this person involved in the crash.
<u>P8</u>	Injury Severity	FARS/CRSS	This element describes the severity of the injury to this person in the crash.
<u>P9</u>	Seating Position	FARS/CRSS	This element identifies the location of this person in or on the vehicle.
<u>P10</u>	Restraint System/Helmet Use	FARS/CRSS	This element records the restraint equipment in use by the occupant, or the helmet in use by a motorcyclist, at the time of the crash.
<u>P11</u>	Any Indication of Mis-Use of Restraint System/ Helmet Use	FARS/CRSS	This element indicates any mis-use of the restraint system or helmet used by this person.
<u>P12</u>	Air Bag Deployed	FARS/CRSS	This element is used to record air bag deployment for this person as reported in the case materials.
<u>P13</u>	Ejection	FARS/CRSS	This element describes the ejection status and degree of ejection for this person, excluding motorcycle occupants.
<u>P14</u>	Ejection Path	FARS Only	This element identifies the path by which this person was ejected from the vehicle.
<u>P15</u>	Extrication	FARS Only	This element identifies if equipment or other force was used to remove this person from the vehicle.

## Person (Motor Vehicle Occupant) Level Elements

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>P16</u>	Police Reported Alcohol Involvement	FARS/CRSS	This data element reflects only the <b>judgment of law enforcement</b> as to whether alcohol was involved or not for this person.
<u>P17</u>	Method of Alcohol Determination (By Police)	FARS Only	This element describes the method by which the police made the determination as to whether alcohol was involved or not for this person.
<u>P18 (1)</u>	Alcohol Test Status	FARS/CRSS	This element identifies if an alcohol (ethanol) test was given to this person.
<u>P18 (2)</u>	Alcohol Test Type	FARS/CRSS	This element identifies the type of the alcohol (ethanol) test that was used for this person.
<u>P18 (3)</u>	Alcohol Test Result	FARS/CRSS	This element identifies the alcohol (ethanol) test result for this person.
<u>P19</u>	Police Reported Drug Involvement	FARS/CRSS	This data element reflects only the <b>judgment of law enforcement</b> as to whether drugs were involved or not for this person.
<u>P20</u>	Method of Drug Determination (By Police)	FARS Only	This element identifies the method by which the police made the determination as to whether drugs were involved or not for this person.
<u>P21 (1)</u>	Drug Test Status	FARS/CRSS	This element identifies if a chemical test for the presence of drugs was given to this person.
<u>P21 (2)</u>	Drug Test Type	FARS/CRSS	This element identifies the type of chemical test for the presence of drugs that was used for this person.
<u>P21 (3)</u>	Drug Test Result	FARS/CRSS	This element identifies the result of a chemical test for the presence of drugs for this person.
<u>P22</u>	Transported to First Medical Facility By	FARS/CRSS	This element identifies the method of transportation this person was provided to receive treatment at the first hospital or medical facility.
<u>P23</u>	Died at Scene/En route	FARS Only	This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.
<u>P24</u>	Death Date	FARS Only	This element records the month, day, and year of this person's death.
<u>P25</u>	Death Time	FARS Only	This element identifies the hour and minute of this person's death utilizing the 24-hour clock format.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>P26</u>	Related Factors - Person (MV Occupant) Level	FARS/CRSS	This element identifies factors related to motor vehicle occupants other than drivers expressed by the investigating officer.
<u>SP1</u>	Death Certificate Number	FARS Only	This element identifies the four-digit GSA code for the city where the death occurred, the two-digit state number and the six-digit sequence number from the death certificate as assigned by the State Vital Statistics or Vital Records Department.
<u>SP2</u>	Fatal Injury at Work	FARS Only	This element indicates if the death certificate identified this person as being "at work" at the time of the crash.
<u>SP3</u>	Race/Hispanic Origin	FARS Only	This element indicates the race and Hispanic origin of this person from the death certificate.

## Person (Not A Motor Vehicle Occupant) Level Elements

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>NM1</u>	State Number	FARS Only	This element identifies the state in which the crash occurred.
<u>NM2</u>	Consecutive Number	FARS Only	This element identifies the unique case number assigned by the data entry system.
<u>NM3</u>	Person Number	Case Structure	This element identifies a number for persons that are not in a motor vehicle in consecutive order.
<u>NM4</u>	<u>Vehicle Number of Motor</u> <u>Vehicle Striking Non-Motorist</u>	FARS/CRSS	This data element captures the in- transport vehicle that made contact with this non-motorist.
<u>NM5</u>	Age	FARS/CRSS	This element identifies the person's age, in years, with respect to the person's last birthday.
<u>NM6</u>	Sex	FARS/CRSS	This element identifies the sex of the person involved in the crash
<u>NM7</u>	Person Type	FARS/CRSS	This element describes the role of this person involved in the crash.
<u>NM8</u>	Injury Severity	FARS/CRSS	This element describes the severity of the injury to this person in the crash.

2017	Element Name	FARS, CRSS,	Definition
Element		Case Structure	
Number			
<u>NM9</u>	Pedestrian/Bike Typing	FARS/CRSS	This element describes <i>the precrash</i> <i>actions</i> leading to crashes between motor vehicles and pedestrians or bicyclists.
NM9 - PB27	Marked Crosswalk Present – Pedestrian <i>(See the</i> companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies if a marked crosswalk was present at the crash site.
NM9 - PB27	Marked Crosswalk Present – Bicyclist (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element identifies if a marked crosswalk was present at the crash site.
NM9 - PB28	Sidewalk Present – Pedestrian <i>(See the companion Pedestrian/ Bicyclist Manual)</i>	FARS/CRSS	This element identifies if a sidewalk was present at the crash site.
NM9 - PB28	Side Walk Present – Bicyclist (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element identifies if a sidewalk was present at the crash site.
NM9 - PB29	School Zone – Pedestrian (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element identifies if the crash occurred in a school zone.
NM9 - PB29	School Zone – Bicyclist <b>(See</b> the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies if the crash occurred in a school zone.
NM9 - PB30	Crash Type – Pedestrian (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element summarizes the circumstances of the crash for this pedestrian.
NM9 - PB30B	Crash Type – Bicyclist <b>(See</b> the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element summarizes the circumstances of the crash for this bicyclist.
NM9 - PB31	Crash Location – Pedestrian (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element summarizes the circumstances of the crash for this pedestrian.
NM9 - PB31B	Crash Location – Bicyclist (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element identifies if the crash location with respect to an intersection.
NM9 - PB32	Pedestrian Position (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies the location of the pedestrian with respect to the trafficway when contacted.
NM9 - PB32B	Bicyclist Position (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies the location of the bicyclist with respect to the trafficway when contacted.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
NM9 - PB33	Pedestrian Initial Direction (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element identifies the compass direction of travel of the pedestrian prior to being contacted.
NM9 - PB33B	Bicyclist Direction (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies the travel direction of the bicyclist with respect to the flow of traffic prior to being contacted.
NM9 - PB34	Motorist Initial Direction (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies the compass direction of travel of the motorist prior to being involved in the crash.
NM9 - PB35	Motorist Maneuver <b>(See the</b> companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies if the motorist was engaged in a turning maneuver at an intersection prior to being involved in the crash.
NM9 - PB36	Intersection Leg (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element identifies on which leg of an intersection the crash occurred.
NM9 - PB37	Pedestrian Scenario (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element summarizes the movements of the pedestrian and motorist in an intersection area.
NM9 - PB38	Crash Group – Pedestrian (See the companion Pedestrian/Bicyclist Manual)	FARS/CRSS	This element provides general groupings of the more specific individual Crash Types - Pedestrian.
NM9 - PB38B	Crash Group – Bicyclist (See the companion Pedestrian/ Bicyclist Manual)	FARS/CRSS	This element provides general groupings of the more specific individual Crash Types - Bicyclist.
<u>NM10</u>	Non-Motorist Location at Time of Crash	FARS/CRSS	This element identifies the location of the non-motorist with respect to the roadway at the time of the crash.
<u>NM11</u>	Non-Motorist Action/ Circumstances	FARS/CRSS	This element describes the action(s) of the non-motorist at the time of their involvement in the crash.
<u>NM12</u>	Non-Motorist Contributing Circumstances	FARS/CRSS	This element describes the action(s) and/or circumstances of the non- motorist that law enforcement indicated may have contributed to the crash.
<u>NM13</u>	<u>Non-Motorist Safety</u> <u>Equipment</u>	FARS/CRSS	This element identifies the safety equipment that was used and not used by this non-motorist as reflected in the case materials.
<u>NM14</u>	Condition (Impairment) at Time of Crash	FARS/CRSS	This element attempts to identify any physical impairment to this non-motorist which may have contributed to the cause of the crash.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>NM15</u>	Police Reported Alcohol Involvement	FARS/CRSS	This data element reflects only the <b>judgment of law enforcement</b> as to whether alcohol was involved or not for this person.
<u>NM16</u>	Method of Alcohol Determination (By Police)	FARS Only	This element describes the method by which the police made the determination as to whether alcohol was involved or not for this person.
<u>NM17 (1)</u>	Alcohol Test Status	FARS/CRSS	This element identifies if an alcohol (ethanol) test was given to this person.
<u>NM17 (2)</u>	Alcohol Test Type	FARS/CRSS	This element identifies the type of the alcohol (ethanol) test that was used for this person.
<u>NM17 (3)</u>	Alcohol Test Result	FARS/CRSS	This element identifies the alcohol (ethanol) test result for this person.
<u>NM18</u>	Police Reported Drug Involvement	FARS/CRSS	This data element reflects only the <b>judgment of law enforcement</b> as to whether drugs were involved or not for this person.
<u>NM19</u>	Method of Drug Determination (By Police)	FARS Only	This element identifies the method by which the police made the determination as to whether drugs were involved or not for this person.
<u>NM20 (1)</u>	Drug Test Status	FARS/CRSS	This element identifies if a chemical test for the presence of drugs was given to this person.
<u>NM20 (2)</u>	Drug Test Type	FARS/CRSS	This element identifies the type of chemical test for the presence of drugs that was used for this person.
<u>NM20 (3)</u>	Drug Test Result	FARS/CRSS	This element identifies the result of a chemical test for the presence of drugs for this person.
<u>NM21</u>	Transported to First Medical Facility By	FARS/CRSS	This element identifies the method of transportation this person was provided to receive treatment at the first hospital or medical facility.
<u>NM22</u>	Died at Scene/En route	FARS Only	This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.
<u>NM23</u>	Death Date	FARS Only	This element records the month, day, and year of this person's death.
<u>NM24</u>	Death Time	FARS Only	This element identifies the hour and minute of this person's death utilizing the 24-hour clock format.

2017 Element Number	Element Name	FARS, CRSS, Case Structure	Definition
<u>NM25</u>	Related Factors - Person (Not a MV Occupant) Level	FARS/CRSS	This element identifies factors related to persons not in a motor vehicle expressed by the investigating officer.
<u>SP1</u>	Death Certificate Number	FARS Only	This element identifies the four-digit GSA code for the city where the death occurred, the two-digit state number and the six-digit sequence number from the death certificate as assigned by the State Vital Statistics or Vital Records Department.
<u>SP2</u>	Fatal Injury at Work	FARS Only	This element indicates if the death certificate identified this person as being "at work" at the time of the crash.
<u>SP3</u>	Race/Hispanic Origin	FARS Only	This element indicates the race and Hispanic origin of this person from the death certificate.

# **100. FARS Submission Instructions**

#### 101. How to Submit

Each case must have at least one Person Level form with **INJURY SEVERITY** attribute Fatal Injury

#### • 2017 Data

Enter data directly using procedures described in the FARS Microcomputer Data Entry Manual (MDE Manual).

#### 102. When to Submit

Make submissions at any time during the week via the MDE

#### 103. Data Sources

- 1. Use the <u>ANSI D16.1 Manual on Classification of Motor Vehicle Traffic Accidents</u> for definitions in coding the FARS forms.
- 2. Obtain information from death certificates for persons who die as a result of injuries sustained in a motor vehicle crash.
- 3. Use the State Driver Licensing Files, Vehicle Registration Files, Highway Department Files, Crash Reports, and Vital Statistics Reports.
- 4. See the FARS MDE manual for instructions on obtaining data and responding to requests for data on vehicles and drivers not registered or licensed in your state.
- 5. The message system should be used to obtain data on involved Out-of-State drivers and vehicles.
- 6. Hierarchy for Case Materials:
  - a. An Early Notification Report can get corrected/replaced/ clarified by
  - b. A Police *Crash Report* can get corrected/replaced/ clarified by
  - c. A Supplemental Police *Crash Report* can get corrected/ replaced/clarified by
  - d. A Reconstruction Report
- 7. Hierarchy for police reported information on the *Police Crash Report*:
  - a. If information provided in the narrative directly contradicts a coded box, the narrative detail takes precedence over the checkbox.

# **FARS Coding Forms**

#### **Crash Level Form**

CODED BY:         INPUT BY:         2017 Fatality Ana           DATE CODED:         DATE INPUT:         2017 Fatality Ana	alysis Reporting System
	ILEVEL Rational Highway Traffic Safety Administration
	mber of Forms ** Number of Vehicle Motor Vehicle ot in Motor ** Number of Forms Occupant ** Number of Motor Vehicle ot in Motor Submitted (C4) Forms
	Submitted (C5)
COUNTY (C6) CITY (C7) CRASH D	
Except for: Actual Mon 000-Not Applicable 998-Not Reported 997-Other 999-Unknown 9997-Other 9999-Unknown	th and Day Month Day Year 9999-Unknown
TRAFFICWAY IDENTIFIER (C10) Actual Posted Number, Assigned Number, or Common Name (If No Posted or Assigned Number) Except. Nine-Fill if Unknown	O1-Not an Intersection         O6-Roundabout           02-Four-Way Intersection         07-Five Point, or More
1	03-T-Intersection 10-L-Intersection 04-Y-Intersection 98-Not Reported 05-Traffic Circle 99-Unknown
2	RELATION TO TRAFFICWAY (C23)
(NOTE: MDE allows for up to 30 alphanumeric characters per line)	01-On Roadway 07-In Parking Lane/Zone 02-On Shoulder 08-Gore 03-On Median 10-Separator
LOCAL STREET         8-Other           2-U.S. Highway         5-Township         9-Unknown	04-On Roadside 11-Continuous Left-Turn Lane 05-Outside Trafficway 98-Not Reported 06-Off Roadway - Location Unknown 99-Unknown
3-State Highway 6-Municipality 4-County Road 7-Frontage Road	WORK ZONE (C24)
Land Use (C12a)         Functional System (C12b)           1-Rural         01-Interstate           (a)         2-Urban	0-None 2-Maintenance 4-Work Zone, Type Unknown - 1-Construction 3-Utility
Inventory 04-Minor Arterial	LIGHT CONDITION (C25)
8-Not Reported 05-Major Collector 9-Unknown 06-Minor Collector 07-Local 96-Trafficway Not in State Inventory 98-Not Reported	1-Daylight 6-Dark - Unknown Lighting 7-Other 2-Dark - Not Lighted 4-Dawn 8-Not Reported 3-Dark - Lighted 5-Dusk 9-Unknown
99-Unknown	ATMOSPHERIC CONDITIONS (C26)
OWNERSHIP (C13) (See Instruction Manual)	O0-No Additional Atmospheric 03-Sleet or Hail 06-Severe Crosswinds Conditions 12-Freezing Rain or Drizzle 07-Blowing Sand, Soil, Dirt 01-Clear 04-Snow 08-Other 08-Other 10-Cloudy 11-Blowing Snow 98-Not Reported
NATIONAL HIGHWAY SYSTEM (C14) 0-This section IS NOT on the NHS 1-This section IS ON the NHS	10-Cloudy 11-Blowing Snow 99-Not Reported 02-Rain 05-Fog, Smog, Smoke 99-Unknown
SPECIAL JURISDICTION (C15) 0-No Special Jurisdiction 4-College/University Campus 1-National Park Service 5-Other Federal Properties 2-Military 8-Other 3-Indian Reservation 9-Unknown	SCHOOL BUS RELATED (C27)           0-No         1-Yes
Actual to Nearest .1 Mile Except: 0000.0-None 9999.8-Not Reported 9999.9-Unknown	RAIL GRADE CROSSING IDENTIFIER (C28) (See Instruction Manual)
LATITUDE GLOBAL POSITION (C17) LONGITUDE	NOTIFICATION TIME EMS (C29)
(See Instruction Manual) (See Instruction Manual)	Military Time 8888-Not Applicable (Not Notified) Except: 9998-Unknown if Notified 9999-Unknown EMS Notification Time
Degrees Minutes Seconds Degrees Minutes Seconds	ARRIVAL TIME EMS (C30)
** CRASH EVENTS (C18) (Element Table Completed in MDE)	Military Time 8888-Not Applicable (Not Notified) 9998-Unknown if Arrived Except: 9997-Officially Canceled 9999-Unknown EMS Scene Arrival Time
** FIRST HARMFUL EVENT (C19)	
(Auto-Fill from CRASH EVENTS - C18) MANNER OF COLLISION (C20)	EMS TIME AT HOSPITAL (C31) Military Time 8888-Not Applicable (Not Transported) 9998-Unknown if Transported
00-Not a Collision with a Motor Vehicle In-Transport 09-Rear-to-Side 01-Front-to-Rear 10-Rear-to-Rear	Except: 9996-Terminated Transport 9997-Officially Canceled 9999-Unknown EMS Hospital Arrival Time
02-Front-to-Front 11-Other 06 - Angle 98-Not Reported 07-Sideswipe-Same Direction 99-Unknown 08-Sideswipe-Opposite Direction	RELATED FACTORS (C32) (See Instruction Manual)
RELATION TO JUNCTION (C21a/b)	
	(b) (See Instruction Manual)
1-Yes         04-Driveway Access           8-Not Reported         03-Driveway Access Related           9-Unknown         16-Shared-Use Path Crossing           17-Acceleration/Deceleration Lane	
Specific Location (C21b)         18-Through Roadway           01-Non-Junction         19-Other Location Within Interchange Ar           02-Intersection-Related         20-EntranceExit Ramp           03-Intersection-Related         98-Not Reported	ea
	II ndatory Field 75114-M-i

#### Vehicle Level Form

CODED BY: INPUT BY: 2017 Fatality Ana	lysis Reporting System
DATE CODED: DATE INPUT: VEHICL	ELEVEL U.S. Department of Transportation National Highway Traffic Safety Administration
STATE NUMBER (V1) (GSA CODES)	** VEHICLE NUMBER (V3) (Assigned by Analyst) ** NUMBER OF OCCUPANTS (V4) 0'-98 Actual Value [If Total Known]: 99-Unknown
UNIT TYPE (V5) **  1-Motor Vehicle In-Transport (Inside or Outside the Trafficway) 2-Motor Vehicle Not In-Transport Within the Trafficway 3-Motor Vehicle Not In-Transport Outside the Trafficway	HAZARDOUS MATERIAL INVOLVEMENT/PLACARD (V21)
HIT-AND-RUN (V6) 0-No 1-Yes 9-Unknown	HM1(Involvement)         HM2(Placard)         HM3(Identification Number)         HM4(Class Number)         HM5(Released)           1-No         0-Not Applicable         0000-Not Applicable         00-Not Applicable         00-Not Applicable         0-Not Applicable         1-No         2-Yes
REGISTRATION STATE (V7) GSA CODES Except: 00-Not Applicable 91-Not Reported 92-No Registration 93-Not Registration 94-U.S. Government Tags (includes military) 94-U.S. Government Tags (includes military) 94-U.S. Government Tags 94-U.S. Government Tags 94-U.S. Government Tags 94-U.S. Government Tags 94-U.S. Government Tags 94-U.S. Bovernment Tags 94-U.S.	8-Not Reported         88-Not Reported         8-Not Reported           BUS USE (V22)           00-Not a Bus         05-Charter/Tour         08-Modified for Personal/Private Use           01-School         06-Transit/Commuter         08-Not Reported           04-Intercity         07-Schuttle         99-Unknown
REGISTERED VEHICLE OWNER (V8) O-Not Applicable, Vehicle Not Registered 1-Driver (in this crash) Registered Owner 2-Driver (in this crash) Not Registered Owner (Other Private Owner Listed) 3-Vehicle Registered as Business/Company[Government Vehicle 4-Vehicle Registered as Rental Vehicle 5-Vehicle Sole (Reported by Police)	SPECIAL USE (V23)     O0-No Special Use 04-Military 08-Non-Transport     O1-Taxi 05-Polica Emergency Services     O2-Vehicle Used for School Transport 06-Ambulance Vehicle     O3-Vehicle Used as Other Bus 07-Fire Truck 98-Not Reported     13-Incident Response 99-Unknown     EMERGENCY MOTOR VEHICLE USE (V24)
6-Driverless/Motor Vehicle Parked/Stopped Off Roadway 9-Unknown VEHICLE MAKE (V9) (See Instruction Manual) (See Instruction Manual)	O-Not Applicable     O-Not Applicable     O-Not Applicable     O-Not Emergency, Non-Transport     O-Emergency (Transport     O-Emergency (Transport     O-Emergency (Deration (Emergency     Warning Equipment In Use)     O-Emergency (Deration, Emergency Warning     Equipment Not in Use)     O-Emergency (Deration, Emergency     O-Emergency (Deration, Emergency     O-Emergency (Deration, Emergency     O-Emergency, Operation, Emergency, Varning     Equipment Not in Use)     O-Emergency, Operation, Emergency, Varning     Equipment Not in Use     O-Emergency, Varning     Emergency, Varning     Equipment Not in Use     O-Emergency, Varning     Emergency, Varning     Equipment Not in Use     O-Emergency, Varning     Emergency, Varning
BODY TYPE (V11) (See Instruction Manual) (See Instruction Manual) (See Instruction Manual) (See Instruction Manual)	Actual Miles Per Hour Except         997-Greater than 151 mph           0000-Stopped Motor Vehicle In-Transport         998-Not Reported           001-151-Reported Speed up to 151 mph         999-Unknown
Actual Value Except: 0-Fill if No VIN Required 8-Fill if Not Reported 9-Fill if Unknown VEHICLE TRAILING (V14) 0-No Trailing Units 1-One Trailing Unit 0-No Trailing Units 1-One Trailing Unit 0-No Trailing Units 0-No Trailing Units	UNDERRIDE/OVERRIDE (V26) 0-No Underride or Override Noted UNDERRIDING A MOTOR VEHICLE IN-TRANSPORT 1-Underride (Compartment Intrusion) 2-Underride (O Compartment Intrusion) 3-Underride (O Compartment Intrusion) 3-Underride (O Compartment Intrusion) 6-Underride (Compartment Intrusion) 7-Overriding a Motor Vehicle Nationapport 8-Overriding a Motor Vehicle Nationapport 9-Unknown if Underride or Override
2-Two Trailing Units 6-Vehicle Towing Another Motor Vehicle - 3-Three or More Trailing Units Non-Fixed Linkage 4-Yes, Number of Trailing Units Unknown 9-Unknown TRAILER VEHICLE IDENTIFICATION NUMBER* (V15)	ROLLOVER (V27)           0-No Rollover         2-Rollover, Untripped           1-Rollover, Tripped by Object/Vehicle         9-Rollover, Unknown Type
(*Up to 3 Trailer VINs can be entered within MDE) Actual Value Except 0-Fill if No VIN Required 7-Fill if No Trailing Units 8-Fill if Not Reported 9-Fill if Unkr	O-No Rollover 3-On Median/Separator 6-Outside of Trafficway 1-On Roadway 4-In Gore 7-In Parking Lane/Zone 2-On Shoulder 5-On Roadside 9-Unknown
	AREAS OF IMPACT - INITIAL CONTACT POINT / DAMAGED AREAS (V29)
JACKKNIFE (V16) Q-Not an Articulated Vehicle 1-No MOTOR CARRIER (V17) IDENTIFICATION NUMBER (See Instruction Manual) Issuing Identification Number	Initial Contact         Damaged Areas (Select all that Apply)           Point         61-Left         Damaged Areas (Select all that Apply)           D0-Non-Collision         61-Left         Donne           11-12-Clock Points         62-Left-Front Side         01-12-Clock Values           13-Top         81-Right         13-Top           14-Undercarriage         82-Right-Front Side         13-Top           18-Cargo/Vehicle Parts Set-in-Motion         82-Right-Font Side         15-No Damage           20-Object Set-In-Motion, Unknown if         98-Unknown         99-Damage Areas Unknown
Authority GROSS VEHICLE WEIGHT RATING/ (V18) GROSS COMBINATION WEIGHT RATING 0-Not Applicable 2-10,001 - 26,000 lbs. 8-Not Reported	EXTENT OF DAMAGE (V30)           0-No Damage         4-Functional Damage         8-Not Reported           2-Minor Damage         6-Disabling Damage         9-Unknown
1-10,000 lbs. or less 3-26,001 lbs. or more 9-Unknown VEHICLE CONFIGURATION (V19)	VEHICLE REMOVAL (V31)     2-Towed Due to Disabling Damage 8-Not Reported     3-Towed Not Due to Disabling Damage 9-Unknown     5-Not Towed
00-Not Applicable 07-Truck Tractor/Double 08-Truck Tractor/Tople for hazardous materials 19-Truck more than 10,000 lbs, 01-Single-Unit Truck (Two Axles and GVWR cannot classify	SEQUENCE OF EVENTS (V32) (See Instruction Manual)
more than 10,000 lbs)         20-Bus/Large Van (seats 9-15 occupation)           02-Single-Unit Truck (Three or More Axles)         including driver)           04-Truck Valling Trailer(s)         21-Bus (seats for more than 15 occupation)           05-Truck Tractor (Bobtail)         including driver)           05-Truck Tractor/Semi-Trailer         90-Unknown	(Read-Only from CRASH EVENTS - C18)
CARGO BODY TYPE (V20) 00-Not Applicable 09-Pole-Trailer 01-Van/Enclosed Box 10-Log	MOST HARMFUL EVENT (V33) (See Instruction Manual)
01-Vanizencised box 10-Log 02-Cargo Tank 11-Intermodal Container Chassis 03-Flatbed 12-Vehicle Towing Another Motor Vehicle 04-Dump 22-Bus 05-Concrete Mixer 96-No Cargo Body Type	RELATED FACTORS (V34) (See Instruction Manual)
06-Auto Transporter 97-Other 07-Garbage/Refuse 98-Unknown Cargo Body Type 08-Grain/Chips/Gravel 99-Unknown	FIRE OCCURRENCE (V35) (Auto-filled by MDE) 0-No or Not Reported 1-Yes
HS Form 214-A (Rev. December, 2016) O.M.B. Number 2127-0006 ** Ma	ndatory Field 75114-M-34h

#### Driver Level Form

DATE CODED DATE INPOT	is Reporting System
STATE CASE NO.: DRIVER L STATE NUMBER (D1)	
(GSA CODES)	(Assigned by Analyst)
** DRIVER PRESENCE (D4) 0-No Driver Present/Not Applicable	PREVIOUS RECORDED CRASHES (D14) Actual Value Except:
	00-None 99-Unknown 98-Crashes Not Reported
DRIVER'S LICENSE STATE (D5) GSA Codes Except: 93-Indian Nation 97-Other Foreign Country	PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS (D15)
94-U.S. Government 98-Not Reported 95-Canada 99-Unknown 96-Mexico	Actual Value Except: 00-None 99-Unknown
DRIVER'S ZIP CODE (D6) Actual Value Except: 00000-Not a Resident of U.S. or Territories	PREVIOUS DWI CONVICTIONS (D16) Actual Value Except: 00-None 99-Unknown
99999-Unknown NON-CDL LICENSE TYPE/STATUS (D7)	PREVIOUS SPEEDING CONVICTIONS (D17)
LICENSE TYPE LICENSE STATUS 0-Not Licensed 0-Not Licensed Type Status 1-Full Driver License 1-Suspended Type	Actual Value Except: 00-None 99-Unknown
2-Intermediate Driver License 2-Revoked 7-Learner's Permit 3-Expired 8-Temporary License 4-Canceled or Denied	PREVIOUS OTHER MOVING VIOLATIONS CONVICTIONS (D18)
9-Unknown License Type 6-Valid 9-Unknown License Status	Actual Value Except: 00-None 99-Unknown
COMMERCIAL MOTOR VEHICLE LICENSE STATUS (D8) 00-No Commercial Driver's License (CDL) 05-Disgualified	DATE OF FIRST CRASH, SUSPENSION OR CONVICTION (D19)
01-Suspended Divers License (GDL) 05-Disqualled 01-Suspended 02-Revoked 07-Learner's Permit 03-Expired 08-Okalid 08-Okalid 08-Okalid 09-Unknown License Status	Actual Value Except:         YEAR           MONTH         YEAR           00-No Record         0000-No Record           99-Unknown         9999-Unknown
COMPLIANCE WITH CDL ENDORSEMENTS (D9)	DATE OF LAST CRASH, SUSPENSION OR CONVICTION (D20)
0-No Endorsement(s) Required for this Vehicle 1-Endorsement(s) Required, complied with 2-Endorsement(s) Required, not complied with 3-Endorsement(s) Required, compliance unknown 9-Unknown, if required	Actual Value Except: <u>MONTH</u> <u>YEAR</u> 00-No Record 0000-No Record 99-Unknown 9999-Unknown Vear
LICENSE COMPLIANCE WITH CLASS OF VEHICLE (D10)	
0-Not Licensed 1-No License Required for This Class Vehicle 2-No Valid License for This Class Vehicle 3-Valid License for This Class Vehicle	VIOLATIONS CHARGED (D21) (SELECT ALL THAT APPLY) (See Instruction Manual)
8-Unknown if Commercial Driver's License (CDL) and/or CDL Endorsements Required for This Vehicle 9-Unknown	SPEEDING RELATED (D22) 0-No 3-Yes, Exceeded Speed Limit 5-Yes, Specifics Unknown 2-Yes, Racing 4-Yes, Too Fast for Conditions 9-Unknown
COMPLIANCE WITH LICENSE RESTRICTIONS (D11) 0-No Restrictions or Not Applicable 1-Restrictions Complied With	CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) (SELECT ALL THAT APPLY)
2-Restrictions Not Compliad With 3-Restrictions, Compliance Unknown 9-Unknown	00-None/Apparently Normal 01-III, Blackout 02-Asleen or Fatigued 02-baleen or Fatigued 09-Under the Influence of Alcohol, Drugs or
DRIVER HEIGHT (D12) FEET INCHES 0-See Inches 00-11, 24-96 - Actual Inches 2-8-Actual Feet 98-Other 9-Unknown 99-Unknown	02-Asleep or Fatigued     09-Under the Influence of Alcohol, Drugs or       03-Walking with a Cane or Crutches, etc     Medication       04-Paraplegic or in a Wheelchair     10-Physical Impairment-No Details       05-Impaired Due to Previous Injury     96-Other Physical Impairment       06-Deaf     99-Unknown if Impaired
DRIVER WEIGHT (D13)	RELATED FACTORS (D24)
040-700 lbs. 998-Other 999-Unknown	(See Instruction Manual)
COMMENTS:	
HS Form 214-B (Rev. December, 2016) O.M.B. No. 2127-0006 ** Mandi	atory Field 75114-M-34t

## Precrash Level (Vehicle / Driver) Form

CODED BY:         INPUT BY:           DATE CODED:         DATE INPUT:	-	2017 Fatality Analys	is Repo	rting \$	Syste	em					
STATE CASE NO.:	PR	<b>ECRASH LEVE</b>		EHIC	LE	E/E	DRIV	ER)	U.S. Department of T National Highway Tra Administration		
STATE NUMBER (PC1) (GSA CODES)		CONSECUTIVE NUMBER	_					VEHICLE	NUMBER (PC3) ad by Analyst)		
CONTRIBUTING CIRCUMSTANC (SELECT ALL THAT APPLY) 00-None 10-Wipers 1 01-Tires 11-Wheels 1 02-Brake System 12-Mirrors 03-Steering 13-Windows/Winds 04-Suspension 14-Body/Doors 05-Power Train 15-Truck Coupling/ 06-Exhaust System 16-Safety Systems 07-Head Lights 97-Other 08-Signal Lights 97-Other 09-Other Lights 97-Other 09-Other Lights 97-Other 09-Other Lights 98-Not Reported TRAFFICWAY DES CO-Non-Trafficway or Driveway Access 1-Two-Way, Not Divided 2-Two-Way, Divided, Unprotected Median 3-Two-Way, Divided, Sotive Median Barrier	DRIVER MANEUVERED TO AVOID (PC15) (SELECT ALL THAT APPLY)         00-Driver Did Not Maneuver to Avoid 01-Object       05-Pedestrian, Pedalcyclist or Other Non-Motorist         02-Poor Road Conditions (Puddle, Ice, Pothole, etc.)       05-Phantom/Non-Contact Motor Vehicle         03-Live Animal       95-No Driver Present/Unknown if Driver Present         04-Motor Vehicle       99-Unknown         DRIVER DISTRACTED BY (PC16) (SELECT ALL THAT APPLY)       Other         00-Not Distracted 01-Looked But Did Not See       16-No Driver Present/Unknown if Driver Present         Unit Construction       16-No Driver Present/Unknown if Driver Present										
5-Two-Way, Not Divided with a Continuous Le TOTAL LANES IN R Actual Value Except: 0-Non-Trafficway or Driveway Access 7-Seven or More Lanes SPEED LIM Actual Speed Limit Except (in 5mph increm 00-No Statutory Limit/Non-Trafficway or Driveway Access ROADWAY ALIGE	04-By a 05-Whil 06-Whil 07-Adju 09-Whil Inte 10-Whil Obje 12-Distr or Ev	le Manipu Isting Aud le Using ( gral to Ve le Using o ect Broug racted by	Object or List lating lio or C Other C chicle or Read ht into Outsid	in V tenir Cell Clim Com chin Veh	ehicle g to Cellul ular Phone ate Control ponent/Con g for Devic	ar Phone s ntrols e/	14-Smoking Related 15-Other Cellular Phone R 17-Distraction/Inattention 18-Distraction/Careless 19-Careless/Inattention 92-Distraction(Distracted), Unknown 93-Inattention(Inattentive), Unknown 97-Lost in Thought/Day Dr 98-Other Distraction 99-Unknown if Distracted	Detail: Detail	s		
ROADWAY GR	Left Unknown I	:9)	01-Going 02-Decel	iver Pres Straight erating in	RECO ent/Un Road	GN		Present 11-Turn 12-Mak	T (PRIOR TO L EVENT) (PC17) ing Left ing a U-Turn		
1-Concrete 4-	Slope 4-Sag (Bo CE TYPE Brick or B Slag, Grav	9-Unknown (PC10) lock 7-Other rel or Stone 8-Not Reported	03-Accele 04-Startin 05-Stopp 06-Passin 07-Disab 08-Leavin 09-Enteri 10-Turnin	ng in Roa ed in Roa ng or Ove led or "Pa ng a Park ng a Park	d adway ertaking arked" ing Po	in Tr sitio	avel Lane n	14-Neg 15-Cha cle 16-Merg 17-Suco Eve	cessful Avoidance to a Previ ent er(specify:)	Ū	1. 
ROADWAY SURFACE C 00-Non-Trafficway or 10-Slush Driveway Access 04-loe/Frost 01-Dry 05-Sand 02-Wet 06-Water (sta	nding or m	07-Oil 08-Other 98-Not Reported	CRITICAL EVENT - PRECRASH (CATEGORY) (PC18) 1-This Vehicle Loss Control Due To: 6-Object or Animal 2-This Vehicle Traveling 7-Other 3-Other Motor Vehicle in Lane 9-Unknown 4-Other Motor Vehicle Encroaching into Lane 5-Pedestrian or Pedalcyclist or Other Non-Motorist CRITICAL EVENT - PRECRASH (EVENT) (PC19)								
03-Snow 11-Mud, Dirt c TRAFFIC CONTROL DEVICE/ DEV				UK	IIICA			ruction Man		L	
(PC12/PC13) DEVICE: (See Instruction Manual) FUNCTIONING: 0-No Controls 1-Device Not Functioning 2-Device Functioning - Functioning Improperly	3-Device 8-Not Re 9-Unkno		Drive 01-No A 05-Relea 06-Steer 07 Steer	Priver Pre er Presen voidance asing Bra	sent / l t Mane kes	Unkı uver	nown if	10-4 11-4 12-4 15-E 16-E 98-C	ANEUVER (PC20) Accelerating and Steering Le Accelerating and Steering Ri Braking and Unknown Steeri Direction Braking Other Action (specify:)	ht	
DRIVER'S VISION OBSCURED BY (PC14) (SELECT ALL THAT APPLY)			0-No Driv		I	PRE	-IMPAC	resent 5-9	Jnknown/Not Reported TY (PC21) Skidding Laterally, Rotation		Г
00-No Obstruction Noted 01-Rain, Snow, Fog, Smoke, Sand, Dust 02-Reflected Glare, Bright Sunlight, Headlights 03-Curve, Hill or Other Roadway Design Feature 04-Building, Billboard, Other Structure 05-Trees, Crops, Vegetation 06-In-Transport Motor Vehicle (including load)	09-Ina 10-Ina 11-Ob 12-Ex 13-Bro Wi 14-Ob 95-No Pre	lash or Spray of Passing Vehicle dequate Defrost or Defog System struction Interior to the Vehicle ternal Mirrors sken or Improperty Cleaned ndshield structing Angles on Vehicle Driver Present/Unknown if Driver sent	1-Tracking 2-Skidding 3-Skidding 4-Skidding 0-No Driv 1-Stayed 2-Stayed Travel I 3-Stayed	g g Longitu g Laterall g Laterall ver Prese in Origin on Road Lane	dinally y Clocl y Cour nt/Unk al Trav way, b	kwis nter- PRI now rel L ut L ot K	e Rotation Clockwise <b>E-IMPAC</b> n if Driver ane eft Original	7-0 9-F Rotation <b>F LOCATIO</b> Present	Direction Unknown Other Vehicle Loss-of-Contro Precrash Stability Unknown ON (PC22) 4-Departed Roadway 5-Remained off Roadway 6-Returned to Roadway 7-Entered Roadway 9-Unknown		cify:)
07-Not In-Transport Motor Vehicle (parked/working)	98-Otl 99-Un	ion Obscured - No Details ner Visual Obstruction known		a				TYPE (PO			
HS Form 214-D (Rev. December, 2016) O.M.B. No. 2	2127-0006	** Manda	tory Field	í –						75114	-M-34h

CODED BY: INPUT BY: 2017 Estality Analy	sis Reporting System
	EL (MV OCCUPANT)
STATE NUMBER (P1) (GSA CODES) CONSECUTIVE NUMBER (P2)	** VEHICLE NUMBER (P3) (Assigned by Analyst) ** PERSON NUMBER (P4)
AGE (P5) Actual Value Except:	POLICE REPORTED ALCOHOL INVOLVEMENT (P16)
001-Less than One Year 998-Not Reported 001-120-Actual Age* 999-Unknown	0-No (Alcohol Not Involved) 8-Not Reported 1-Yes (Alcohol Involved) 9-Unknown (Police Reported)
SEX (P6) 1-Male 8-Not Reported 2-Female 9-Unknown	METHOD OF ALCOHOL DETERMINATION (By Police) (P17) 1-Evidential Test (Breath, Blood, Urine) 5-Observed
** PERSON TYPE (P7) 01-Driver of a Motor Vehicle In-Transport	2-Preliminary Breath Test (PBT)     3-Behavioral     4-Passive Alcohol Sensor (PAS)
02-Passenger of a Motor Vehicle In-Transport 03-Occupant of a Motor Vehicle Not In-Transport 09-Unknown Occupant Type in a Motor Vehicle In-Transport	ALCOHOL TEST (P18)
INJURY SEVERITY (P8)	Status Type Result
0-No Apparent Injury (O) 4-Fatal Injury (K) 1-Possible Injury (C) 5-Injured, Severity Unknown 2-Suspected Minor Injury (B) 6-Died Prior to Crash 3-Suspected Serious Injury (A) 9-Unknown/Not Reported	Status: 0-Test Not Given 2-Test Given 8-Not Reported 9-Unknown if Tested
3-Suspected Serious Injury (A) 9-Unknown/Not Reported SEATING POSITION (P9)	Type: 00-Test Not Given 10-Preliminary 05-Blood Plasma/ 08-Other Test Type 01-Blood BreathTest (PBT) Serum 98-Unknown Test Type
Left Middle Right Other Unknown Front Row Seats 11 12 13 18 19	02-Breath Test 03-Urine 06-Blood Clot 95-Not Reported (AC) 04-Vitreous 07-Liver 99-Unknown if Tested
2nd Row Seats         21         22         23         28         29           3rd Row Seats         31         32         33         38         39           4th Row Seats         41         42         43         48         49           5th Row Seats         51         51         51         51	Result: Actual Value (Decimal Implied Before First Digit (0.xxx)) Except:           000-939-Actual Value         997-AC Test Performed, Results         995-Not Reported           94094 or Greater         Unknown         999-Unknown if Tested           996-Test Not Given         998-Positive Reading with No Actual Value
50-Sleeper Section of Cab (truck) 53-Other Passenger in Passenger or Cargo	POLICE REPORTED DRUG INVOLVEMENT (P19)
51-Other Passenger in Enclosed Passenger or Cargo Area 54-Trailing Unit	0-No (Drugs Not Involved) 8-Not Reported 1-Yes (Drugs Involved) 9-Unknown (Police Reported)
52-Other Passenger in Unenclosed 55-Riding on Exterior of Vehicle Passenger or Cargo Area 98-Not Reported 99-Unknown	METHOD OF DRUG DETERMINATION (By Police) (P20)
RESTRAINT SYSTEM/ HELMET USE (P10)	1-Evidential Test (Blood, Urine) 3-Behavioral 7-Other 2-Drug Recognition Expert (or Evaluator) (DRE) 8-Not Reported
20- None Used/Not Applicable 05-DOT-Compliant Motorcycle	DRUG TEST (P21)
01-Shoulder Belt Only Used Helmet 02-Lap Belt Only Used 16-Helmet, Other than DOT-	
03-Shoulder and Lap Belt Used Compliant Motorcycle Helmet 04-Child Restraint - Type Unknown 10-Obild Restraint - Type Unknown 10-Deliant Motorcycle Helmet 19-Helmet, Unknown if DOT-	Status Type 1 Result 1 Type 2 Result 2 Type 3 Result 3
10 Child Restraint - Forward Facing     Compliant       11-Child Restraint - Rear Facing     17-No Helmet       12-Booster Seat     29-Unknown if Helmet Worn	Status: 0-Test Not Given 2-Test Given 8 - Not Reported 9-Unknown if Tested
12-500ster Sea 08-Restraint Used - Type 97-70ther Unknown 98-Not Reported 99-Unknown	Type:         0-Test Not Given         3-Both: Blood & Urine Tests         6-Not Reported           1-Blood         7-Unknown Test Type         9-Unknown if Tested           Percutt         2-Urine         8-Other Test Type
ANY INDICATION OF MIS-USE OF	000-Test Not Given 800-895-Anabolic Steroid*
RESTRAINT SYSTEM / HELMET USE (P11) 0-No 1-Yes	001-Tested, No Drugs Found/Negative         900-995-Inhalant*           100-295-Narcotic*         996-Other Drug           300-395-Depressant*         997-Tested For Drugs, Results Unknown
	400-495-Stimulant* 998-Tested For Drugs, Drugs Found, 500-595-Hallucinogen* Type Unknown/Positive
AIR BAG DEPLOYED (P12) 01-Deployed-Front 09-Deployed-Unknown Location	600-695-Cannabinoid* 095-Not Reported 700-795-Phencyclidine(PCP)* 999-Unknown if Tested
02-Deployed-Side (door, seatback) 20-Not Deployed 03-Deployed-Curtain (roof) 98-Not Reported	*See Instruction Manual for specific drug lists
07-Deployed-Other (knee, airbelt, etc) 99-Deployment Unknown 08-Deployed-Combination	TRANSPORTED TO FIRST MEDICAL FACILITY BY (P22)           0-Not Transported         4-Transported Unknown Source
EJECTION (P13)	1-EMS Air 6-Other 5-EMS Ground 8-Not Reported
0-Not Ejected 3-Ejected-Unknown Degree 9-Unknown if Ejected	3-EMS Unknown Mode 9-Unknown 2-Law Enforcement
1-Totally Ejected 7-Not Reported 2-Partially Ejected 8-Not Applicable	DIED AT SCENE/EN ROUTE (P23)
EJECTION PATH (P14)	0-Not Applicable 8-Died En Route 7-Died at Scene 9-Unknown
0-Ejection Path Not Applicable 6-Through Roof Opening (sunroof;	DEATH DATE (P24)
1-Through Side Door Opening 2-Through Side Window 3-Through Windshield 8-Other Path (e.g., Back of pickup truck)	88-Not Applicable 8888-Not Applicable
3-Through Windshield     8-Other Path (e.g., Back of pickup truck)     4-Through Back Window     9-Ejection Path Unknown     5-Through Back Door/Tailgate Opening	99-Unknown 9999-Unknown DEATH TIME (P25)
on book book langue epoining	Military Time Except: 8888-Not Applicable (Non-fatal) 9999-Unknown
EXTRICATION (P15)	(See Instruction Manual concerning known hr., but unknown min.)
0-Not Extricated / Not Applicable 1-Extricated 9-Unknown	RELATED FACTORS (P26)     (See Instruction Manual)
HS Form 214-C (Rev. December, 2016) O.M.B. No. 2127-0006 ** Man	datory Field 75114-M-34

#### Person Level (Motor Vehicle Occupant) Form

## Person Level (Not A Motor Vehicle Occupant) Form

CODED BY: INPUT BY: DATE CODED: DATE INPUT: STATE CASE NO.:			2017 Fatality Ana PERSON LEVEI	lysi _ (	s Rep NO	ort	ing M	Syste V C	CCUPANT) OS. Department of Transportation National Highway Traffic Safety Administration
STATE NUMBER (NM1) (GSA CODES)			CONSECUTIVE NUMBER	R (NM	12)				** PERSON NUMBER (NM3)
VEHICLE NUMBER OF MOTOR NON-MOTORIST (NM4) Assigned Vehicle N 999-Unknown					<b>AT 1</b> ( <u>SE</u> 00-Nor 01-III, E	LEC ie/Ap Black	OF O	CRASH	
Actual Value Except: 000-Less than One Year 001-120-Actual Age*	E (NI		998-Not Reported		04-Para	king apleg aired	with a lic or ii	Cane o 1 a Whe	Crutches, etc. 10. Physical Impairment-No Details
SE 1-Male 2-Female	(NI	÷.,	8-Not Reported 9-Unknown			0-N 1-Y	lo (Alc es (Alc	ohol No cohol In	ORTED ALCOHOL INVOLVEMENT (NM15)           t Involved)         8-Not Reported           volved)         9-Unknown (Police Reported)           COHOL DETERMINATION (By Police) (NM16)
** PERSOI     04-Occupant of a Non-Motor Vehicle     Transport Device     05-Pedestrian     06-Bicyclist     07-Other Cyclist	N TY	PE	(NM7) 08-Person on Personal Conveyance 10-Persons In/On Buildings 19-Unknown Type of Non-Moto	rist		1-E 2-Pi 3-B	videnti elimin ehavio	al Test ( ary Brea ral	Breath, Blood, Urine) 5-Observed th Test (PBT) 8-Other Method (e.g., Saliva test) 9-Not Reported ALCOHOL TEST (NM17)
07-Other Cyclist INJURY SE 0-No Apparent Injury (O) 1-Possible Injury (C) 2-Suspected Minor Injury (B) 3-Suspected Serious Injury (A) PEDESTRIAN/E			4-Fatal Injury (K) 5-Injured, Severity Unknown 6-Died Prior to Crash 9-Unknown/Not Reported			00-T 01-B 02-B (/	8-Not F est No lood reath AC)	Not Give Reported t Given Test	
(Element Co NON-MOTORIST LOCATIO (See Instr	N AT	TI	ME OF CRASH (NM10)		0 9 9 0-No	00-9 409 96-T	39-Act 4 or G est No POL gs Not	ual Valu reater t Given ICE R Involve	e 997-AC Test Performed, Results 995-Not Reported Unknown 998-Positive Reading with No Actual Value EPORTED DRUG INVOLVEMENT (NM18) d) 8-Not Reported
NON-MOTORIST ACTION/ CIRCUMSTANCES (NM11) (SELECT ALL THAT APPLY) 01-Going To or From School (K-12) 02-Waiting to Cross Roadway 03-Crossing Roadway 03-Crossing Roadway 04-Jogging/Running 05-Movement Along Roadway with Tra 06-Movement Along Roadway-Directio 08-In Roadway - Other (Working, Play	Traffi n Un	know	09-Adjacent to Roadway (e.g. Shoulder, Median) 10-Working in Trafficway 11-Entering/Exiling Parked or Stopped Vehicle 12-Disabled Vehicle Related 14-Other (Specify:) 19 98-Not Reported 99-Unknown		1-Evi 2-Dru	Mi denti ig Re	ETHC al Test cognit	(Blood ion Exp	ert (or Evaluator) (DRE) 8-Not Reported DRUG TEST (NM20) Result 1 Type 2 Result 2 Type 3 Result 3 ven 2-Test Given
NON-MOTORIST CONTRIBUTING CIRCUMSTANCES (NM12) (SELECT ALL THAT APPLY) 00-None Noted 01-Dart-Out 11-Dash 02-Failure to Yield Right-Of-Way 03-Failure to Obey Traffic Signs, Signals or Officer 04-In Roadway Improperty (Standing,	1- 1:	Re 4-Op Ec 5-Im 6-Fa	ling to Have Lights on When quired erating Without Required juipment oroper or Erratic Lane Changing lure to Keep in Proper Lane or nning off Road		001- 100- 300- 400- 500- 600-	ult: Test 295- 395- 495- 595- 695-	1-Blo 2-Uri Not Gi ed, No Narcot Depres Stimula Halluc Canna	ne Ven Drugs f ic* ssant* ant* nogen* binoid* yclidine	7-Unknown Test Type 8-Other Test Type 6-Other Test Type 6-Other Test Type 900-995-Inhalant* 996-Other Drug 997-Tested For Drugs, Results Unknown 998-Tested For Drugs, Results Unknown 998-Tested For Drugs, Drugs Found, Type Unknown/Positive 095-Not Reported
Lying, Working, Playing, etc.) 05-Entering/Exiting Parked or Stopped Vehicle 06-Inatlentive (Talking, Eating, etc.) 07-Improper Turn/Merge 08-Improper Passing 09-Wrong-Way Riding or Walking 10-Riding on Wrong Side of Road 12-Improper Crossing of Roadway or Intersection (Jaywalking)	14 11 20 2	7-Ma Tra B-Op Ca 9-No No D-Pa Ina Ov 1-Otl	king Improper Entry to or Exit from flicway erating in Other Erratic, Reckless, reless or Negligent Manner t Visible (Dark Clothing, Lighting, etc.) ssing with Insufficient Distance or dequate Visibility or Failing to Yield ertaking Vehicle ter (Specify:) known	2		0-N 1-E 5-E 3-E 2-L:	ot Tra MS Air MS Gr MS Ur aw Ent ot App ied at	ound known forceme DI licable Scene	6-Other 8-Not Reported Mode 9-Unknown nt ED AT SCENE/EN ROUTE (NM22) 8-Died En Route 9-Unknown
	FET	( EC			99-Ùn	App n-fat	(Y licable al) n	ץ 8 9	TE (NM23) EAR 888-Not Applicable (Non-fatal) 999-Unknown DEATH TIME (NM24) 88-Not Applicable (Non-fatal) 9999-Unknown
Helmet Use         Protective Prads         Other Protection           1-N0         1-N0         1-N0         1-N0           2-Yes         2-Yes         8-Not Reported         8-Not Reported           9-Unknown         9-Unknown         9-Unknown         9-Unknown           HS Form 214-E (Rev. December, 2016)         0.M.         0.M.	ed	1-No 2-Yes 3-Not 9-Unk	ve Clothing         Lighting Use         Other Preve           Reported         1-No         1-No           2-Yes         2-Yes         2-Yes           B-Not Reported         9-Unknown         9-Unknown           2127-0006         ** Mail	orted	(Se	e Insi	truction	TED F	ACTORS (NM25) uction Manual) 75114-M-34

# 200. Form Coding Instructions

#### 201. General Instructions

#### 201.1 Codes

- 201.1.1 All codes are numeric except <u>Trafficway Identifier</u>, <u>Additional State Information</u>, <u>Rail</u> <u>Grade Crossing Identifier</u>, <u>Vehicle Identification Number</u>, <u>Trailer Vehicle Identification</u> <u>Number</u>, and <u>Motor Carrier Identification Number</u>.
- 201.1.2 All codes are on the forms except: <u>Ownership</u>, <u>Global Position</u>, <u>Crash Events</u>, <u>First</u> <u>Harmful Event</u>, <u>Rail Grade Crossing Identifier</u>, Related Factors (<u>Crash, Vehicle</u>, <u>Driver</u>, <u>Person – Occupant</u>, and <u>Person – Not An Occupant</u>), <u>Vehicle Make</u>, <u>Vehicle Model</u>, <u>Body</u> <u>Type</u>, <u>Motor Carrier Identification Number</u>, <u>Sequence of Events</u>, <u>Most Harmful Event</u>, <u>Violations Charged</u>, <u>Traffic Control Device</u>, <u>Critical Event – Precrash (Event</u>), <u>Crash Type</u>, <u>Non-Motorist Location at Time of Crash</u>, <u>Pedestrian/Bike Typing</u>, <u>Death Certificate</u> <u>Number</u>, <u>Fatal Injury at Work</u> and <u>Race/Hispanic Origin</u>. See the appropriate data element pages for these codes.
- 201.1.3 The code for attribute **Unknown** is always nine. **Unknown** should only be used when all sources for obtaining information on an element have been searched and the information is missing or stated unknown. In an element that includes the attribute **Not Reported, Unknown** is only used for stated unknowns.
- 201.1.4 The code for attribute **Not Applicable** or its equivalent is always zero(s), except for data elements C29-C31 where **Not Applicable (Not Notified)** is 8888, P13 where **Not Applicable** is 8, P24/NM23 where **Not Applicable (non-fatal)** is 88888888, P25/NM24 where **Not Applicable (non-fatal)** is 8888, and SP2 where **Not Applicable (not a fatality)** is 8.
- 201.1.5 The code for attribute **None** is always zero except for <u>Alcohol Test Result</u>, <u>Motor Carrier</u> <u>Identification Number</u>, <u>Restraint System/Helmet Use</u>, and <u>Non-Motorist Safety</u> <u>Equipment</u>.

#### 201.2 Coding Forms

201.2.1 Blanks are used only in fields to be later updated with four exceptions:

- 201.2.1.1 If <u>Driver Presence</u> is coded "0" or "9" all other driver information except <u>Related Factors-Driver Level</u> must be blank.
- 201.2.1.2 If <u>VIN</u> is less than seventeen characters, do not zero-fill, leave remaining characters blank. If a State is not allowed to code the entire VIN, code the partial VIN and zero-fill the characters that cannot be completed.
- 201.2.1.3 If <u>Trafficway Identifier</u> is less than 30 characters, do not zero-fill or 9-fill. Leave remaining characters blank. The second **Trafficway Identifier** field is also left blank for non-junction crashes.
- 201.2.1.4 If <u>Motor Carrier Identification Number</u> is less than 9 characters, do not zerofill or 9-fill. Leave remaining characters blank.
- 201.2.2 All codes are right-justified except <u>VIN</u>, <u>Trafficway Identifier</u> and <u>Motor Carrier</u> <u>Identification Number</u>.

201.3 Vehicle, Driver, Precrash and both Person Level Forms. These forms are automatically numbered by the system.

201.3.1 Vehicles are numbered consecutively beginning with "001."

- 201.3.2 For each vehicle, persons are numbered consecutively beginning with "001." Order is not important. The driver does not have to be "001."
- 201.3.3 Persons not in motor vehicles are numbered consecutively beginning with "01." Order is not important.

#### 201.4 Miscellaneous

201.4.1 The number of changes per case is not limited.

- 201.4.2 Request of other States for information should always follow the format of the MDE systems Out-Of-State Data Request whether the MDE System itself or the mail is used.
- 201.4.3 Refer all coding questions through the CDAN Helpdesk.
- 201.4.4 Copies of all cases or other actions submitted must be retained for 3 years after the data collection year.
- 201.4.5 If a State will not allow transmittal of complete <u>VIN</u>, send a memorandum to the COTR informing her/him of this fact.

#### 201.5 Special Case - Coding Fatal Traffic Crashes for which there is only a death certificate.

- 201.5.1 Be sure the death occurred within thirty (30) days of the crash. If you don't know, do not submit the case. If it occurred after 30 days, do not submit.
- 201.5.2 For the cases you do submit, you must complete Forms HS-214, HS-214A, HS-214B, HS-214C, HS-214D, HS-214E unless you have been granted an exemption.

#### 201.6 Code the required elements as follows:

The following elements must be coded. If any of these elements are left blank or if an edit check is violated which involves the coding of one of these elements, you will not have a usable FARS case.

#### Crash Level (Form HS-214)

Crash Date- Appropriate Day, Month and YearCrash Time- Appropriate hour and minute if known, 9999 if not knownNumber of Forms Submitted for Persons Not in Motor Vehicles- 00-99Number of Vehicle Forms Submitted- 001-999Number of Motor Vehicle Occupant Forms Submitted- 000-999Crash Events- Table completed in MDEFirst Harmful Event- Appropriate attribute derived from table, 99 if not knownVehicle Level (Form HS-214A)Vehicle Number - 001-999Number of Occupants- 01-98 if known, 99 if unknownUnit Type- 1-4Driver Level (Forms HS-214B)-

Vehicle Number - 001-999

Driver Presence - Appropriate attribute if known, 9 if unknown Precrash Form (Form HS-214C) Vehicle Number - 001-999 if occupant Crash Type - 01-99 Person Level (Motor Vehicle Occupant) (Form HS-214D) Vehicle Number - 001-999 if occupant Person Number - 001-999 Person Type - 01-03, 09 for occupants Person Level (Not a Motor Vehicle Occupant) (Form HS-214E) Person Number - 001-999 Vehicle Number of Motor Vehicle Striking Non-Motorist - 001-999 Person Type - 04-08, 10, 19 for non-occupants

201.6.1 Code all other elements with the proper attribute if information is known. If no information is known, code the items **Unknown** or **Not Reported**. There are three exceptions to this, <u>Rollover</u>, <u>Emergency Motor Vehicle Use</u> and <u>Fire Occurrence</u> should all use the attribute "0" (**No Rollover**, **Not Applicable**, and **No or Not Reported**, respectively).

#### 202. Deletion Instructions

See FARS Microcomputer Data Entry (MDE) Manual for instructions on how to delete a case.

#### 203. Request For Case Listing Instructions

See FARS Microcomputer Data Entry (MDE) Manual for instructions on how to list a case.

#### 204. How to Structure a Case

When creating an MDE case structure, it is important to understand and correctly enter the proper number of Persons Not in Motor Vehicles, Vehicles, and Motor Vehicle Occupants. This initial structuring of the case is important for dependent data elements once your case is created. The following instructions are intended to assist in the proper structuring of your case.

#### **Step 1: Number of Persons Not in Motor Vehicles**

Enter the number of persons involved in this crash who are not in motor vehicles. This includes:

- Occupants of Non-Motor Vehicle Transport Devices (i.e., persons riding in an animal-drawn conveyance, on an animal or injured occupants of a railway train or a road vehicle on rails)
- Pedestrians
- Bicyclists
- Other Cyclists
- Persons on Personal Conveyances
- Persons In/On Buildings
- Unknown Types of Non-Motorists

For detailed explanations and examples of each, please see (NM7) Person Type.

#### Important things to consider:

- Do not include non-contact persons. For example, if the *case materials identify* three pedestrians and only one of them was contacted by a vehicle or something set into motion by a vehicle, you do not include the two who were not contacted.
- Do not include witnesses or other persons not directly involved in the crash.
- Do not include uninjured occupants of railway trains or road vehicles on rails.

#### Step 2: Number of Vehicles (in-transport, parked/stopped off roadway)

Enter the number of vehicles involved in this crash. This includes:

- Motor Vehicles In-Transport (Inside or Outside the Trafficway)
- Motor Vehicles Not In-Transport Within the Trafficway
- Motor Vehicles Not In-Transport Outside the Trafficway
- Working Motor Vehicles (Highway Construction, Maintenance, Utility only)

For detailed explanations and examples of each, please see (V5) Unit Type.

#### Important things to consider:

- You must have at least one motor vehicle "In-Transport" involved in the crash to be considered a FARS or CRSS case.
- Do not include Phantom or Non-Contact Vehicles (i.e., a vehicle that did not directly contact another vehicle and has no harmful event in the crash).
- It is possible to have a case where one vehicle sets something into motion, and then the thing
  set into motion hits another vehicle. In this case, even though the two vehicles never made
  direct contact with each other, both vehicles would be considered contact vehicles and should
  be entered because they both had harmful events. For more information about set-in-motion
  cases, please see (C32) Related Factors Crash Level, and (V29) Areas of Impact.
- A vehicle that sets something into motion, striking a person or property and causes injury or damage is a contact vehicle and should be included in this count

#### Step 3: Number of Person Forms for a Vehicle

Enter the number of occupants in the vehicle. An occupant is any person who is part of a motor vehicle (i.e., in it, on it, or attached to it).

For special handling of uninjured occupants for which there is NO Person Level data in the case materials, see "<u>Created Records</u>" below.

There are three special rules for counting occupants when structuring a case:

- Buses: For vehicle body types 50-52, 55, 58, and 59 you will enter ONLY the Driver (regardless of injury) and injured passengers when you are structuring the case. Do not include uninjured passengers. The total <u>number of occupants</u> (including uninjured occupants) will be added later on the Vehicle Form once your case has been created.
- Unknown: If the actual number of motor vehicle occupants is unknown, include the driver, if there is one, plus all other known occupants in the count (even if there is no information *in* the *case materials*).
- Uninjured Passengers with no information in the case materials: See <u>Created Records</u> below.

#### Important things to consider:

Persons ejected or who fall from a motor vehicle in-transport are still considered occupants of that vehicle for the duration of the unstabilized situation

#### **Step 4: Injury Severity**

Enter the injury severity for each of the Person Forms you entered in Steps 1 and 3. For detailed explanations and examples, please see <u>P8/NM8 Injury Severity</u>.

#### **Created Records**

This is intended to streamline data entry and only applies when information is not available for some or all uninjured passengers, as is the case in some states which do not require information to be collected

for uninjured passengers. In these situations, the system automatically generates a created record with a set of standard values. A Created Record is generated when the total <u>number of occupants</u> (entered on the Vehicle form) is greater than this <u>Number of Person Forms</u> for a vehicle entered when structuring the case and the body type is not a bus (<u>Body Types 50, 51, 52, 55, 58, or 59</u> [large buses]).

If there are uninjured passengers of an in-transport motor vehicle (other than Body Types 50, 51, 52, 55, 58, or 59 [large buses]), the MDE will automatically populate all of the data elements on the "Created" Person Level (MV Occupant) Form generated by MDE. Because this is a shortcut to auto-fill data, and this data cannot be edited, ensure the values that would apply to each occupant exactly match the values shown in the table below. You will be prompted in MDE to confirm your acceptance of created records (see Figure 1).

#### Figure 1: Created Records Message

Message fr	rom webpage	J
2	The Number of Occupants (3) you have entered is more than the number of Person records created (1) for this vehicle. This will automatically generate (2) person record(s) called Created Records and will fill them up with data. Are you sure you want to proceed with this change?	
	OK Cancel	

#### **Case Structuring Inducing Created Records:**

- 1. When structuring a case, enter the <u>Number of Occupants</u> excluding uninjured passengers for which you have no data anywhere in the case materials.
- 2. On the Vehicle form, code the <u>Number of Occupants</u> data element with the total number of occupants (both injured and uninjured) in the vehicle, as indicated in the case material.
- 3. Once the <u>Body Type</u> has been entered, and it is not a large bus, the system will generate "Created" Person Level (MV Occupant) forms for the additional occupants (i.e., forms for the uninjured passengers excluded when structuring in "1" above.). A confirmation message will appear (see <u>Figure 1</u> above). Once confirmed, the system then fills in the form with the data shown in the Table below.

# In the following situations people must be counted when structuring a case in Number of Person Forms for a Vehicle:

- 1. If the vehicle is a large Bus (<u>Body Types 50-52, 55, 58, 59</u>), only the driver and injured bus passengers are to be entered into the system for these vehicles, and additional Person forms will not be automatically created.
- 2. Any driver or injured passenger of a motor vehicle in transport
- 3. Any occupant of a motor vehicle not in transport
- 4. Any uninjured passenger in a motor vehicle in-transport if the information for that passenger is in any way different than <u>the table below</u>. This is because if the information is different from below, then you must have additional information on that occupant. A Created Record cannot be edited and is populated with the following values:

#### **Created Records Standard Set of Values**

Element Name	Code	Attribute
Age	998	Not Reported
Sex	8	Not Reported
Person Type	2	Passenger of a Motor Vehicle in Transport
Injury Severity	0	No Apparent Injury (O)
Seating Position	98	Not Reported
Restraint System/Helmet Use	98	Not Reported
Any Indication of Mis-Use of Restraint	0	No
System/Helmet Use		
Air Bag Deployed	98	Not Reported
Ejection	7	Not Reported
*Ejection Path	0	Ejection Path Not Applicable
*Extrication	0	Not Extricated/Not Applicable
Police-Reported Alcohol Involvement	8	Not Reported
*Method of Alcohol Determination (By Police)	9	Not Reported
Alcohol Test Status	0	Test Not Given
Alcohol Test Type	0	Test Not Given
Alcohol Test Result	996	Test Not Given
Police Reported Drug Involvement	8	Not Reported
*Method of Drug Determination (By Police)	8	Not Reported
Drug Test Status	0	Test Not Given
Drug Test Type (1)	0	Test Not Given
Drug Test Results (1)	000	Test Not Given
Drug Test Type (2)	0	Test Not Given
Drug Test Results (2)	000	Test Not Given
Drug Test Type (3)	0	Test Not Given
Drug Test Results (3)	000	Test Not Given
Transported to First Medical Facility By	0	Not Transported
*Died at Scene/En Route	0	Not Applicable
*Death Date	88 88 8888	Not Applicable
*Death Time	8888	Not Applicable
Person Related Factor (1)	00	None
Person Related Factor (2)	00	None
Person Related Factor (3)	00	None
*Death Certificate Number	Os	Not Applicable
*Fatal Injury At Work	8	Not Applicable
*Race	00	Not Applicable
*Hispanic Origin	00	Not Applicable

\*FARS Only Elements

## Special Instructions for Hit-and-Run Vehicles:

For uninjured passengers of hit-and-run vehicles, the Created Records are editable and each of the values in the table above can be edited as appropriate. The standard edit checks are activated.

# **300.** Data Element Coding Instructions

#### **301.** Section Organization

301.1 For each element on the FARS forms, an instruction page follows in the order of the elements on the forms. In an element that is duplicated on more the one form, the instructions are provided in the first occurrence of the element with reference to the second occurrence.

301.1.1 The letters in the upper right hand corner refer to the forms:

- 'C' Crash Level Form
- 'V' Vehicle Level Form
- 'D' Driver Level Form
- 'PC' Precrash Level (Vehicle/Driver) Form
- 'P' Person Level (MV Occupant) Form
- 'NM' Person Level (Not a MV Occupant) Form
- 301.1.2 The Format section gives the type element and whether it must be coded for an original case or whether it can be changed.
- 301.1.3 The Element Value section lists the attributes for the element and their associated codes.
- 301.1.4 The Remarks section contains coding instructions, special instructions, etc., for the element.

# **State Number – FARS Only**

FORMAT: 2 numeric SAS NAME: Accident.STATE ELEMENT VALUES:

Codes	Attribute
01	Alabama
02	Alaska
04	Arizona
05	Arkansas
06	California
08	Colorado
09	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	lowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana

Codes	Attribute
31	Nebraska
32	Nevada
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
43	Puerto Rico
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
52	Virgin Islands
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming

**Definition:** This element identifies the state in which the crash occurred.

Remarks: None.

#### **Consistency Checks:**

Check	IF	THEN
(200P)	CITY is greater than 0000 and less than 9997, and COUNTY is greater than 000	COUNTY and CITY must be valid codes for the STATE.
	and less than 997,	STATE.
(220P)	LIGHT CONDITION equals 4, and STATE is	CRASH TIME must equal 0300-0900, 9999.
	not equal to 02,	
(2300)	LIGHT CONDITION equals 5, and STATE is	CRASH TIME must equal 1600-2200, 9999.
	not equal to 02,	

Check	IF	THEN
(A010)	STATE equals 02, and LIGHT CONDITION equals 4,	CRASH TIME should equal 0300-1000, 9999.
(A020)	STATE equals 02, and LIGHT CONDITION equals 5,	CRASH TIME should equal 1500-2359, 9999.
(A940)	STATE NUMBER equals 11,	maximum SPEED LIMIT (not including 98 or 99) should equal 55.
(A945)	STATE NUMBER equals 15,	maximum SPEED LIMIT (not including 98 or 99) should equal 60.
(A950)	STATE NUMBER equals 02, 09, 10, 25, 34, 36, 41, 43, 44, 50,	maximum SPEED LIMIT (not including 98 or 99) should equal 65.
(A955)	STATE NUMBER equals 01, 05, 06, 12, 13, 17, 18, 19, 21, 24, 26, 27, 28, 29, 33, 37, 39, 42, 45, 47, 51, 53, 54, 55,	maximum SPEED LIMIT (not including 98 or 99) should equal 70.
(A960)	STATE NUMBER equals 04, 08, 20, 22, 23, 31, 35, 38, 40, 48,	maximum SPEED LIMIT (not including 98 or 99) should equal 75.
(A961)	STATE NUMBER equals 16, 30, 32, 46, 49, 56,	maximum SPEED LIMIT (not including 98 or 99) should equal 80.
(G01P)	STATE is, and GLOBAL POSITION - LATITUDE (degrees) is not equal to 77, 88, 99,	LATITUDE (degrees) must be equal to, or greater than (1d), and LATITUDE (degrees) must not be greater than (2d).
(G02P)	STATE is, and GLOBAL POSITION LATITUDE (degrees) equals (1d),	LATITUDE (minutes) must be equal to, or greater than (1s).
(G03P)	STATE is, and GLOBAL POSITION LATITUDE (degrees) equals (2d),	LATITUDE (minutes) must not be greater than (2s).
(G04P)	STATE is, and GLOBAL POSITION LONGITUDE (degrees) is not equal to 777, 888, 999,	LONGITUDE (degrees) must be equal to, or greater than, (3d), and LONGITUDE (degrees) must not be greater than (4d).
(G05P)	STATE is, and GLOBAL POSITION LONGITUDE (degrees) equals (3d),	LONGITUDE (minutes) must be equal to, or greater than (3s).
(G06P)	STATE is, and GLOBAL POSITION LONGITUDE (degrees) equals (4d),	LONGITUDE (minutes) must not be greater than (4s).
(V983)	VEHICLE TRAILING equals 3,	STATE should equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49.
(V984)	STATE does not equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49,	VEHICLE TRAILING should not equal 3.

## Consistency Check (FARS Only)

Check	Language
(U370)	UNLIKELY: EXTENT OF DAMAGE equals 8 if STATE NUMBER does not equal 17, 34, 48, 49, or 53.

# **Consecutive Number - FARS Only**

FORMAT: 4 numeric SAS NAME: Accident.ST\_CASE ELEMENT VALUES:

• 0001-9999 Assigned Number

**Definition:** This element identifies the unique case number assigned by the data entry system.

**Remarks:** Please complete FARS forms with the MDE assigned case number.

# **Crash Level Data Elements**

- <u>C1 State Number FARS Only</u>
- <u>C2 Consecutive Number FARS Only</u>
- C3 Number of Forms Submitted for Persons Not in Motor Vehicles
- <u>C4 Number of Vehicle Forms Submitted</u>
- <u>C5 Number of Motor Vehicle Occupant Forms Submitted</u>
- <u>C6 County / C7 City FARS Only</u>
- <u>C8 Crash Date</u>
- <u>C9 Crash Time</u>
- C10 Trafficway Identifier FARS Only
- <u>C11 Route Signing FARS Only</u>
- C12 Land Use and Functional System FARS Only
- <u>C13 Ownership FARS Only</u>
- <u>C14 National Highway System FARS Only</u>
- C15 Special Jurisdiction FARS Only
- <u>C16 Milepoint FARS Only</u>
- C17 Global Position
- C18 Crash Events
- <u>C19 First Harmful Event</u>
- C20 Manner of Collision
- C21 Relation to Junction
- <u>C22 Type of Intersection</u>
- <u>C23 Relation to Trafficway</u>
- C24 Work Zone
- C25 Light Condition
- C26 Atmospheric Conditions
- C27 School Bus Related
- <u>C28 Rail Grade Crossing Identifier FARS Only</u>
- <u>C29 Notification Time EMS FARS Only</u>
- <u>C30 Arrival Time EMS FARS Only</u>
- C31 EMS Time at Hospital FARS Only
- C32 Related Factors Crash Level
- C33 Interstate Highway CRSS Only
- C34 Stratum CRSS Only
- <u>C35 Police Jurisdiction CRSS Only</u>
- Additional State Information

# C3 - Number of Forms Submitted for Persons Not in Motor Vehicles

FORMAT: 2 numeric SAS NAME: Accident.PEDS ELEMENT VALUES:

Codes	Attributes
00-99	Actual Number

**Definition:** This element records the number of Person Level (Not a Motor Vehicle Occupant) forms that are applicable to this case.

**Remarks:** This count will match exactly the persons counted in the case structure field "Number of Persons Not in Motor Vehicles" (formerly called "Number of Non-Motorist Forms Submitted"). Occupants of any motor vehicle in-transport, parked/stopped off roadway motor vehicles, working motor vehicles, or motor vehicles in motion outside the trafficway will **not** be counted in this field. The count for this field includes:

- Occupants of a Non-Motor Vehicle Transport Device (persons riding in an animal-drawn conveyance, on an animal, injured occupants of railway trains) - <u>Person Type (NM7)</u> attribute 04 (Occupant of a Non-Motor Vehicle Transport Device).
- 2. Pedestrians, Bicyclists and Other Cyclists Person Type (NM7) attributes: "05, 06, and 07."
- 3. Other Persons on Personal Conveyances (i.e., skaters, wheel chair occupants) Person Level (Not a Motor Vehicle Occupant) form <u>Person Type</u> attribute **08 (Person on Personal Conveyances)**.
- 4. Any injured persons **outside** the trafficway that are not in a motor vehicle (in buildings) Person Level (Not a Motor Vehicle Occupant) form <u>Person Type</u> attribute **10 (Persons In/On Buildings)**.

Check	IF	THEN
(5Y0F)	FIRST HARMFUL EVENT equals 08, 09, 15,	NUMBER OF FORMS SUBMITTED FOR PERSONS
		NOT IN MOTOR VEHICLES must not equal 00.
(CSI4)	NUMBER OF FORMS SUBMITTED FOR	
	PERSONS NOT IN MOTOR VEHICLES must	
	equal the actual number of persons not in	
	motor vehicles in this case.	
(PB34)	NUMBER OF FORMS SUBMITTED FOR	PEDESTRIAN/BIKE TYPING -CRASH TYPE -
	PERSONS NOT IN MOTOR VEHICLES equals	PEDESTRIAN must not equal 320, 330, 360, 680,
	01, and FIRST HARMFUL EVENT equals 08,	830, 890, 900 or 910.
	and RELATION TO JUNCTION (b) equals 02,	
(PB35)	NUMBER OF FORMS SUBMITTED FOR	PEDESTRIAN/BIKE TYPING -CRASH LOCATION -
	PERSONS NOT IN MOTOR VEHICLES equals	PEDESTRIAN must equal 1.
	01, and FIRST HARMFUL EVENT equals 08,	
	and RELATION TO JUNCTION (b) equals 02,	

#### **Consistency Checks:**

# C4 - Number of Vehicle Forms Submitted

FORMAT: 3 numeric SAS NAME: Accident.VE\_TOTAL ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

**Definition:** This element records all contact motor vehicles which the officer has reported on the **Police Crash Report** as a unit involved in the crash.

**Remarks:** Included are: in-transport vehicles, not in-transport vehicles (parked/stopped off roadway/ working motor vehicles) or vehicles located outside the trafficway boundaries.

#### When identifying contact vehicles for this count:

- Remember all vehicles that are part of the unstabilized situation are part of the crash. Therefore, when recording the number of vehicles involved, the vehicles need not make contact with one another. They need only have a harmful event as part of the unstabilized situation. For example, two vehicles are traveling through an intersection when a pedestrian steps into the roadway. The first vehicle strikes the pedestrian and the second vehicle swerves to avoid the first, loses control, and overturns. Both vehicles in this situation are "contact" vehicles; therefore, this is a two-vehicle crash.
- 2. Even though there are no injuries in the vehicle or the amount of damage sustained is below the state threshold, if the vehicle is involved in a harmful event it is still a contact vehicle within the entire crash and should be included in this count even if the vehicle information section is not completed on the *Police Crash Report*.

#### **IMPORTANT:**

Remember, you must have **at least one motor vehicle "In-Transport"** involved in the crash for this to be a reportable case.

Check	IF	THEN
(050P)	PERSON TYPE equals 04-08, 19, and NUMBER	VEHICLE NUMBER OF MOTOR VEHICLE
	OF VEHICLE FORMS SUBMITTED equals 001,	STRIKING NON-MOTORIST must equal 001.
(1A0P)	RELATED FACTORS-CRASH LEVEL equals 14,	NUMBER OF VEHICLE FORMS SUBMITTED must
		be greater than 001.
(2Z0F)	any SEQUENCE OF EVENTS equals 12, 14, 45,	NUMBER OF VEHICLE FORMS SUBMITTED must
	54, 55,	be greater than 001.
(428P)	CRASH TYPE equals 20-91,	NUMBER OF VEHICLE FORMS SUBMITTED must
		be greater than 001.
(429P)	NUMBER OF VEHICLE FORMS SUBMITTED	CRASH TYPE must equal 00, 01-16, 92, 98, 99.
	equals 001,	

#### **Consistency Checks:**

Check	IF	THEN
(42AP)	NUMBER OF MOTOR VEHICLES FORMS	CRITICAL EVENT – PRECRASH (EVENT) should
	SUBMITTED equals 001, and RELATION TO	equal 01-06, 08-14 or 19.
	TRAFFICWAY equals 02, 04, 06-08, and	
	ATTEMPTED AVOIDANCE MANEUVER equals	
	00 or 01,	
(431P)	NUMBER OF VEHICLE FORMS SUBMITTED	UNDERRIDE/OVERRIDE for the other vehicle
	equals 002, and UNDERRIDE/OVERRIDE	must equal 0.
	equals 1-8, 9 for one vehicle,	
(432P)	NUMBER OF VEHICLE FORMS SUBMITTED	UNDERRIDE/OVERRIDE must equal 0.
	equals 001,	
(670F)	FIRST HARMFUL EVENT equals 12, 14, 45, 54,	NUMBER OF VEHICLE FORMS SUBMITTED must
	55,	be greater than 001.
(A080)	DRIVER PRESENCE equals 0, and FIRST	one RELATED FACTORS-DRIVER LEVEL should
	HARMFUL EVENT equals 12, and NUMBER OF	equal 20.
	VEHICLE FORMS SUBMITTED equals 002,	
(A090)	NUMBER OF VEHICLE FORMS SUBMITTED is	there should be at least one vehicle with
	greater than 001,	TRAVEL SPEED of 001-151, 997-999, or blanks.
(AZDQ)	DRIVER MANEUVERED TO AVOID equals 04,	NUMBER OF VEHICLE FORMS SUBMITTED must
		be greater than 001.
(CSI1)	NUMBER OF VEHICLE FORMS must equal the	
	actual number of Vehicle Level forms for this	
	case.	
(CSI2)	There must be exactly one Driver Level form	
	corresponding to each Vehicle Level form.	

# **C5** - Number of Motor Vehicle Occupant Forms Submitted

#### FORMAT: 3 numeric SAS NAME: Accident.PERSONS ELEMENT VALUES:

Codes	Attributes
000-999	Actual Number

**Definition:** This element records the number of Person Level (Motor Vehicle Occupant) forms that are applicable to this case.

**Remarks:** This element is derived when structuring the case. See <u>204. How to Structure a Case</u> section for remarks.

#### **Consistency Check:**

Check	Language
(CSI3)	NUMBER OF MOTOR VEHICLE OCCUPANT FORMS SUBMITTED must equal the actual number of
	Person Level (Motor Vehicle Occupant) forms for this case.

# C6 - County / C7 City - FARS Only

**FORMAT:** one set 3 numeric, one set 4 numeric **SAS NAME:** Accident.COUNTY, Person.COUNTY, Accident.CITY **ELEMENT VALUES:** 

County:		City:		
Codes	Attributes		Codes	Attributes
000	Not Applicable		0000	Not Applicable
001-996	GSA Codes		0001-9996	GSA Codes
997	Other		9997	Other
998	Not Reported		9898	Not Reported
999	Unknown		9999	Unknown

**Definition:** This element refers to the location of the unstabilized event with regard to the County/City.

**Remarks:** COUNTY and CITY are considered one field. Both must be submitted at the same time.

If COUNTY only is known, CITY may be 9999 (Unknown).

Code CITY as **0000 (Not Applicable)** if the crash does not occur within city limits.

Code CITY as **9997 (Other)** if CITY is other than those given by the GSA Codes.

Code CITY as **9999 (Unknown)** if crash location is unknown.

Code COUNTY as **997 (Other)** if COUNTY is other than those given by the GSA Codes.

Code COUNTY as 999 (Unknown) if location is unknown.

In general, **Not Applicable** should be used when there is no GSA code for the crash location.

**Other** should be used when the Analyst knows there is a GSA code for the location, but the attribute does not appear on the master GSA code list provided by NHTSA Headquarters. Both situations should be reported to NHTSA Headquarters.

#### **Not Reported**

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

#### Code Not Reported in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

### **Consistency Checks:**

Check	IF	THEN
(200P)	CITY is greater than 0000 and less than 9997, and COUNTY is greater than 000 and less than 997,	COUNTY and CITY must be valid codes for the STATE.
(210P)	CITY is greater than 0000 and less than 9997,	COUNTY must not equal 999.

## C8 - Crash Date

FORMAT: 2 sets of 2 numeric and 1 set of 4 numeric

**SAS NAME:** Accident.DAY, Vehicle.DAY, Person.DAY, parkwork.PDAY, Accident.MONTH, Accident.DAY\_WEEK, Accident.YEAR; Vehicle.MONTH; Person.MONTH; parkwork.PMONTH

#### **ELEMENT VALUES:**

Codes	Attributes
01-12	Month
01-31	Day (FARS Only)
Current (pre-printed)	Year

Definition: This element identifies the date on which the crash occurred.

**Remarks:** If the *Police Crash Report* indicates that the crash (usually a hit-and-run) occurred between some PM and AM time (e.g., 8:00 PM and 6:00 AM) on either a preceding or following day, code the crash as occurring on the following day. If a range of days is indicated (e.g., between Sunday and Friday), code the last date of the range (e.g., Friday).

#### FARS SPECIAL INSTRUCTION:

In cases where the crash date is reported as Unknown on the *Police Crash Report*, refer to the death certificate for the death date to establish the crash date.

#### **CRSS SPECIAL INSTRUCTION:**

The date of the crash is rolled up from CRSS sampling program.

If the date of the crash is unknown, use the date the crash was reported. If the time of the crash is unknown, record the time as 9999.

If the month cannot be determined from the *Police Crash Report*, enter the month of the Ending Contact Date from the Inventory Record.

If the crash date on the *Police Crash Report* does not match the crash date shown on the data entry screen and it is determined that the crash date on the *Police Crash Report* is correct, the crash date is corrected.

Check	IF	THEN
(1COP)	the MODEL YEAR is not equal to 9998 or	the vehicle MODEL YEAR must not be greater than
	9999,	CRASH YEAR plus ONE.
(3KOP)	DATE OF LAST CRASH, SUSPENSION,	
	CONVICTION must be less than or equal to	
	CRASH DATE.	
(3U0P)	DEATH DATE equals CRASH DATE, and	DEATH TIME must not be less than CRASH TIME.
	CRASH TIME is not equal to 9999,	
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person
		must be within 720 hours of the CRASH DATE and
		CRASH TIME.
(4V2F)	CRASH MONTH equals 12, and DEATH	DEATH YEAR must equal CRASH YEAR plus 1.
	MONTH equals 01,	

#### **Consistency Checks:**

Check	IF	THEN
(4V3F)	CRASH MONTH equals 12,	DEATH MONTH must equal 01, 12, 88, 99.
(4V4F)	CRASH MONTH equals 02-11, and DEATH	DEATH MONTH must equal CRASH MONTH or
	MONTH is not equal to 88 or 99,	CRASH MONTH plus 1.
(4V5F)	CRASH MONTH equals 01, and DEATH	DEATH MONTH must equal CRASH MONTH or
	MONTH is not equal to 88 or 99,	CRASH MONTH plus 1 or CRASH MONTH plus 2.
(5KOP)	The Year of DATE OF FIRST CRASH,	
	SUSPENSION, CONVICTION must be within	
	five years of the Year of CRASH DATE.	
(6V0P)	DEATH DATE must not be less than CRASH	
	DATE.	
(7V0F)	DEATH YEAR equals 9999,	CRASH MONTH must not be 01-11.
(921P)	MAKE is not 97, 98, 99, and equals, and	MODEL YEAR must equal, or CRASH YEAR plus
	MODEL equals,	1.
(A030)	CRASH MONTH equals 05-09,	ATMOSPHERIC CONDITIONS should not equal 03,
		04, 11, 12.
(A040)	CRASH MONTH equals 05-09,	ROADWAY SURFACE CONDITIONS should not
		equal 03, 04, 10.
(FP4F)	CRASH DATE is blank, case status is flawed.	
(V620)	CRASH MONTH is between January and	the VEHICLE MODEL YEAR should NOT be greater
	March,	than the CRASH YEAR unless it equals 9998 or
		9999 (contact Coding Assistance through the
		CDAN Helpdesk.).

## Consistency Check (FARS Only)

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	same, and CRASH TIME and DEATH TIME are the same,	should equal 0, and DIED AT SCENE/EN ROUTE should equal 7.

FORMAT: 4 numeric

**SAS NAME:** Accident.Hour, Accident.Minute; Vehicle.HOUR, Vehicle.MINUTE, Person.HOUR, Person.MINUTE, parkwork.PHOUR, parkwork.PMINUTE

#### **ELEMENT VALUES:**

Codes	Attributes
0000-2359	Valid military time (Code midnight as "0000")
9999	Unknown

**Definition:** This element identifies the time at which the crash occurred.

**Remarks:** Enter the time at which the crash occurred as shown on the **Police Crash Report**. This is the preferred time in all cases. If the crash time is not reported, unknown, or known to be in error, then all available information in the case materials should be used to determine Crash Time. If the hour cannot be determined, then enter **9999 (Unknown)**.

If the *Police Crash Report* indicates the crash occurred during some time interval of greater than one hour (e.g., 8:00 PM to 6:00 AM, or 8:00 AM to 5:00 PM), enter **9999 (Unknown)**. However, if the interval is one hour or less, code the midpoint of the interval.

#### **Examples:**

- 8:00 PM to 9:00 PM, enter 2030
- 8:30 PM to 9:30 PM, enter 2100
- 8:50 PM to 9:30 PM, enter 2110

When the time is available but AM versus PM is not shown on the *Police Crash Report*, base the time on <u>Light</u> <u>Condition</u> (e.g., time is 10:00, LIGHT CONDITION is **2 (Dark - Not Lighted)**; code as **2200**).

Midnight or 12 AM is coded as **0000** in military time and is the start of a new day. One minute after midnight is 12:01 and is coded as **0001**.

AM - Starts at 00:00 Midnight PM - Starts at 12:00 Noon

If the case materials state the crash occurred at the beginning or early moments of the day, midnight is coded as **0000**.

#### FARS SPECIAL INSTRUCTION:

If the day of the crash and the day of EMS Notification do not have the same date, then be sure to use attribute **<u>18 (Date of Accident and Date of EMS Notification Were Not the Same Day)</u>** in RELATED FACTORS - CRASH LEVEL.

#### **Crash Time**

#### How to Code Midnight:

In general, code midnight as **0000**. However, there may be confusion over which day midnight falls into. CRASH TIME is recorded between 00:00-23:59. Midnight is coded as **0000** to represent the beginning of a new day. This may not be the practice followed in your sources. Therefore, you have to determine which part of the day is being considered in your sources.

#### End of Day:

If your data sources give you a <u>Crash Date</u> and are consistent in talking about the end of that day, when they give the time of the crash as midnight, 12:00-midnight, 24:00 or 00:00, then you should code Crash Time as **2359**.

#### Beginning of Day:

If your sources give a <u>Crash Date</u> and are consistent in referring to the beginning or early moments of that day when they give a crash time, code midnight as **0000**.

See remarks - Notification/Arrival Time EMS, EMS Arrival At Hospital.

#### **CRSS SPECIAL INSTRUCTION:**

The time of the crash is rolled up from CRSS sampling program. If the time of the crash is unknown, record the time as **9999 (Unknown)**.

If the time of the crash on the *Police Crash Report* does not match the crash time shown on the data entry screen and it is determined that the crash time on the *Police Crash Report* is correct, then the crash time should be changed to reflect the time listed on the *Police Crash Report*.

Check	IF	THEN
(220P)	LIGHT CONDITION equals 4, and STATE is not equal to 02,	CRASH TIME must equal 0300-0900, 9999.
(2300)	LIGHT CONDITION equals 5, and STATE is not equal to 02,	CRASH TIME must equal 1600-2200, 9999.
(3U0P)	DEATH DATE equals CRASH DATE, and CRASH TIME is not equal to 9999,	DEATH TIME must not be less than CRASH TIME.
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
(A010)	STATE equals 02, and LIGHT CONDITION equals 4,	CRASH TIME should equal 0300-1000, 9999.
(A020)	STATE equals 02, and LIGHT CONDITION equals 5,	CRASH TIME should equal 1500-2359, 9999.
(A041)	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
(A050)	CRASH TIME equals 0900-1600,	LIGHT CONDITION should not equal 2-6.
(A060)	CRASH TIME equals 2300-0400,	LIGHT CONDITION should not equal 1, 4, 5, 9.
(A070)	NOTIFICATION TIME EMS is not 8888, 9998 or 9999,	NOTIFICATION TIME EMS should not be more than 120 minutes later than CRASH TIME.
(FP5F)	CRASH TIME is blank, case status is flawed.	
(P56P)	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

#### **Consistency Checks:**

## Consistency Checks (FARS Only):

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME and DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.

## C10 - Trafficway Identifier - FARS Only

#### **FORMAT:** 2 sets, 30 alphanumeric **SAS NAME:** Accident.TWAY\_ID; Accident.TWAY\_ID2 **ELEMENT VALUES:**

Codes	Attributes
	Actual Posted Number, Assigned Number, or Common Name (if no posted or assigned number)
	except:
9s	Unknown

Definition: This element captures the identity (name) of the trafficway on which the crash occurred.

#### **Remarks:**

#### For Non-Junction Crashes:

Code the trafficway identifier from the police *crash* report or highway department in the top row. Leave the bottom row blank.

#### For Intersection Crashes (Not Within an Interchange Area):

Code the trafficway identifier for the trafficway with the highest function class in the top row. Code the second trafficway identifier at the intersection, if provided by the police, in the bottom row. If the vehicles are traveling on different roadways of equal class, assign the crash to the roadway on which the motor vehicle precipitating the crash is traveling and record this roadway in the top row.

#### For Intersection-Related Crashes (Not Within an Interchange Area):

Code the trafficway identifier for the trafficway provided by the police in the top row. This does not necessarily have to be the highest functional class. In all cases, this will be the trafficway where the first harmful event occurred or the Unstabilized Situation began. Code the second trafficway identifier at the intersection, if provided by the police, in the bottom row.

#### For Intersection Crashes Within an Interchange Area:

If the **<u>First Harmful Event</u>** occurs within the intersection of a ramp and the surface roadway:

- Code the trafficway identifier provided on the police report or highway log in the top row (this does not necessarily have to be the highest function class).
- Code <u>Route Signing</u> for the trafficway in the top row.
- It is important to code the Land Use and Functional System, Ownership, and National Highway System for the highest class of trafficway at this intersection.
- Use the bottom row to record the second trafficway identifier provided by the police for this intersection.

#### For Intersection-Related Crashes Within an Interchange Area:

Code the trafficway identifier for the trafficway provided by the police in the top row. In many cases, this will be the trafficway where the first harmful event occurred or the Unstabilized Situation began. Code the second trafficway identifier at the intersection, if provided by the police, in the bottom row.

#### For Ramp Crashes:

If the crash occurs on the ramp or is related to the ramp, include the word "RAMP" and/or the ramp ID number after the trafficway's identifier (e.g., I-10 RAMP).

#### General Guidelines for Coding Trafficway Identifier:

This data is obtained from the State Highway Department, or if same as that used by the State Highway Department, from the police *crash* report. Enter all alphabetic characters with **CAPITAL LETTERS**. If less than 30 characters, left-justify and do not zero-fill.

- Use <u>standard USPS abbreviations</u> for the street name suffix (ex. AVE, BLVD, CT, FWY). **Do not include** *punctuation at the end of the suffix abbreviation.*
- Do not enter the street address where the crash occurred. For example, 245 Elm St. would be entered as ELM ST *in MDE*.
- Do not enter milepoints here following the trafficway even if provided on the report. Milepoints are entered in the element <u>Milepoint</u>.
- Do not enter a cross street referenced by the investigating officer for a **non-junction** crash. For example, if the report states: "the crash occurred on Main Street, 0.6 miles south of Girard Avenue," Girard Avenue does not go in Trafficway Identifier 2. Trafficway Identifier 2 is reserved for intersection and intersection-related crashes.
- If a trafficway is known to have both a route identifier and a common name record the route identifier first followed by the common name (Example: State Route 3 is also Indian Head Highway **and** would be coded as SR-3 **INDIAN HEAD HWY**).

Obtained from the State Highway Department, or if same as that used by the State Highway Department, from the police *crash* report.

- If <u>Route Signing</u> is **1 (Interstate)**, you must enter "I-" in the first two spaces of Trafficway Identifier.
- If <u>Route Signing</u> is **2 (US Highway)**, you must enter "US-" in the first three spaces of Trafficway Identifier.
- If <u>Route Signing</u> is **3 (State Highway)**, you must enter "SR-" in the first three spaces of Trafficway Identifier.
- If <u>Route Signing</u> is **4 (County Road)**, you must enter "CR-" in the first three spaces of Trafficway Identifier followed by the route number OR name if there is no number.

Immediately after the route designation (I-, US- or SR-), you should enter the corresponding highway number. For example, Interstate 70 should be coded as "I-70" and US 66 should be coded as "US-66." You must use a dash in the highway designation between the capital letters and the number.

If one trafficway is both, a State Highway and an Interstate Highway, <u>Route Signing</u> must always be coded "1-Interstate." You should always try to obtain the route number and milepoint that correspond to the Route Signing (Interstate).

 a) If the Trafficway Identifier and <u>Milepoint</u> are available for only the State Highway then code <u>Route</u> <u>Signing</u> as **1 (Interstate)**, enter "I-" in the first two spaces of Trafficway Identifier followed by the full State Highway Identifier as normal (including any letters.) Code the State Highway Milepoint under the element <u>Milepoint</u>.

Example:

If California business loop (CA215) is also Interstate 15, then code "I-SR215" or "I-CA215."

b) If the Trafficway Identifier and <u>Milepoint</u> are available for both the State Highway and the Interstate Highway, enter "I-" in the first two spaces of Trafficway Identifier followed by the Interstate number. You may then also enter the State Highway Identifier anywhere after the Interstate route number. Code the Interstate Milepoint under the element <u>Milepoint</u>.

Example: "I-15" (SR215) or "I-15" (CA215) Similarly, if a State Highway is also a US Highway, <u>Route Signing</u> must always be coded "2-US Highway." You should always try to obtain the route number and milepoint that correspond to the Route Signing (US Highway).

 a) If the Trafficway Identifier and Milepoint are available only for the State Highway, then code <u>Route</u> <u>Signing</u> as **2 (US Highway)**, enter "US-" in the first three spaces of Trafficway Identifier followed by the full State Highway Identifier as normal (including any letters). Code the State Highway Milepoint under the element <u>Milepoint</u>.

Example: If Florida Route 25 is also US Route 27, then code "US-SR25" or "US-FL25."

 b) If the Trafficway Identifier and Milepoint are available for both the US Highway and the State Highway, enter "US-" in the first three spaces of Trafficway Identifier followed by the US route number. You may then also enter the State Highway Identifier anywhere after the US route number. Code the US Route Milepoint under the element <u>Milepoint</u>. Example:

"US-27" (SR25) or "US-27" (FL25).

#### **Overlapping Roadways of Equal Function Class**

For situations where you are presented with a roadway with two equal functional class identifiers for the same roadway, such as a stretch of roadway that is both US-10 and US-25, record both trafficways in Trafficway Identifier #1 using the "slash" format. The lower number trafficway should appear before the slash (e.g., "US-10/25"). This would also apply to Interstates, State and County roadways with two designations of equal class.

#### **Other Land Ways**

Crashes that occur on parking lot ways or other privately owned land ways open to the public for transportation will likely not be named in the State Highway Department inventory. If the police provide a name for this trafficway, use that name. If however, you are provided a street address OR the name of the adjacent trafficway (i.e. not the location where the crash occurred) OR the location information is blank enter "NONE".

Check	IF	THEN
(1F1P)	RELATION TO JUNCTION (b) does not equal 02, 03,	the second TRAFFICWAY IDENTIFIER should be blank.
(340P)	ROUTE SIGNING equals 1,	the first position of TRAFFICWAY IDENTIFIER #1 must be "I" and the second position must be "-".
(341P)	the first position of TRAFFICWAY IDENTIFIER #1 equals "I" and the second position equals "_",	ROUTE SIGNING must equal 1 or 7.
(350P)	ROUTE SIGNING equals 2,	the first two positions of TRAFFICWAY IDENTIFIER #1 must be "US" and the third position must be "-".
(351P)	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "US" and third position equals "-",	ROUTE SIGNING must equal 2 or 7.
(360P)	ROUTE SIGNING equals 3,	the first two positions of TRAFFICWAY IDENTIFIER #1 must be "SR" and the third position must be "-".

#### **Consistency Checks:**

**C10** 

Check	IF	THEN
(361P)	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "SR" and third position equals "-",	ROUTE SIGNING must equal 3 or 7.
(362P)	ROUTE SIGNING equals 4,	the first two positions of TRAFFIC-WAY IDENTIFIER #1 must be "CR" and the third position must be "-".
(781P)	TYPE OF INTERSECTION equals 02-07, 10,	TRAFFICWAY IDENTIFIER (b) should not be blank.
(AC0A)	RELATION TO JUNCTION (b) equals 02, 03,	the second TRAFFICWAY IDENTIFIER should not be all blank.

# C11 - Route Signing - FARS Only

### FORMAT: 1 numeric SAS NAME: Accident.ROUTE ELEMENT VALUES:

Codes	Attributes
1	Interstate
2	U.S. Highway
3	State Highway
4	County Road
5	Local Street - Township
6	Local Street - Municipality
7	Local Street - Frontage Road
8	<u>Other</u>
9	Unknown

Definition: This element identifies the route signing of the trafficway on which the crash occurred.

**Remarks:** Before coding this element, be certain of which trafficway is to be coded. This element is coded with respect to the trafficway in the top row of <u>Trafficway Identifier</u>. If there is any question, refer to the remarks section of Trafficway Identifier for a hierarchy for selecting the appropriate trafficway to be coded.

#### CODING FRONTAGE ROADS

If the crash occurs on a frontage road which is part of a larger, higher order trafficway (such as Interstate, U.S. Highway or State Route), use the following guideline to code the highway elements:

- Code <u>Trafficway Identifier</u> and <u>Land Use and Functional System</u> (b) for the **01 (Interstate)**, **02 (Principal** Arterial Other Freeways and Expressways) or **04 (Minor Arterial)**.
- Code Route Signing 7 (Local Street Frontage Road).

Make sure to include the highway designation in Trafficway Identifier when using **7 (Local Street - Frontage Road)**. See <u>Trafficway Identifier</u>.

If the **Frontage Road** is a separate trafficway, code all highway elements for that trafficway. **Frontage Road** is not used.

#### 8 (Other) includes 'Other Limited Access' and 'Other Major Artery.'

Federal Highway Administration classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to Regional State Assignee.

Check	IF	THEN
(260P)	ROUTE SIGNING equals 1,	NATIONAL HIGHWAY SYSTEM must equal 1.
(320P)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not equal 7,	NATIONAL HIGHWAY SYSTEM must equal 1.
(330P)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	ROUTE SIGNING must not equal 1.
(340P)	ROUTE SIGNING equals 1,	the first position of TRAFFICWAY IDENTIFIER #1 must be "I" and the second position must be "-"
(341P)	the first position of TRAFFICWAY IDENTIFIER #1 equals "I" and the second position equals "-",	ROUTE SIGNING must equal 1 or 7.
(350P)	ROUTE SIGNING equals 2,	the first two positions of TRAFFICWAY IDENTIFIER #1 must be "US" and the third position must be "-".
(351P)	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "US" and third position equals "-",	ROUTE SIGNING must equal 2 or 7.
(360P)	ROUTE SIGNING equals 3,	the first two positions of TRAFFICWAY IDENTIFIER #1 must be "SR" and the third position must be "-".
(361P)	the first two positions of TRAFFICWAY IDENTIFIER #1 equals "SR" and third position equals "-",	ROUTE SIGNING must equal 3 or 7.
(362P)	ROUTE SIGNING equals 4,	the first two positions of TRAFFIC-WAY IDENTIFIER #1 must be "CR" and the third position must be "-".
(A280)	ROUTE SIGNING equals 1,	SPECIAL JURISDICTION should not equal 1-5, 8, 9.
(A290)	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	RELATION TO JUNCTION (b) should not equal 02-04, 06, 08, 16.
(A291)	RELATION TO JUNCTION (b) equals 07,	ROUTE SIGNING should not equal 5, 6.
(A300)	ROUTE SIGNING equals 1,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.
(A310)	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	TOTAL LANES IN ROADWAY should not equal 1 for any vehicle.
(A320)	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
(A330)	ROUTE SIGNING equals 1, 2,	ROADWAY SURFACE TYPE should equal 1, 2, 8 for at least one vehicle.
(A350)	ROUTE SIGNING equals 1,	FIRST HARMFUL EVENT should not equal 10.
(A360)	RELATION TO JUNCTION(b) equals 07,	ROUTE SIGNING should not equal 4.
(A700)	SPEED LIMIT is greater than 65 for every vehicle,	ROUTE SIGNING should equal 1-4.

Check	IF	THEN
(A820)	FIRST HARMFUL EVENT equals 46, and	ROUTE SIGNING should not equal 1.
	RELATION TO JUNCTION (a) equals 1, and	
	RELATION TO JUNCTION (b) does not equal	
	02, 03, 05,	
(A840)	ROUTE SIGNING equals 7,	LAND USE AND FUNCTIONAL SYSTEM (b) should
		equal 01-03.
(A850)	LAND USE AND FUNCTIONAL SYSTEM (b)	NATIONAL HIGHWAY SYSTEM should equal 1.
	equals 02, and ROUTE SIGNING equals 2,	
(A882)	<b>RELATION TO TRAFFICWAY equals 07,</b>	ROUTE SIGNING should not equal 1.
(A920)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) should
		not equal 02, and ROUTE SIGNING should not
		equal 2.

# C12 - Land Use and Functional System - FARS Only

**FORMAT:** 1 numeric occurring 1 time, 2 numeric occurring 1 time SAS NAME: *RUR\_URB; FUNC\_SYS* ELEMENT VALUES:

#### C12a: Land Use

Codes	Attributes
1	Rural
2	Urban
6	Trafficway Not in State Inventory
8	Not Reported
9	<u>Unknown</u>

#### C12b: Functional System

Codes	Attributes
01	Interstate
02	Principal Arterial – Other Freeways and Expressways
03	Principal Arterial – Other
04	Minor Arterial
05	Major Collector
06	Minor Collector
07	Local
96	Trafficway Not in State Inventory
98	Not Reported
99	<u>Unknown</u>

**Definition (Land Use):** The classification of the segment of the trafficway on which the crash occurred based on the Federal Highway Administration (FHWA) approved adjusted Census boundaries of small urban and urbanized areas.

**Definition (Functional System):** This element identifies the functional classification of the segment of the trafficway on which the crash occurred.

**Remarks:** Before coding this element, be certain of which trafficway is to be coded. This element is coded with respect to the trafficway selected in <u>NATIONAL HIGHWAY SYSTEM</u>, <u>OWNERSHIP</u>, <u>ROUTE SIGNING</u>, and in the top row of <u>TRAFFICWAY IDENTIFIER</u>. The exception would be an intersection *crash* in an interchange. Please see the remarks below and in TRAFFICWAY IDENTIFIER for a hierarchy for selecting the appropriate trafficway to be coded.

Code the value that represents the FHWA approved Land Use and Functional System. FHWA classification obtainable from the State Highway Department must be used.

No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the state DOT planning office.

#### Land Use:

- **6 (Trafficway Not in State Inventory)** is used when a qualifying motor vehicle traffic *crash* occurs on a trafficway that is not included in the state highway inventory. Examples include *crashes* that occur on parking lot ways or other privately owned landways open to the public for transportation.
- **8 (Not Reported)** is used when the crash occurred on a reportable trafficway but the information to record LAND USE is missing or unavailable.
- 9 (Unknown) is used when the crash occurred on a reportable trafficway, but it is unknown if the crash location is within the boundaries of an urban area. If LAND USE is unknown, FUNCTIONAL SYSTEM, <a href="https://www.oww.com/oww.com/oww.com/www.com/oww.com/wwww.com/www.com/www.com/www.com/wwww.com/www.com/www.com/www.

#### **Functional System:**

- **96 (Trafficway Not in State Inventory)** is used when a qualifying motor vehicle traffic *crash* occurs on a trafficway that is not included in the state highway inventory. Examples include *crashes* that occur on parking lot ways or other privately owned landways open to the public for transportation.
- **98 (Not Reported)** is used when the crash occurred on a reportable trafficway but the information to record FUNCTIONAL SYSTEM is missing or unavailable.
- 99 (Unknown) is used when the crash occurred on a reportable trafficway, but the functional classification of the segment of the trafficway on which the crash occurred can't be determined or the applicable segment can't be determined. If FUNCTIONAL SYSTEM is unknown, LAND USE, <u>OWNERSHIP</u> and <u>NATIONAL</u>
   <u>HIGHWAY SYSTEM</u> can still be coded with a known value. For example, it may be known that the crash occurred within or outside urban boundaries (LAND USE). However, the trafficway may change classification along its length and the segment of the trafficway on which the crash occurred may not be known.

#### **NON-JUNCTION CRASHES**

Assign the crash to the trafficway on which the first harmful event occurred. If the first harmful event occurred on private property, assign the crash to the trafficway on which the vehicle was traveling when the Unstabilized Situation began.

#### **INTERSECTION CRASHES (Not Within an Interchange)**

In an at-intersection crash, assign the crash to the highest function class of trafficway at the intersection.

If the vehicles are traveling on different roadways of equal class, assign the crash to the roadway on which the motor vehicle precipitating the crash is traveling.

#### **INTERSECTION CRASHES (Within an Interchange)**

Interchange crashes that occur in an intersection of a ramp that connects a higher and a lower class trafficway should be assigned to the highest-class trafficway. For example: vehicle #1 strikes vehicle #2 in the intersection of the I-270 ramp and US-10. Code FUNCTIONAL SYSTEM as 01 (Interstate).

Ramps are part of the highest class of trafficway to which they connect. Therefore, if a crash occurs on a ramp, including in the merge/diverge lanes, and it is not an Intersection crash, it is assigned to the highest class of trafficway to which the ramp connects. Example: vehicle #1 overturns on the ramp of I-270 and US-10. Code

C12

FUNCTIONAL SYSTEM 01 (Interstate). This includes intersection-related and entrance/exit ramp related crashes for <u>RELATION TO JUNCTION</u>.

#### **OTHER CRASHES (Within an Interchange)**

For other crashes that occur within an interchange, other than intersection crashes, code Functional System for the trafficway on which the vehicles were traveling. Example, vehicle #1 strikes vehicle #2 on US-10 bridge within the I-270 interchange (not in the intersection of any ramp, or on any ramp). Code FUNCTIONAL SYSTEM for US-10 and not I-270.

#### **QUESTIONABLE CASES**

In any questionable case, the higher function class takes precedence.

Check	IF	THEN
(1TOP)	SPEED LIMIT for every vehicle is greater than	LAND USE AND FUNCTIONAL SYSTEM (a) should
	55, and not equal to 98 or 99,	not equal 2 or 6, and LAND USE AND
		FUNCTIONAL SYSTEM (b) should not equal 06,
		07, or 96.
(300P)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) must
		not equal 01.
(320P)	LAND USE AND FUNCTIONAL SYSTEM (b)	NATIONAL HIGHWAY SYSTEM must equal 1.
	equals 01, and ROUTE SIGNING does not equal 7,	
(A110)	FIRST HARMFUL EVENT equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should
ι <i>γ</i>		not equal 01-03.
(A11A)	FUNCTIONAL SYSTEM (b) equals 01,	OWNERSHIP must equal 01 or 31.
(A12A)	either FUNCTIONAL SYSTEM (b) or	both must equal 96.
	OWNERSHIP equals 96,	
(A13A)	LAND USE (a) equals 6,	FUNCTIONAL SYSTEM (b) must equal 96.
(A14A)	FUNCTIONAL SYSTEM (b) equals 96,	LAND USE a must equal 6.
(A15A)	FUNCTIONAL SYSTEM (b) equals 99,	LAND USE (a) should equal 9, OWNERSHIP
		should equal 99, and NATIONAL HIGHWAY
		SYSTEM should equal 9.
(A150)	LAND USE AND FUNCTIONAL SYSTEM (b)	RELATION TO JUNCTION (b) should not equal
	equals 01, 02, and RELATION TO JUNCTION	02-04, 06, 08.
	(a) equals 0,	
(A160)	LAND USE AND FUNCTIONAL SYSTEM (b)	ROADWAY SURFACE TYPE should equal 1, 2, 8 or
	equals 01-06,	9 for at least one vehicle.
(A170)	ROADWAY SURFACE TYPE equals 3-5 for	LAND USE AND FUNCTIONAL SYSTEM (b) should
	every vehicle,	not equal 01-06.
(A180)	LAND USE AND FUNCTIONAL SYSTEM (b)	SPECIAL JURISDICTION should not equal 1-5, 8,
(	equals 01,	9.
(A190)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02,	SPECIAL JURISDICTION should not equal 4.
(A200)	RELATION TO JUNCTION (b) equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should
		not equal 06, 07 or 96.

Check	IF	THEN
(A210)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	TRAFFIC CONTROL DEVICE should not equal 01- 04, 07, 20, 23, 40, 50, 65.
(A220)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
(A230)	SEQUENCE OF EVENTS equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
(A240)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and RELATION TO JUNCTION (a) equals 0,	TRAVEL SPEED should not equal 005-040 for any vehicle.
(A250)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20,	TOTAL LANES IN ROADWAY should not equal 1 for the vehicles involved in the first harmful event.
(A720)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.
(A810)	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
(A840)	ROUTE SIGNING equals 7,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
(A850)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2,	NATIONAL HIGHWAY SYSTEM should equal 1.
(A860)	NATIONAL HIGHWAY SYSTEM equals 1,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
(A883)	RELATION TO TRAFFICWAY equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
(A900)	SPEED LIMIT equals 60, 65 for every vehicle,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 04-07 or 96.
(A910)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 04-07 or 96,	NATIONAL HIGHWAY SYSTEM should equal 0, 9.
(A920)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 02, and ROUTE SIGNING should not equal 2.
(U684)	UNLIKELY: LAND USE (a) equals 8.	
(U685)	UNLIKELY: FUNCTIONAL SYSTEM (b) equals 98.	
(U686)	UNLIKELY: LAND USE and FUNCTIONAL SYSTEM (a/b) equals 9, 99.	

# C13 - Ownership - FARS Only

#### FORMAT: 2 numeric SAS NAME: *RD\_OWNER* ELEMENT VALUES:

Codes	Attributes
01	State Highway Agency
02	County Highway Agency
03	Town or Township Highway Agency
04	City or Municipal Highway Agency
11	State Park, Forest or Reservation Agency
12	Local Park, Forest or Reservation Agency
21	Other State Agency
25	Other Local Agency
26	Private (other than Railroad)
27	Railroad
31	State Toll Road
32	Local Toll Authority
40	Other Public Instrumentality (i.e., Airport)
50	Indian Tribe Nation
60	Other Federal Agency
62	Bureau of Indian Affairs
63	Bureau of Fish and Wildlife
64	U.S. Forest Service
66	National Park Service
67	Tennessee Valley Authority
68	Bureau of Land Management
69	Bureau of Reclamation
70	Corps of Engineers
72	Air Force
74	Navy/Marines
80	Army
96	Trafficway Not in State Inventory
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the entity that has legal ownership of the segment of the trafficway on which the crash occurred.

**Remarks:** Before coding this element, be certain of which trafficway is to be coded. This element is coded with respect to the trafficway selected in <u>NATIONAL HIGHWAY SYSTEM</u>, <u>LAND USE AND FUNCTIONAL SYSTEM</u>, <u>ROUTE SIGNING</u>, and in the top row of <u>TRAFFICWAY IDENTIFIER</u>. The exception would be an intersection *crash* in an interchange. Please see the remarks section of TRAFFICWAY IDENTIFIER for a hierarchy for selecting the appropriate trafficway to be coded.

Code the level of government that best represents the highway owner irrespective of whether agreements exist for maintenance or other purposes.

- "State" means owned by one of the 50 States, the District of Columbia, or the Commonwealth of Puerto Rico including quasi-official State commissions or organizations;
- "County, local, municipal, town, or township" means owned by one of the officially recognized governments established under State authority;
- "Federal" means owned by one of the branches of the U.S. Government or independent establishments, government corporations, quasi-official agencies, organizations, or instrumentalities;
- "Other" means any other group not already described above or nongovernmental organizations with the authority to build, operate, or maintain toll or free highway facilities.
- Only private roads that are open to public travel (e.g., toll bridges) are to be reported in HPMS.

**96 (Trafficway Not in State Inventory)** is used when a qualifying motor vehicle traffic *crash* occurs on a trafficway that is not included in the state highway inventory. Examples include *crashes* that occur on parking lot ways or other privately owned landways open to the public for transportation.

**98 (Not Reported)** is used when the crash occurred on a reportable trafficway but the information to record Ownership is missing or unavailable.

**99 (Unknown)** is used when the crash occurred on a reportable trafficway, but it can't be determined which entity has legal ownership of the segment of the trafficway on which the crash occurred or the applicable segment can't be determined. If OWNERSHIP is unknown, <u>LAND USE and FUNCTIONAL SYSTEM</u> and <u>NATIONAL HIGHWAY SYSTEM</u> can still be coded with known values. For example, it may be known that the crash occurred in an urban area on a minor collector that is not part of the NHS. However, the location detail may not be sufficient to determine ownership (e.g., **03 (Town or Township Highway Agency)** or **04 (City or Municipal Highway Agency)**).

Federal Highway Administration classification obtainable from the State Highway Department must be used.

No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the state DOT planning office.

Check	IF	THEN
(A11A)	FUNCTIONAL SYSTEM (b) equals 01,	OWNERSHIP must equal 01 or 31.
(A12A)	either FUNCTIONAL SYSTEM (b) or OWNERSHIP equals 96,	both must equal 96.
(A15A)	FUNCTIONAL SYSTEM (b) equals 99,	LAND USE (a) should equal 9, OWNERSHIP should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
(U683)	UNLIKELY: OWNERSHIP equals 98 or 99.	

# C14 - National Highway System - FARS Only

#### FORMAT: 1 numeric SAS NAME: Accident.NHS ELEMENT VALUES:

Codes	Attributes
0	This section IS NOT on the NHS
1	This section IS ON the NHS
9	Unknown if this section is on the NHS

**Definition:** This element identifies whether or not this crash occurred on a trafficway that is part of the National Highway System.

**Remarks:** The National Highway System includes the Interstate System, and consists of principal arterial system routes and some Strategic Highway Network connectors functionally classified below principal arterial.

Federal Highway Administration classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to Regional State Assignee.

Check	IF	THEN
(260P)	ROUTE SIGNING equals 1,	NATIONAL HIGHWAY SYSTEM must equal 1.
(300P)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) must not equal 01.
(320P)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not equal 7,	NATIONAL HIGHWAY SYSTEM must equal 1.
(330P)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	ROUTE SIGNING must not equal 1.
(A15A)	FUNCTIONAL SYSTEM (b) equals 99,	LAND USE (a) should equal 9, OWNERSHIP should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
(A850)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2,	NATIONAL HIGHWAY SYSTEM should equal 1.
(A860)	NATIONAL HIGHWAY SYSTEM equals 1,	LAND USE AND FUNCTIONAL SYSTEM (b) should equal 01-03.
(A910)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 04-07 or 96,	NATIONAL HIGHWAY SYSTEM should equal 0, 9.
(A920)	NATIONAL HIGHWAY SYSTEM equals 0, 9,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 02, and ROUTE SIGNING should not equal 2.

# **C15 - Special Jurisdiction - FARS Only**

### FORMAT: 1 numeric SAS NAME: Accident.SP\_JUR ELEMENT VALUES:

Codes	Attributes
0	No Special Jurisdiction
1	National Park Service
2	Military
3	Indian Reservation
4	College/University Campus*
5	Other Federal Properties*
8	Other
9	Unknown

**Definition:** This element identifies if the location on the trafficway where the crash occurred qualifies as a Special Jurisdiction even though it may be patrolled by state, county, or local police (e.g., all State highways running through Indian reservations are under the jurisdiction of the Indian reservation).

**Remarks:** Road must be under the regulation of Special Jurisdiction, although it may be patrolled by state, county, or local police forces.

There is a difference between a National Park and National Forest. Only areas described as National Parks should be **1 (National Park Service)**. State parks should be coded as **8 (Other)**, and National Forests should be coded as **0 (No Special Jurisdiction)**.

State highways running through Indian Reservations must be coded as **3 (Indian Reservation)**.

#### \* These values are unlikely occurrences and will raise an error flag.

Check	IF	THEN
(A180)	LAND USE AND FUNCTIONAL SYSTEM (b)	SPECIAL JURISDICTION should not equal 1-5, 8,
	equals 01,	9.
(A190)	LAND USE AND FUNCTIONAL SYSTEM (b)	SPECIAL JURISDICTION should not equal 4.
	equals 02,	
(A280)	ROUTE SIGNING equals 1,	SPECIAL JURISDICTION should not equal 1-5, 8,
		9.
(U010)	UNLIKELY: SPECIAL JURISDICTION is equal to	
	4 or 5.	

### FORMAT: 5 numeric SAS NAME: Accident.MILEPT ELEMENT VALUES:

Codes	Attributes
0.0000	None
	Actual to Nearest Tenth Mile
9999.8	Not Reported
9999.9	Unknown

**Definition:** This element identifies the milepoint nearest to the location where the crash occurred.

**Remarks:** Refer to the remarks section under <u>LAND USE AND FUNCTIONAL SYSTEM</u> for the hierarchy of selecting the trafficway to be coded.

Code the MILEPOINT for the respective <u>TRAFFICWAY IDENTIFIER</u>. For crashes that occur on entrance or exit ramps use the milepoint associated with the ramp location with respect to the trafficway to which it belongs. When transitioning between two trafficways of equal functional class choose the milepoint of the exiting trafficway.

Obtained from *the* State Highway Department. Code the actual Milepoint to the nearest .1 mile with decimal. Right justify if less than 5 digits. For example, if Milepoint is 10, you must code "0010.0."

#### The Difference Between Mile POINTS and Mile POSTS:

Mile POINTS make up the length of a road. They are part of a State's official Linear Referencing System (LRS). Mile points are measurements of the road and are expressed in decimal format. This LRS is used for the State's official Trafficway Asset Management. This information can come ONLY from a State's DOT out of their official Roadway Inventory, Roadlog, or other Roadway information collection system; because, the physical mile POST may or may not align with the LRS mile POINT.

The Mile POST (sometimes called Mile Markers or Mile Post Markers) is the physical, numerical marker located on the roadside. This is typically the information located on Police Crash Reports, as law enforcement frequently refer to the mile posts or mile markers when describing the location of an incident. DO NOT CODE THE MILE POST.

9999.8 (Not Reported) is used when the information to record MILEPOINT is not applicable, missing, or unavailable.

# C17 - Global Position

#### **FORMAT:** 8 numeric, 9 numeric **SAS NAME:** Accident.Latitude/Accident.Longitud **ELEMENT VALUES:**

Codes	Attributes
	Latitude (dd.mm.ss.ss) (degrees/minutes/seconds)
	Longitude (ddd.mm.ss.ss) (degrees/minutes/seconds)
7s	Not Reported
8s	Not Available
9s	<u>Unknown</u>

Definition: This element identifies the location of the crash using Global Position coordinates.

**Remarks:** "Global Position" refers to the geographic location of the crash. It is expressed in Degrees, Minutes, and Seconds of Latitude; and Degrees, Minutes, and Seconds of Longitude:

## Latitude: dd mm ss.ss (Degrees/Minutes/Seconds) Longitude: ddd mm ss.ss (Degrees/Minutes/Seconds)

In some instances, your source documents may display Longitude as a negative (-) number. You may disregard the minus (-) sign.

#### **Right-Justify Degrees and Minutes:**

Note that **Longitude** Degrees can be up to three digits. Code Degrees less than three digits in the right-most positions and "0s" to the left. Code **Latitude** or **Longitude** Minutes less than two digits in the right-most position with "0s" to the left. Examples: Longitude "77 degrees – 7 minutes - no seconds" is coded 077 07 00.00; Longitude "80 degrees - no minutes - no seconds" is coded 080 00 00.00; Latitude "30 degrees - one minute - 30 seconds" is coded 30 01 30.00.

#### Latitude and Longitude Seconds:

Code the value of **Latitude** or **Longitude** Seconds to two significant places after the decimal. If the **Latitude** or **Longitude** Seconds precision is less than two decimal positions, enter "0s" in the right-most positions of Seconds. Always right-justify any data before the decimal point with added "0s" to the left (e.g., 5.1 seconds is 05.10 with no spaces before the decimal point).

## 7s (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

#### Code 7s (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**9s (Unknown)** is selected if the investigating officer reported that the global position of the crash was not known.

#### FARS SPECIAL INSTRUCTION:

The state Police *Crash* Report may include the geographic location in a format compatible with this element, or the State Highway Department may be able to provide it from a state Geographic Information System (GIS) or Global Positioning System (GPS).

A Geo-locator tool is available on the FARS microcomputer *(MDE)* to assist generating latitude and longitude when they are not available through state sources.

If data is unknown, code all "9s." For example, if you are in a state that does record geographic location coordinates, but you don't have those coordinates, and the Geo-locator tool cannot provide the coordinates, the data is unknown.

Code the complete valid **Latitude** and **Longitude**, if available, if not blank and if not unknown. You must code valid **Latitude** or **Longitude** minutes and seconds when coding a valid value for **Latitude** or **Longitude** degrees. (For example: Latitude - 38 99 99.99 is invalid.)

#### **CRSS SPECIAL INSTRUCTION:**

This data element is only coded if it is present on the *Police Crash Report* and in Lat/Long format, otherwise code as **Not Reported**.

Check	IF	THEN
(G01P)	STATE is and GLOBAL POSITION -	LATITUDE (degrees) must be equal to, or greater
	LATITUDE (degrees) is not equal to 77, 88, 99,	than ( <u>1d</u> ), and LATITUDE (degrees) must not be
		greater than ( <u>2d</u> ).
(G02P)	STATE is, and GLOBAL POSITION -	LATITUDE (minutes) must be equal to, or greater
	LATITUDE (degrees) equals ( <u>1d</u> ),	than ( <u>1s</u> ).
(G03P)	STATE is, and GLOBAL POSITION -	LATITUDE (minutes) must not be greater than
	LATITUDE (degrees) equals (2d),	( <u>2s</u> ).
(G04P)	STATE is and GLOBAL POSITION -	LONGITUDE (degrees) must be equal to, or
	LONGITUDE (degrees) is not equal to 777,	greater than ( <u>3d</u> ), and LONGITUDE (degrees)
	888, 999,	must not be greater than ( <u>4d</u> ).
(G05P)	STATE is, and GLOBAL POSITION -	LONGITUDE (minutes) must be equal to, or
	LONGITUDE (degrees) equals ( <u>3d</u> ),	greater than ( <u>3s</u> ).
(G06P)	STATE is, and GLOBAL POSITION -	LONGITUDE (minutes) must not be greater than
	LONGITUDE (degrees) equals ( <u>4d</u> ),	( <u>4s</u> ).
(G07P)	any part of GLOBAL POSITION - LATITUDE	all parts of LATITUDE must be all 8s.
	(degrees, minutes or seconds) is all 8s,	
(G08P)	any part of GLOBAL POSITION - LONGITUDE	all parts of LONGITUDE must be all 8s.
	(degrees, minutes or seconds) is all 8s,	
(G09P)	any part of GLOBAL POSITION - LATITUDE	all parts of LATITUDE must be all 9s.
	(degrees, minutes or seconds) is all 9s,	
(G10P)	any part of GLOBAL POSITION - LONGITUDE	all parts of LONGITUDE must be all 9s.
	(degrees, minutes or seconds) is all 9s,	
(G11P)	any part of GLOBAL POSITION - LATITUDE	all parts of LATITUDE must be blank.
	(degrees, minutes or seconds) is blank,	

## **Global Position**

Check	IF	THEN
(G12P)	any part of GLOBAL POSITION - LONGITUDE	all parts of LONGITUDE must be blank.
	(degrees, minutes or seconds) is blank,	
(G0AP)	any part of GLOBAL POSITION - LONGITUDE	all parts of LONGITUDE must be all 7s.
	(degrees, minutes or seconds) is all 7s,	
(GOBP)	any part of GLOBAL POSITION - LATITUDE	all parts of LATITUDE must be all 7s.
	(degrees, minutes or seconds) is all 7s,	

# C18 - Crash Events

FORMAT: (Completed in MDE) SAS NAME: (See Below)

**Definition:** The Crash Events table records in chronological sequence, the set of events resulting from an unstabilized situation that constitutes a motor vehicle traffic crash.

**Remarks:** The "crash" is concluded in time when all events which originate from the unstabilized situation are stabilized. The Crash Events table is designed to provide a coded description of all qualifying events which occurred in the crash.

With this coded chronological sequence of qualified crash events, traffic safety analysts can review the entire series of events involving in-transport motor vehicles. Various areas of concern to the highway safety community can be easily assessed using this data. For instance, the injury severity in crashes can be assessed relative to the number and type of impacts involved. Likewise, certain collision configurations that may create a greater hazardous condition for the occupants can be identified. Other possible areas of analysis would be the mix of vehicles sizes or the types of objects the different classes of vehicles impact.

To complete the Crash Events table, each event for each vehicle is recorded in the order in which they occur, time-wise, based on the description of the crash from the crash report narrative, diagram or other relevant case materials. Crash Events includes both harmful and non-harmful events that occur in the crash. Recording of Crash Events ends at the last harmful event of the entire crash. Therefore, a non-harmful event (e.g., Crossing the Centerline) that occurs following the last harmful event of the crash will not be included.

The Crash Events table is completed based on the actions of the in-transport motor vehicle(s) in the case. Consequently, other involved traffic units (parked motor vehicle, pedestrian, etc.) are only identified in the events for the in-transport motor vehicle that contacted it. If the crash report includes an event that involves only not in-transport motor vehicles and/or non-motorists, that specific event is not entered as an event in the coded crash sequence.

#### **Examples Include:**

- Not in-transport vehicle impacts pedestrian, other not in-transport vehicle, or fixed object.
- Pedestrian or pedalcyclist impacts an object, a not in-transport vehicle, other non-motorist.

#### \*Note: Data recorded in the Crash Events table is used to derive the following data elements:

- 1. First Harmful Event (FHE) the first injury or damage producing event in each crash.
- 2. Areas of Impact / Initial (AOI/Initial) the first Areas of Impact value for each vehicle.
- 3. <u>Sequence of Events (SOE)</u> all events (harmful and non-harmful) associated with each in-transport motor vehicle in the table.

For items identified in a "damaged property" section on the report, include all items listed associated with the applicable vehicle in the best order that can be determined. If the actual order cannot be determined, use the listed order of items. In a multi-vehicle crash, if it cannot be determined which vehicle is associated with the damaged property listed; assign these items to the vehicle most likely to be associated with this property. If this cannot be established, omit these events.

#### C18 Crash Events Table Columns

Vehicle Number	Areas of Impact	Sequence of	Vehicle Number	Areas of Impact
(This Vehicle)	(This Vehicle)	Events (SOE)	(Other Vehicle)	(Other Vehicle)

# **Event Number**

FORMAT: (Completed in MDE) SAS NAME: Cevent.EVENTNUM; Vevent.EVENTNUM ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

**Remarks:** This is a computer assigned number beginning with '001.' The event number(s) show the chronological sequence of the qualifying harmful and non-harmful events in the crash. Qualifying events are those which involve an in-transport motor vehicle or an object set-in-motion by an in-transport motor vehicle.

In the MDE system this will be the row position and not displayed as a column in the entry table.

# Vehicle Number (This Vehicle)

FORMAT: (Completed in MDE) SAS NAME: Cevent.VNUMBER1; Vevent.VNUMBER1 ELEMENT VALUES:

Codes	Attributes
001-999	Actual Number

**Remarks:** Enter the number of the in-transport motor vehicle associated with the event in the Sequence of Events column of the Crash Events Table. Vehicles are assigned the *Police Crash Report's* vehicle number unless a vehicle number from the *Police Crash Report* is not used in the case (e.g., non-contact vehicle).

# Areas of Impact (This Vehicle)

FORMAT: (Completed in MDE) SAS NAME: Cevent.AOI1; Vevent.AOI1 ELEMENT VALUES: \*

Codes	Attributes
00	Non-Collision
01-12	Clock Points
13	Top
14	Undercarriage
61	Left
62	Left-Front Side
63	Left-Back Side
81	Right
82	Right-Front Side
83	Right-Back Side
18	Cargo/Vehicle Parts Set-In-Motion

Codes	Attributes
19	Other Objects Set-In-Motion
20	Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other
98	Not Reported
99	Unknown

**Remarks:** Identifies the contact point (if applicable) for the vehicle coded in Vehicle Number (This Vehicle) associated with this event. If the event is a Collision event, code the value that identifies the impact area or indicates this vehicle set an object in motion. If the event is a Non-Collision event, use the attribute <u>00 (Non-Collision</u>). If the event is a <u>Non-Harmful event</u>, then skip entry of an Areas of Impact (This Vehicle) value for that event.

This field uses the same values and Remarks as the Vehicle Level data element <u>Areas of Impact – Initial Contact</u> <u>Point</u>. The Vehicle Level data element Areas of Impact - Initial Contact Point is derived from the Crash Events Table and will always be the first recorded areas of impact value for each vehicle in the table.

# **Sequence of Events**

FORMAT: (Completed in MDE) SAS NAME: Cevent.SOE; Vevent.SOE ELEMENT VALUES:

#### Non-Harmful Events:

Codes	Attributes
61	Equipment Failure (blown tire, brake failure, etc.)
62	Separation of Units
63	Ran Off Roadway-Right
64	Ran Off Roadway-Left
79	Ran off Roadway - Direction Unknown
71	End Departure
65	Cross Median
68	Cross Centerline
66	Downhill Runaway
67	Vehicle Went Airborne
69	Re-entering Roadway
70	Non-harmful, Swaying Trailer/Jackknife
60	Cargo/Equipment Loss or Shift (non-harmful)

#### **Non-Collision Harmful Events:**

Codes	Attributes
01	Rollover/Overturn
02	Fire/Explosion
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision

Codes	Attributes
72	Cargo/Equipment Loss or Shift (harmful to this vehicle)
16	Thrown or Falling Object
05	Fell/Jumped from Vehicle

# Collision with Motor Vehicle In-Transport:

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by
	Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

## Collision with Object Not Fixed:

Codes	Attributes
08	Pedestrian
09	Pedalcyclist
10	Railway Vehicle
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal-Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	Unknown Object Not Fixed

# Collision with Fixed Object:

Codes	Attributes
17	Boulder
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	Curb

Codes	Attributes
34	Ditch
35	<u>Embankment</u>
38	<u>Fence</u>
39	Wall
40	Fire Hydrant
41	<u>Shrubbery</u>
42	Tree (Standing Only)
48	Snow Bank
53	Mail Box
43	Other Fixed Object
<i>93</i>	Unknown Fixed Object

#### Unknown

Codes	Attributes
99	<u>Unknown</u>

**Remarks:** This data element is derived from the Crash Events Table. Recording of Crash Events ends at the last harmful event of the entire crash. Therefore, a <u>non-harmful event</u> (e.g., Crossing the Centerline) that occurs following the last harmful event of the crash will not be included. Correction to the Sequence Events order must be made by revision to the Crash Events Table. This field uses the same values and Remarks as the Vehicle Level data element <u>Sequence of Events</u>.

Check	IF	THEN
(A042)	CRASH EVENTS-SEQUENCE OF EVENTS equals	at least one previous CRASH EVENTS-SEQUENCE
	17, 19-21, 23-26, 30-35, 38-43, 52, 53, 57, <b>93</b> ,	OF EVENTS should equal 63, 64, 71 or 79 for that
	for a vehicle,	vehicle.
(A043)	SEQUENCE OF EVENTS for the last event in	
	the CRASH EVENTS TABLE must not equal 60-	
	71, 79.	
(A612)	PERSON TYPE equals 04, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	10, 49, or 74 for that vehicle number in the
	MOTORIST equals,	CRASH EVENTS table.
(A619)	the total count of <i>persons with</i> PERSON TYPE	the number of events equal to 08 <i>for that</i>
	equal to 05 that have the same VEHICLE	<i>vehicle</i> in the CRASH EVENTS table should equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	
	MOTORIST is,	
(A61A)	the total count of PERSON TYPES is equal to	the number of events equal to 15 in the CRASH
	08 for the vehicle in VEHICLE NUMBER OF	EVENTS table should equal for that vehicle.
	MOTOR VEHICLE STRIKING NON-MOTORIST is	
(A61B)	the total count of PERSON TYPES is equal to	the number of events equal to 08 in the CRASH
	10 for the vehicle in VEHICLE NUMBER OF	EVENTS table should equal for that vehicle.
	MOTOR VEHICLE STRIKING NON-MOTORIST is	
	<i>,</i>	

# Vehicle Number (Other Vehicle)

**FORMAT:** (Completed in MDE) **SAS NAME:** Cevent.VNUMBER2; Vevent.VNUMBER2 **ELEMENT VALUES:** 

Codes	Attributes
001-999	Actual Number

**Remarks:** This identifies the vehicle number of the vehicle contacted by the motor vehicle in-transport recorded in "Vehicle Number (This Vehicle)." This field is applicable only when the event is a collision between two motor vehicles (i.e., Sequence of Events codes 12, 54, 55, 14, or 45). If the event is **not** a collision between two motor vehicles, then Vehicle Number (Other Vehicle) is not applicable and left blank.

# Areas of Impact (Other Vehicle)

FORMAT: (Completed in MDE) SAS NAME: Cevent.AOI2; Vevent.AOI2 ELEMENT VALUES:

Codes	Attributes
00	Non-Collision
01-12	<u>Clock Points</u>
13	Тор
14	Undercarriage
61	<u>Left</u>
62	Left-Front Side
63	Left-Back Side
81	Right
82	Right-Front Side
83	Right-Back Side
18	Cargo/Vehicle Parts Set-In-Motion
19	Other Objects Set-In-Motion
20	Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other
98	Not Reported
99	Unknown

**Remarks**: Identifies the contact point (if applicable) for the vehicle coded in Vehicle Number (This Vehicle) associated with this event. If the event is a Collision event, code the value that identifies the impact area or indicates this vehicle set an object in motion. If the event is a Non-Collision event, use the attribute <u>00 (Non-Collision</u>). If the event is a <u>Non-Harmful event</u>, then skip entry of an Areas of Impact (This Vehicle) value for that event.

This field uses the same values as the Vehicle Level data element <u>Areas of Impact – Initial Contact Point</u>. The Vehicle Level data element Areas of Impact - Initial Contact Point is derived from the Crash Events Table and will always be the first recorded areas of impact value for each vehicle in the table.

# C19 - First Harmful Event

## **FORMAT:** 2 numeric **SAS NAME:** Accident.HARM\_EV; Vehicle.HARM\_EV; Person.HARM\_EV; parkwork.PHARM\_EV **ELEMENT VALUES:**

# **Non-Collision Harmful Events:**

Codes	Attributes
01	Rollover/Overturn
02	Fire/Explosion
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision
16	Thrown or Falling Object
72	Cargo/Equipment Loss or Shift (harmful to this vehicle)
05	Fell/Jumped from Vehicle

#### **Collision with Motor Vehicle In-Transport:**

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set-in-Motion
	from/by Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

## **Collision with Object Not Fixed:**

Codes	Attributes
08	Pedestrian
09	Pedalcyclist
10	Railway Vehicle
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	Unknown Object Not Fixed

**Collision with Fixed Object:** 

Codes	Attributes
17	Boulder
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	<u>Curb</u>
34	Ditch
35	<u>Embankment</u>
38	<u>Fence</u>
39	<u>Wall</u>
40	Fire Hydrant
41	<u>Shrubbery</u>
42	Tree (Standing Only)
48	Snow Bank
53	Mail Box
43	Other Fixed Object
93	Unknown Fixed Object

#### <u>Unknown</u>

Codes	Attributes
99	<u>Unknown</u>

**Definition:** The First Harmful Event is defined as the first injury- or damage-producing event of the crash.

Remarks: on following page.

## **Non-Collision Harmful Events**

#### Non-Collision events involving motorcycles and vehicles with a "load":

Non-Collision events may occur before or after a collision event. They should not be coded as a separate event if they occur as part of a collision event.

Examples:

- A motorcycle strikes a deer, overturns and the rider becomes separated from the vehicle. Code the collision event, not the non-collision "Rollover/Overturn" and "Fell/Jumped from Vehicle" that occur as part of the collision event.
- One tractor/trailer rear-ends another tractor/trailer. The impact pushes the lead vehicle's load into the back of the tractor cab with part falling onto the roadway. Code the collision event, not the non-collision "cargo-loss or shift" that occurred as part of the collision event.

**01 (Rollover/Overturn)** is used when a motor vehicle rotates (rollover) at least one quarter turn onto its side or end. For motorcycles, laying the motorcycle down on its side is sufficient to code **01 (Rollover/Overturn)** as a harmful event if damage or injury is produced, even though the data element <u>Rollover</u> is not applicable to motorcycles.

If there is a **01 (Rollover/Overturn)** that begins in another location but involves a ditch or embankment in the case (e.g., "rolled through the ditch," "rolled down the embankment," "came to rest against the embankment"), then the rule applies where if there is no damage associated with an impact with the fixed object during the rollover, it is not included in the Crash Events. If there is indication that damage resulted from an impact with the fixed object, it is included in the Crash Events. This follows the same logic as striking a tree or another vehicle during an overturn.

**Note:** For medium/heavy trucks with attached trailers by fixed linkage, when either the power unit or the trailer rolls over, the entire vehicle will be considered a rollover.

**02 (Fire/Explosion)** is used for a vehicle fire or explosion that occurs during the crash sequence or as a result of the crash.

As it pertains to the occurrence of **02 (Fire/Explosion)**, the crash circumstances are not considered stabilized until the threat of damage to this vehicle, or injury consequences to this vehicle's occupants, has ceased. Therefore, the crash sequence is not considered stabilized until all occupants have exited the vehicle and the scene has been declared safe by police or other authority. Fires that occur at a later time to vehicles abandoned at the scene (e.g., in open fields, on hillsides, etc.) or to vehicles removed from the scene to another location (tow yard, curbside, etc.) are not considered part of the crash sequence.

**03 (Immersion or Partial Immersion)** is used when an in-transport motor vehicle enters a body of water and results in injury or damage. This code would also be used if the vehicle came to rest in water and the depth cannot be ascertained from case materials. **NOTE:** In immersion fatalities the injury to the person may be noted as "drowning".

**04 (Gas Inhalation)** includes injury or death as a result of toxic fumes, such as carbon monoxide fumes leaking from a motor vehicle in-transport.

**51** (Jackknife [harmful to this vehicle]) applies to a condition that occurs to an articulated vehicle, (any vehicle with a trailing unit(s) connected by a hitch; e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit, striking the power unit, causing damage to the power unit or trailer. Jackknife should only be coded as a harmful event if there is clear indication of damage to the jackknifed vehicle or injury to its occupants caused by the jackknife.

**06 (Injured in Vehicle [non-collision])** is used when an occupant is injured during an unstabilized situation without a collision, excluding cargo/equipment loss or shift. Examples: Driver slams on brake, causing an unrestrained passenger to be injured. Driver makes a sharp turn causing driver to strike head on side window, knocking driver unconscious.

**44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.])** is used when the pavement surface irregularity is on a paved surface. Other examples include indication of contact with a dip, depression, low spot, trough, etc.) If the impact is with a surface irregularity (e.g. ruts, potholes) not on a paved surface use the <u>58 (Ground)</u>. For a vehicle that "bottoms out" on the paved surface (causing damage) due to speed but not because of a pavement surface irregularity, use attribute **07 (Other Non-Collision)**.

07 (Other Non-Collision). Non-collision not captured in the listed non-collision attributes.

Examples:

- Damage to the vehicle produced by its own dislodged vehicle parts (including hood flying up and contacting the windshield).
- A vehicle "bottoms out" on the roadway (causing damage) due to speed but not because of a pavement surface irregularity. For impacts on the roadway due to pavement surface irregularities should be coded **44** (Pavement Surface Irregularity [ruts, potholes, grates, etc.]).

**16 (Thrown or Falling Object)** is used when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor vehicle. If a tree limb falls from a tree and is contacted by a car, enter **16 (Thrown or Falling Object)**. If a person maliciously throws an object off an overpass into traffic below, enter **16 (Thrown or Falling Object)**. This excludes contacts made by loads or objects set in-motion by a motor vehicle (see **54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport**).

**72 (Cargo/Equipment Loss or Shift [harmful to this vehicle])** refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, and not to the vehicle, its parts or trailing unit, itself. This attribute is only used when the injury- or damage-producing event in the crash is the loss or shift of cargo in/on a vehicle causing damage to that vehicle, its cargo, or injury to its occupants. This attribute should never be used to refer to a "collision" event (see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport]).</u>

## Example:

A pickup truck brakes rapidly to avoid a collision. This causes a piece of lumber in the pickup bed to smash through the rear window.

**05 (Fell/Jumped from Vehicle)** is used when an occupant of this vehicle falls or jumps (not suicide) from the vehicle causing injury. For example, an occupant of a motor vehicle in-transport leans against the car door, it opens and the occupant falls out; or a person riding on a vehicle's exterior (hood, roof, running board, etc.) falls or jumps, and is injured by the fall. If an occupant falls or jumps from a vehicle and is struck by that vehicle, use this attribute.

## **Collision with a Motor Vehicle In-Transport**

**12 (Motor Vehicle In-Transport)** is used when the injury- or damage-producing event is two motor vehicles intransport making contact within the trafficway boundaries. In-transport means that the motor vehicle is inmotion or on the roadway portion of a trafficway.

54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact by something set-in-motion by one *or both* of the vehicles. In these circumstances, both vehicles will have this attribute extracted and included in their SEQUENCE OF EVENTS.

In crashes involving harmful events caused by objects set-in-motion by a Motor Vehicle in-transport, remember that a vehicle's load is considered part of the vehicle.

#### Examples:

- If cargo falls from a truck (in-transport) and strikes another motor vehicle in-transport, this is treated as a two-vehicle crash. Therefore, the proper code for both vehicles is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in- Motion from/by Another Motor Vehicle In-Transport) and the <u>Area Of Impact (This Vehicle)</u> column is coded <u>18 (Cargo/Vehicle</u> <u>Parts Set-In-Motion)</u>.
- If an in-transport vehicle strikes an at-rest object in the roadway that was previously cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is <u>73 (Object That Had</u> <u>Fallen from Motor Vehicle In-Transport</u>). If that object is then propelled into another motor vehicle in-transport, the proper SEQUENCE OF EVENTS attribute for this next event is <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport</u>) and the <u>Area Of Impact (This Vehicle)</u> column is coded <u>19 (Other Objects Set-In-Motion)</u>.
- If an in-transport vehicle strikes an at-rest object in the roadway that was not cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is <u>18 (Other Object [Not Fixed]</u>). If that object is then propelled into another motor vehicle in-transport, the proper SEQUENCE OF EVENTS code for this next event is **54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport)** and the <u>Area Of Impact (This Vehicle)</u> column is coded <u>19 (Other Objects Set-In-Motion)</u>.

This attribute does not apply when the cargo, persons or objects set-in-motion by an in-transport motor vehicle strikes something other than another in-transport motor vehicle. In this case, use the applicable "collision with non-fixed object", or "collision with fixed object" code for the thing struck by the cargo, person, or object set-in-motion.

## Examples:

- If cargo falls from a truck (in-transport) and strikes another vehicle that is not in-transport, the proper SEQUENCE OF EVENTS attribute is <u>14 (Parked Motor Vehicle)</u> or <u>45 (Working Motor Vehicle)</u> depending on which type of not in-transport vehicle was contacted by the load and the <u>Area Of Impact (This Vehicle)</u> column is coded <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u>.
- If cargo falls from a truck (in-transport) and strikes a pedestrian, the proper SEQUENCE OF EVENT attribute would be <u>08 (Pedestrian)</u> and the <u>Area Of Impact (This Vehicle)</u> column is coded <u>18</u> (Cargo/Vehicle Parts Set-In-Motion).

If a pedestrian is struck by an at-rest object propelled by an in-transport vehicle (e.g., parked motor vehicle, stop sign, etc.), the proper SEQUENCE OF EVENTS attribute for this harmful event is <u>08</u> (<u>Pedestrian</u>) and the <u>Area Of Impact (This Vehicle</u>) column is coded <u>19 (Other Objects Set-In-Motion</u>).

**55 (Motor Vehicle in Motion Outside the Trafficway)** is used when the injury- or damage-producing event is two motor vehicles in-transport making contact outside the trafficway boundaries in a motor vehicle traffic crash.

### Example:

A vehicle loses control attempting to turn into a gas station and strikes another vehicle pulling away from the pump in the station lot.

# **Collision with Object Not Fixed**

**08 (Pedestrian)** is used for all those not on a personal conveyance. A person pushing a vehicle should be coded **08 (Pedestrian)**. A person being carried by another person should also be considered a **08 (Pedestrian)**.

**09** (**Pedalcyclist**) is used for any person on a non-motorized other road vehicle propelled by pedaling. Examples include a bicycle, tricycle, unicycle or pedal car.

**10 (Railway Vehicle)** is any land vehicle that is (1) designed primarily for, or in use for, moving persons or property from one place to another on rails and (2) not in use on a land way other than a railway.

- Inclusions: Railway Trains, Street car/trolley on private way.
- Exclusions: Street car/trolley operating on trafficway.

74 (Road Vehicle on Rails) is any land vehicle on rails operating in a trafficway.

- Inclusions: Street car/trolley operating on trafficway.
- Exclusions: Railway Trains, Street car/trolley on private way, Street car/trolley or electric bus operating on tires.

**11 (Live Animal)** is used for collisions with live animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device (see <u>ANSI D16.1</u>). Default to **11 (Live Animal)** if it cannot be determined if the struck animal is alive, dead or if it was being ridden or drawing a transport device.

**49 (Ridden Animal or Animal-Drawn Conveyance)** *is used* for ridden animals and animals drawing transport devices. See **18 (Other Object [Not Fixed])** for an animal carcass.

**18 (Other Object [Not Fixed])** is used when a motor vehicle in-transport strikes a non-fixed object that is known NOT to have been the cargo or part of another motor vehicle in-transport or when it is UNKNOWN whether the object was the cargo or part of another motor vehicle in-transport (i.e., refers to objects such as a dead body, animal carcass, construction cones or barrels, an unattached trailer, a bicycle without a rider or downed tree limbs or power lines, debris from a prior crash). For objects that have become separated from a motor vehicle in-transport not as a result of a prior crash, use attribute **73 (Object That Had Fallen from Motor Vehicle In-Transport)**.

**15 (Non-Motorist on Personal Conveyance)** is used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

- 1. Rideable toys
  - a. Roller Skates, in-line skates
  - b. Skateboards
  - c. Skates
  - d. Baby carriage
  - e. Scooters
  - f. Toy Wagons
- 2. Motorized rideable toys
  - a. Motorized skateboard
  - b. Motorized toy car
- 3. Devices for personal mobility assistance
  - a. Segway-style devices
  - b. Motorized and non-motorized wheelchair
  - c. Handicapped scooters

## Exclusions:

- 1. Golf cart
- 2. Low Speed Vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped

**14 (Parked Motor Vehicle)** is used when the impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in-transport.

**45 (Working Motor Vehicle)** is used to indicate the motor vehicle contacted was in the act of performing construction, maintenance or utility work related to the trafficway when it became an involved unit. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles, tow trucks, etc.

## Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker", performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A state, county or privately owned snow plow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.

- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle which is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling or calming influence.

**NOTE:** *Code* "45" excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garbage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, etc. These are considered motor vehicles In-transport). Use Related Factors-Vehicle Level <u>42 (Other</u> <u>Working Vehicle [Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle])</u> to identify these vehicles.

A question may arise when a police, fire or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, or as traffic control. The question becomes, "has its function changed from being a motor vehicle in-transport to a working vehicle?" The answer is "no." Treat these situations as a motor vehicle in-transport striking another motor vehicle in-transport. Use Related Factors-Vehicle Level <u>41 (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities)</u> to identify that this vehicle was struck while performing these work activities.

**73 (Object That Had Fallen from Motor Vehicle In-Transport)** is used when a motor vehicle in- transport impacts a non-fixed object at rest that is known to have been the cargo or part of another motor vehicle in-transport. Do not use this attribute for debris from a prior crash. This attribute does not include vehicle occupants that are ejected or fall from a motor vehicle in-transport. (Example: Motorcycle operator falling from a motor vehicle see non-collision event <u>O5 (Fell/Jumped From Vehicle)</u>. For impacts involving two motor vehicles in transport resulting from cargo, persons, or objects set in motion see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by another Motor Vehicle In-Transport</u>].

For example, if cargo that fell from a vehicle and was at rest in the roadway is struck, this attribute would apply. If the cargo was at rest in the roadway as a result of a prior accident, use attribute **18 (Other Object** [Not Fixed]).

# 91 (Unknown Object Not Fixed) is used when the event involves an object that is known to be not fixed but the case materials do not identify the specific object.

# **Collision with Fixed Object**

The attributes <u>58 (Ground)</u>, <u>33 (Curb)</u>, <u>34 (Ditch)</u>, and <u>35 (Embankment)</u> are grouped under the Collision with Fixed Object subset because they are intended to be harmful events in the crash (i.e. – they are associated with an impact that produces injury or damage).

When coding these events there must be fields on the *Police Crash Report* or verbiage in the narrative such as "struck," "hit," "impacted," etc. that identify these as harmful.

For cases where the indication of the harmful event came from the narrative, there may not be a corresponding indication of damage in any *Police Crash Report* field. In these instances, code the harmful event as stated in the narrative and include the corresponding attribute under Areas of Impact.

If there is no indication of damage from contact with the fixed object in fields on the **Police Crash Report** and the narrative language does not identify it as a harmful event (e.g., "came to rest on the embankment" or

"drove through" or "drove across" the ditch and/or the embankment, or "drove over" the curb do not **code** <u>33</u> (Curb), <u>34 (Ditch)</u>, or <u>35 (Embankment)</u> in the Sequence of Events.

**17 (Boulder)** is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

**19 (Building)** is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.

**58 (Ground)** is used when the impact is with an earthen or paved surface off of the roadway. **58 (Ground)** is not to be entered when the harmful event is <u>01 (Rollover/Overturn)</u>.

Indication of furrowing, gouging, or digging in of the tires/wheels is not sufficient to code the collision event **58** (Ground). For example, if the *Police Crash Report* narrative states; "the trucks tires dug into the turf causing the vehicle to roll over," the harmful event should be <u>01 (Rollover/Overturn)</u>.

**20 (Impact Attenuator/Crash Cushion)** is a device for controlling the absorption of energy released during vehicle collision (crash cushion). Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

**50 (Bridge Overhead Structure)** is used when striking the bottom of a bridge while traveling on a trafficway underneath it. See Figure 18 for a diagram of Bridge Components.

**21 (Bridge Pier or Support)** is a square or round column of stone, concrete, brick, steel or wood for supporting a bridge between abutments. This attribute includes the bridge abutments which are supporting the ends of a bridge. Abutments are generally designed for retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick or wood (includes the wing-walls). See Figure 18 for a diagram of Bridge Components.

**23 (Bridge Rail [Includes Parapet])** is a wooden, brick, stone, concrete, or metal fence-like structure which runs along the outer most edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet. Balustrade is often used synonymously with parapet. See See <u>Figure 18</u> for a diagram of Bridge Components.

• Bridges do not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

**24 (Guardrail Face)** is a low barrier that has the primary longitudinal structure composed of metal (plates, mesh, box beam, etc.). A guardrail is differentiated from <u>25 (Concrete Traffic Barrier)</u> by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete (including concrete rails). If the crash report does not differentiate between guardrail face and end, default to guardrail face.

Guardrails, which serve as bridge rails, should be coded as 23 (Bridge Rails [includes Parapet]).

**52 (Guardrail End)** is used if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

**25 (Concrete Traffic Barrier)** refers to the longitudinal traffic barriers constructed of concrete. This includes all temporary concrete barriers regardless of location (i.e., temporary Jersey Barrier on a bridge being used to control traffic during bridge repair/construction). Concrete walls (vertical side surfaces) do not apply here; see <u>39 (Wall)</u>.

**57 (Cable Barrier)** refers to a flexible barrier system which uses several cables typically supported by steel posts. These barriers are designed to help lessen impact or keep vehicles within the confines of the road.

26 (Other Traffic Barrier) is used for all other longitudinal barriers such as wood or rock.

59 (Traffic Sign Support) is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in-transport. This includes mile marker posts and signs above the trafficway.
46 (Traffic Signal Support) is used when the post supporting a traffic signal, or the signal itself, is hit by a motor vehicle in-transport.

**30 (Utility Pole/Light Support)** refers to supports for highway lighting systems, not including other private lighting systems (e.g., parking lot lights). **30 (Utility Pole/Light Support)** is used for electrical, telephone, cable & other utility pole-type supports.

**31 (Other Post, Other Pole, or Other Supports)** is used for posts other than highway signs, utility poles, or light supports. (e.g., reflectors on poles alongside of roadway, parking meters, flag poles, etc.). For mail box posts, use **53 (Mail Box)**. For fence posts, use **38 (Fence)**.

32 (Culvert) is a man-made drain or channel crossing under a road, sidewalk, etc.

**33 (Curb)** is a concrete or asphalt structure that borders the paved surface. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Ensure that the *case materials* provide some indication that damage has occurred when a vehicle strikes a curb. This attribute includes collisions with curbing that forms raised islands, medians, or separators. For example, if the report identifies the vehicle struck/collided with a traffic island, channelizing island, raised median, or separator use **33 (Curb)** not <u>43</u> (Other Fixed Object).

**34 (Ditch)** includes any man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert. Reference to a "ditchbank", "embankment of the ditch", or "ditch embankment" should be coded under **34 (Ditch)**.

**35 (Embankment)** is a raised structure to hold back water, to carry a roadway or the result of excavation or washout (including erosion) which may be faced with earth (or rock, stone or concrete). A **35 (Embankment)** can usually be differentiated from a <u>39 (Wall)</u> by its incline whereas a wall is usually vertical. However, there are exceptions to this; such as a retaining wall that may be inclined or a vertical embankment that is caused by a natural event such as a washout.

In crashes involving a field approach or driveway crossing, use attribute **35 (Embankment)** when no specific components (e.g., culverts or ditches) are identified.

**38 (Fence)** includes the fence posts. A Fence can be made of wood, chain link, stone, etc.

**39 (Wall)** is a primarily vertical structure composed of concrete, metal, timber or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also included as **39 (Wall)** is headwalls (or endwalls) that are sometimes provided on culvert ends principally to protect the sides of the embankment around the culvert opening against erosion. This does not include wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wingwalls should be coded as **21 (Bridge Pier or Support)**.

**40 (Fire Hydrant)** refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fire plugs or fire stand pipes in some areas.

**41 (Shrubbery)** refers to vegetation which is usually of a woody multi-stemmed variety and in most instances is low growing rather than tall. May also be called bushes. Some common examples are boxwood, hawthorn, and mountain laurel.

**42 (Tree [Standing Only])** is used when a vehicle strikes a standing tree. This includes impacts from overhanging branches, tree stumps or large cactus (Saguaro). If a vehicle strikes a fallen tree, use <u>18 (Other Object [Not Fixed]</u>). If a tree falls on a vehicle as it is passing by, use <u>16 (Thrown or Falling Object)</u>.

**48 (Snow Bank)** is used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

**53 (Mail Box)** refers to a private residence mail/newspaper box including the post. A cluster of private mailboxes is included in this attribute. This element does not include U.S. Mailbox, which are typically blue and are for general public use. Code a U.S. Mailbox as **43 (Other Fixed Object)**.

**43 (Other Fixed Object)** is used when the object is fixed (considered a permanent structure) and is not described by any of the other fixed object attributes. This attribute excludes collisions with curbing that forms raised islands, medians, or separators (See also <u>33 (Curb)</u>.)

Examples:

- Bus shelters
- Pedestrian walkways
- Toll booths
- Guy wires supporting utility poles
- U. S. Mailbox for public use

Other examples would include property damage to standing crops, yards, and other vegetation (excluding: <u>41</u> (<u>Shrubbery</u>), <u>42</u> (<u>Tree [Standing Only]</u>), and <u>58 (Ground</u>)) if noted on the crash report.

When the case materials identify a non-specific object impact, apply the following guidelines. If the case materials only identify the harmful event as:

- "Fixed Object", then use 43 (Other Fixed Object)
- "Sign", then use 59 (Traffic Sign Support)
- "Post", then use 31 (Other Post, Other Pole or Other Supports)
- "Sign Post", then use <u>59 (Traffic Sign Support)</u>
- "Bridge", then use <u>23 (Bridge Rail [Includes Parapet])</u> when the vehicle is on top of the bridge, when the vehicle is going under the bridge, then use <u>21 (Bridge Pier or Support)</u>
- "Barrier", then use 26 (Other Traffic Barrier)

# *93 (Unknown Fixed Object) is used when the event involves an object that is known to be fixed but the case materials do not identify the specific object.*

#### Unknown

99 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(42CP)	there are two vehicles involved in the FIRST	those two vehicles' CRASH TYPES must belong
	HARMFUL EVENT,	to the same CRASH TYPE Configuration.

Check	IF	THEN
(440F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98 or 99.
(450F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 14.
(460F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.
(470F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03, 08, 10,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, <b>28</b> , 98, 99.
(480F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04, 06,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.
(490F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 05,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 24, 25.
(500F)	FIRST HARMFUL EVENT equals 01-11, 14-21, 23-26, 30-35, 44-53, 57-59, 72, 73,	MANNER OF COLLISION must not equal 01, 02, 06-11, 98, 99.
(510F)	FIRST HARMFUL EVENT equals 12, 54, 55,	MANNER OF COLLISION must not equal 00.
(520F)	FIRST HARMFUL EVENT equals 10,	TRAFFIC CONTROL DEVICE must not equal 01- 04, 07-09, 20-50, 98 for the vehicle involved in the first harmful event.
(530F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 99,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 98, 99.
(531F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
(540F)	FIRST HARMFUL EVENT equals 02,	the vehicle involved in the first harmful event must have FIRE OCCURRENCE equal to 1.
(550F)	FIRST HARMFUL EVENT equals 08,	at least one person must have PERSON TYPE equal 05, 10.
(560F)	FIRST HARMFUL EVENT equals 09,	at least one person must have PERSON TYPE equal to 06, 07.
(570F)	FIRST HARMFUL EVENT equals 05, 06,	at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5 or blank.

Check	IF	THEN
(580F)	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL does not equal 32, 89 for at least one occupant in the not in-transport motor vehicle involved in the first harmful event,	RELATION TO TRAFFICWAY should not equal 01.
(590F)	FIRST HARMFUL EVENT equals 15,	at least one Person Level form must have a PERSON TYPE of 08.
(5Y0F)	FIRST HARMFUL EVENT equals 08, 09, 15,	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES must not equal 00.
(670F)	FIRST HARMFUL EVENT equals 12, 14, 45, 54, 55,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
(9C0P)	FIRST HARMFUL EVENT equals 55,	there must be at least one vehicle with UNIT TYPE equal to 1.
(A041)	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
(A080)	DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002,	one RELATED FACTORS-DRIVER LEVEL should equal 20.
(A100)	FIRST HARMFUL EVENT is not equal to 02, 04, 05, 10, 16, 18,	there should be one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
(A110)	FIRST HARMFUL EVENT equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
(A350)	ROUTE SIGNING equals 1,	FIRST HARMFUL EVENT should not equal 10.
(A370)	FIRST HARMFUL EVENT equals 99,	MANNER OF COLLISION should not equal 00, 01- 11.
(A380)	FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the first harmful event, and BODY TYPE does not equal <b>80, 81, 83, 84</b> , <b>88, 89,</b> for this vehicle, and RELATION TO TRAFFICWAY equals,	LOCATION OF ROLLOVER should equal respectively.
(A390)	FIRST HARMFUL EVENT equals 17, 19-21, 23- 26, 30-35, 38-43, 52, 53, 57, <b>93</b> ,	RELATION TO TRAFFICWAY should not equal 01, 02, 07, 11.
(A3C0)	FIRST HARMFUL EVENT equals 02-07,16, 44, 51, 72,	CRASH TYPE must equal 00 for the vehicle involved in the first harmful event.
(A3D0)	FIRST HARMFUL EVENT equals 01-07, 16, 44, 51, 72,	CRASH TYPE must not equal 20-91.
(A3E0)	CRASH TYPE equals 13,	FIRST HARMFUL EVENT must equal 08, 09, 11, 15 or 49.
(A41A)	FIRST HARMFUL EVENT equals 02, 04, 07, 16, 44 or 54,	CRITICAL EVENT - PRECRASH (EVENT) should equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
(A420)	FIRST HARMFUL EVENT equals 10,	RELATION TO JUNCTION (b) should equal 06.
(A421)	FIRST HARMFUL EVENT equals 24, 25, 30, 33, 34, 35, 40, 46, 52, 57, 59,	RELATION TO TRAFFICWAY should equal 03, 04, 08 or 10.

Check	IF	THEN
(A480)	CRASH TYPE equals 00,	FIRST HARMFUL EVENT must equal 02-07, 16,
(		44, 51, 72.
(A4A0)	CRASH TYPE equals 01-16,	FIRST HARMFUL EVENT must not equal 12.
(A4BP)	FIRST HARMFUL EVENT equals 54 or 55,	CRASH TYPE must equal 98 for the vehicles involved in the first harmful event.
(A4DP)	CRASH TYPE equals 20-91,	FIRST HARMFUL EVENT must equal 12.
(A4EP)	CRASH TYPE equals 11,	FIRST HARMFUL EVENT must equal 14.
(A60F)	FIRST HARMFUL EVENT equals 14,	CRASH TYPE must equal 01-11, 14, 15, 92, 98, 99.
(A61F)	FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the first harmful event,	CRASH TYPE should equal 13 for the vehicle involved in the first harmful event.
(A61G)	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61H)	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON- MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61J)	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 08, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61K)	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A62F)	FIRST HARMFUL EVENT equals 18, 43, 73, <b>91</b> , or <b>93</b> , and RELATION TO TRAFFICWAY equals 01 or 11,	CRASH TYPE should equal 12 or 15 for the vehicle involved in the first harmful event.
(A63F)	FIRST HARMFUL EVENT equals 01,	CRASH TYPE should equal 01-10, 98, 99 for the vehicle involved in the first harmful event.

Check	IF	THEN
(A65F)	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL equals 32 or 89 for an occupant of the parked vehicle involved in the first harmful event,	CRASH TYPE should equal 15, 92 or 98 for the in- transport vehicle involved in the First Harmful Event.
(A66F)	FIRST HARMFUL EVENT equals 14, and CRASH TYPE equals 01-10 or 14,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 32 or 89 for any occupant of the parked vehicle involved in the First Harmful Event.
(A770)	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should equal 01-04 for the vehicle involved in the first harmful event.
(A780)	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should not equal 00 for the vehicle involved in the first harmful event.
(A790)	FIRST HARMFUL EVENT equals 46,	RELATION TO JUNCTION (b) should not equal 01, 07.
(A800)	FIRST HARMFUL EVENT equals 46,	RELATION TO TRAFFICWAY should not equal 01, 02, 05, 07, 11.
(A801)	FIRST HARMFUL EVENT equals 12,	RELATION TO TRAFFICWAY must not equal 5.
(A810)	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
(A820)	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	ROUTE SIGNING should not equal 1.
(A830)	FIRST HARMFUL EVENT equals 46,	SPEED LIMIT should be less than 55 for the vehicle involved in the first harmful event.
(AC1A)	FIRST HARMFUL EVENT equals 54,	MANNER OF COLLISION should equal 11.
(AM1P)	FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle,	one RELATED FACTORS-CRASH LEVEL must equal 14.
(AZ2P)	FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT- PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
(FAOF)	FIRST HARMFUL EVENT equals blank, case status is flawed.	
(PB34)	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.

Check	IF	THEN
(PB35)	NUMBER OF FORMS SUBMITTED FOR	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION -
	PERSONS NOT IN MOTOR VEHICLES equals	PEDESTRIAN must equal 1.
	01, and FIRST HARMFUL EVENT equals 08,	
	and RELATION TO JUNCTION (b) equals 02,	
(U020)	UNLIKELY: FIRST HARMFUL EVENT equals 02,	
	04, 06, 51, 72.	
(U030)	UNLIKELY: FIRST HARMFUL EVENT equals 12,	
	55, and MANNER OF COLLISION equals 10,	
	11.	
(U640)	UNLIKELY: FIRST HARMFUL EVENT equals 99	
(V750)	UNDERRIDE/OVERRIDE equals 1-3,	FIRST HARMFUL EVENT or at least one
		SEQUENCE OF EVENTS (for this vehicle) should
		equal 12, 55.
(V760)	UNDERRIDE/OVERRIDE equals 4-6,	FIRST HARMFUL EVENT or at least one
		SEQUENCE OF EVENTS (for this vehicle) should
		equal 14, 45.
(V79P)	ROLLOVER equals 2, and FIRST HARMFUL	CRASH TYPE must equal 01-10, 14, 15 or 98 for
	EVENT equals 01,	the vehicle involved in the first harmful event.

### Consistency Check (CRSS Only):

Check	IF	THEN
(A3K0)	FIRST HARMFUL EVENT equals 10,	INTERSTATE HIGHWAY should not equal 1.

# C20 - Manner of Collision

#### FORMAT: 2 numeric SAS NAME: Accident.MAN\_COLL; Vehicle.MAN\_COLL; Person.MAN\_COLL; parkwork.PMAN\_COLL ELEMENT VALUES:

Codes	Attributes
00	Not a Collision with a Motor Vehicle In-Transport
01	Front-to-Rear
02	Front-to-Front
06	Angle
07	Sideswipe-Same Direction
08	Sideswipe-Opposite Direction
09	Rear-to-Side
10	Rear-to-Rear
11	<u>Other</u>
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the orientation of two motor vehicles in-transport when they are involved in the <u>First Harmful Event</u> of a collision crash. If the First Harmful Event is not a collision between two motor vehicles in-transport it is classified as such.

#### **Remarks:**

**00 (Not a Collision with a Motor Vehicle In-Transport)** is used when the <u>First Harmful Event</u> is not an impact between two in-transport motor vehicles.

**01 (Front-to-Rear)** is used when a collision occurs between the rear of one vehicle and the front of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>First Harmful Event</u> must be front to back.

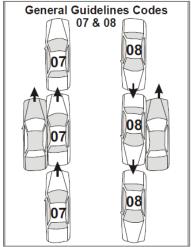
**02 (Front-to-Front)** is used when a collision occurs between the front end of one vehicle and the front end of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>First Harmful</u> <u>Event</u> must both be front.

**06 (Angle)** is a crash where two motor vehicles impact at an angle. For example, the front of one motor vehicle impacts the side of another motor vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>First Harmful Event</u> must not be front to front, front to back, back to back, or back to side.

**07 (Sideswipe - Same Direction)** is used when the case materials report that a sideswipe occurred while the two vehicles were traveling in the same direction. (See <u>Figure 2</u>.)

#### Clarification for coding sideswipe attributes 07 and 08:

Sideswipe codes are used for both vehicles when the initial engagement has no significant involvement of the front or rear surface areas where the impact swipes along the side surfaces of the vehicles parallel to their direction of travel. If it is unclear if the collision was an angle or a sideswipe, then code it <u>O6 (Angle)</u>. Endswipes and side-to-side angle impacts are coded as <u>11 (Other)</u>. (See Figure 2.)



#### Figure 2: General Guidelines for Sideswipe Codes 07 & 08

**08 (Sideswipe - Opposite Direction)** is used when the case materials report that a sideswipe occurred while the two vehicles were traveling in opposite directions. (See <u>Figure 2</u>.)

**09 (Rear-To-Side)** is used when a collision occurs between the rear of one vehicle and the side of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>First Harmful Event</u> must back for one and side for the other.

**10 (Rear-To-Rear)** is used when a collision occurs between the rear of one vehicle and the rear of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the <u>First Harmful Event</u> must both be back.

**11 (Other)** should be used for any collision between two motor vehicles in-transport where the collision is not described by attributes "01-10," including set-in-motion situations.

#### **Examples include:**

- One vehicle "end" swipes (endswipe) another vehicle instead of their "sides" swiping.
- One vehicle slides into another vehicle at an angle such that they impact side-to-side.
- One vehicle is airborne and makes contact with its front or undercarriage to the other vehicle's hood or top.
- Cargo or other load on one motor vehicle in-transport shifts and lands or is thrown into/onto another vehicle.
- The tire of one motor vehicle in-transport throws a stone through the windshield of another vehicle.
- A vehicle occupant or motorcyclist falls or is thrown from a vehicle striking or is struck by another vehicle.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **11 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(420P)	MANNER OF COLLISION equals 07, 08,	there must be at least two vehicle forms with AREAS OF IMPACT-INITIAL CONTACT POINT equal to 01-05, 07-11, 61-63, 81-83, 98, 99.
(421P)	MANNER OF COLLISION equals 01,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 06.
(422P)	MANNER OF COLLISION equals 02,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 12.
(423P)	MANNER OF COLLISION equals 06,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 01, 11, 12, 98, 99, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 01-05, 07-11, 61-63, 81-83 98, 99.
(424P)	MANNER OF COLLISION equals 09,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event should equal 06, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event should equal 01-05, 07-11, 61-63, 81-83, 98, 99.
(425P)	MANNER OF COLLISION equals 10,	AREAS OF IMPACT- INITIAL CONTACT POINT for one vehicle in the first harmful event should equal 06, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event should equal 06, 98, 99.
(426P)	MANNER OF COLLISION equals 02,	CRASH TYPE must not equal 64-67 for the vehicles involved in the first harmful event.
(427P)	MANNER OF COLLISION equals 06,	CRASH TYPE must not equal 20-43 or 50-53 for the vehicles involved in the first harmful event.

Check	IF	THEN
(500F)	FIRST HARMFUL EVENT equals 01-11, 14-	MANNER OF COLLISION must not equal 01, 02,
	21, 23-26, 30-35, 44-53, 57-59, 72, 73,	06-11, 98, 99.
(510F)	FIRST HARMFUL EVENT equals 12, 54, 55,	MANNER OF COLLISION must not equal 00.
(9BAP)	MANNER OF COLLISION equals 07, and PRE-	CRASH TYPE should equal 44-49, 98, 99 for the
	EVENT MOVEMENT (PRIOR TO	vehicles involved in the first harmful event.
	<b>RECOGNITION OF CRITICAL EVENT) equals</b>	
	10 or 11 for neither one of the vehicles	
	involved in the first harmful event,	
(9BCP)	MANNER OF COLLISION equals 08, and PRE-	CRASH TYPE should equal 64-67, 98, 99 for the
	EVENT MOVEMENT (PRIOR TO	vehicles involved in the first harmful event.
	<b>RECOGNITION OF CRITICAL EVENT) equals</b>	
	10 or 11 for neither one of the vehicles	
	involved in the first harmful event,	
(9BDP)	MANNER OF COLLISION equals 01,	CRASH TYPE should not equal 44-49 for the
		vehicles involved in the first harmful event.
(A370)	FIRST HARMFUL EVENT equals 99,	MANNER OF COLLISION should not equal 00, 01-
		11.
(AC1A)	FIRST HARMFUL EVENT equals 54,	MANNER OF COLLISION should equal 11.
(BZ80)	MANNER OF COLLISION equals 00,	CRASH TYPE must equal 00, 01-16, 92, 98, 99 for
		the vehicle in the first harmful event.
(U030)	UNLIKELY: FIRST HARMFUL EVENT equals	
	12, 55, and MANNER OF COLLISION equals	
	10, 11.	

# **C21** - Relation to Junction

**FORMAT:** 1 numeric occurring 1 time, 2 numeric occurring 1 time **SAS NAME:** Accident.RelJct1, Accident.RelJct2 **ELEMENT VALUES:** 

#### C21a: Within Interchange Area?

Codes	Attributes
0	No
1	Yes
8	Not Reported
9	<u>Unknown</u>

#### **C21b:** Specific Location

Codes	Attributes
01	Non-Junction
02	Intersection
03	Intersection-Related
05	Entrance/Exit Ramp Related
20	Entrance/Exit Ramp
06	Railway Grade Crossing
07	Crossover-Related
04	Driveway Access
08	Driveway Access Related
16	Shared-Use Path Crossing
17	Acceleration/Deceleration Lane
18	Through Roadway
19	Other location within interchange area
98	Not Reported
99	Unknown

**Definition:** The coding of this data element is done in two subfields and based on the location of the first harmful event of the crash. It identifies the crash's location with respect to presence in an interchange area and the crash's location with respect to presence in or proximity to components typically in junction or interchange areas.

#### **Remarks:**

#### Subfield 1 (C21a): Within Interchange Area?

**Interchange:** An interchange is a system of interconnecting roadways in conjunction with one or more grade separations, providing for the movement of traffic between two or more roadways on different levels.

**0** (No) is used if the first harmful event of the crash occurs outside of the boundaries of an interchange.

**1** (Yes) is used if the location of the first harmful event of the crash is within an interchange area.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when police indicate unknown.

#### Subfield 2 (C21b): Specific Location

**01 (Non-Junction)** is used for crashes where the first harmful event occurs **outside** an interchange area and does not occur in or related to a junction, ramp, rail grade crossing, crossover, or shared-use path or trail. This attribute includes crashes that occur on a parking lot way (access road) at the connection of a parking aisle. (See Figure 4.)

**02 (Intersection)** is used when the first harmful event occurs in an area which: (1) contains a crossing or connection of two or more roadways not classified as a driveway access, and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters, the two areas and the roadway connecting them are considered to be parts of a single intersection.

#### FARS SPECIAL INSTRUCTION:

**In an Intersection, within Interchange Area**: if the first harmful event occurs within the intersection of a ramp and the surface roadway: It is important to always code <u>National Highway System</u> and <u>Land Use and</u> <u>Functional System</u> for the highest class of trafficway at this intersection.

**03 (Intersection-Related)** means that the first harmful event: (1) occurs on an approach to or exit from an intersection and (2) results from an activity, behavior or control related to the movement of traffic units through the intersection.

Note:

- For crashes where the first harmful event occurs in a crosswalk at an intersection area, use **03** (Intersection-Related).
- For Traffic Circles and Roundabouts, enter <u>02 (Intersection)</u> when the first harmful event occurs within the area formed by the prolongation of curb or edge lines of the approach legs of the intersection, regardless of whether or not the collision was in any way related to an intersection. Use **03** (Intersection-Related) if the first harmful event occurs in the central island or any directional island which serves the rotary intersection.

**05 (Entrance/Exit Ramp Related)** is used when the first harmful event occurs off the entrance/exit ramp roadway, but is related to the use of or entry onto the ramp. (See Figure 3)

**Note:** If the first harmful event occurs in the intersection of a ramp, then use <u>02 (Intersection)</u>. If the first harmful event occurs on the ramp outside of an intersection of the ramp and the surface roadway and is related to the movement of traffic through the intersection, then use <u>03 (Intersection-Related)</u>.

**20 (Entrance/Exit Ramp)** is used when the first harmful event occurs **on** an entrance or exit ramp roadway and is not the result of an activity, behavior or control related to the movement of traffic units through an intersection. This would include all the areas between the gore and entrance/exit ramp intersection. (See Figure <u>3</u>)

**06 (Railway Grade Crossing)** is used when the first harmful event occurred in the area formed by the at-grade connection of a railroad bed and a roadway. Crashes occurring outside a railway grade crossing due to traffic congestion associated with a railway grade crossing are considered non-junction.

**07 (Crossover-Related)** is used when the first harmful event occurs in a crossover or on approach to or exit from a crossover and related to the use of the crossover.

**Note:** A crossover is the area of the median of a divided trafficway where motor vehicles are permitted to cross the opposing lane or traffic or execute a U-turn.

#### 04 (Driveway Access) is used when the first harmful event occurs:

- 1. on a driveway access (See ANSI D16.1 Manual 2.5.9) (See Figure 5)
- 2. or involves a road vehicle entering or leaving by way of a driveway access where at least one traffic unit (vehicle, pedalcyclist, or pedestrian) is physically on the driveway access within the trafficway.

This attribute includes crashes occurring on sidewalks within the driveway access.

#### Examples:

- A car turning into a private residence driveway strikes a bicyclist riding on the sidewalk that crosses over the driveway access.
- A tractor trailer backing out of a business entrance onto the trafficway, while partially on the driveway access, is struck by a car on the roadway.

08 (Driveway Access Related) is used when the first harmful event:

- 1. occurs on the trafficway,
- 2. does not occur on a 04 (Driveway Access), but
- results from an activity, behavior or control related to the movement of traffic units onto or out of a driveway (<u>See ANSI D16.1 Manual 2.5.9.1</u>). (See Figure 5)

#### Examples:

- A vehicle attempting to turn left into a driveway from the eastbound lanes is struck broadside by another vehicle traveling in the westbound lanes,
- A vehicle that has just entered the trafficway from a driveway is struck in the rear before it can gain speed.

**Note:** When a driveway access junction is within an intersection and the crash would meet the criteria of driveway access or driveway access related, enter <u>02 (Intersection)</u> if the first harmful event was within the boundaries of the intersection or <u>03 (Intersection-Related)</u> if it was not, but related to the intersection.

**Note:** If there is not sufficient detail available to differentiate between driveway access and driveway access related, but it is known that the vehicle was coming out of (or going into) a driveway, default to 08 (Driveway Access Related). (See <u>Figure 5</u>.)

**16 (Shared-Use Path Crossing)** is used when the first harmful event occurs at the crossing of a roadway and a shared-use path (see Note below for the definition of a shared use path). At least one non-motorist has to be physically in the crossing of the roadway and the shared-use path and the crash has to be related to the use of it. If the crossing of a roadway and a shared-use path overlaps/coincides with a crosswalk in a non-intersection area (e.g., mid-block), then select **16 (Shared-Use Path Crossing)**.

**Note**: A shared-use path is a bikeway **physically separated** from motorized vehicular traffic by an open space or barrier and either within the highway right of way or an independent right of way. Shared-use paths will also be used by pedestrians, skaters, wheelchairs, joggers and other non-motorist users. A shared-use path is not a sidewalk and where a shared-use path crosses another land way is similar to, but not a crosswalk. A shared-use path crossing may overlap/coincide with a crosswalk.

**17 (Acceleration/Deceleration Lane)** is used when the first harmful event occurs on the roadway in an interchange area on an auxiliary or speed-change lane that allows vehicles to accelerate to highway speeds before entering the through roadway or decelerate to safe speeds to negotiate a ramp without interrupting traffic flow on the through roadway exited. (See Figure 3)

**18 (Through Roadway)** (See Figure 3) is used when the first harmful event occurs on the roadway within an interchange area but **does not** occur:

- In an intersection or related to an intersection <u>02 (Intersection)</u> or <u>03 (Intersection Related)</u>.
- On a 20 (Entrance/Exit Ramp) or related to the use of the ramp 05 (Entrance/Exit Ramp Related)
- In a 17 (Acceleration/Deceleration Lane)

**19 (Other location within interchange area)** is used when the first harmful event occurs within an Interchange, off of the roadway (e.g. median, shoulder, roadside) and is not related to the use of or the entry onto a ramp. (See Figure 3)

Examples:

- A vehicle on the <u>18 (Through Roadway)</u> portion of the interchange departs the roadway and overturns in the median.
- A vehicle leaves the <u>18 (Through Roadway)</u> portion of the interchange and strikes a vehicle parked on the shoulder.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

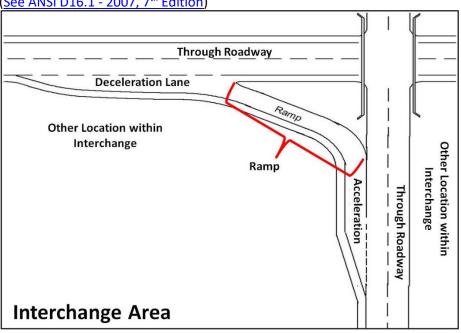
99 (Unknown) is used when police indicate unknown.

If <u>Subfield TWO</u> is coded:	Subfield ONE may only be coded as:
<b>01</b> Non-Junction	<b>0</b> No
02 Intersection	<b>0</b> No, <b>1</b> Yes, <b>8</b> Not Reported, <b>9</b> Unknown
03 Intersection-Related	0 No, 1 Yes, 8 Not Reported, 9 Unknown
04 Driveway Access	<b>0</b> No, <b>1</b> Yes, <b>8</b> Not Reported, <b>9</b> Unknown
05 Entrance/Exit Ramp Related	0 No, 1 Yes, 8 Not Reported, 9 Unknown
06 Railway Grade Crossing	<b>0</b> No
07 Crossover Related	0 No, 1 Yes, 8 Not Reported, 9 Unknown
08 Driveway Access Related	0 No, 1 Yes, 8 Not Reported, 9 Unknown
16 Shared-Use Path or Trail	0 No, 1 Yes, 8 Not Reported, 9 Unknown
17 Acceleration/Deceleration Lane	1 Yes
18 Through Roadway	1 Yes
19 Other Location Within Interchange Area	1 Yes
20 Entrance/Exit Ramp	<b>0</b> No, <b>1</b> Yes, <b>8</b> Not Reported, <b>9</b> Unknown
98 Not Reported	0 No, 1 Yes, 8 Not Reported, 9 Unknown
99 Unknown	0 No, 1 Yes, 8 Not Reported, 9 Unknown

#### Valid Combinations for Subfield 1 and Subfield 2

**Figure 3** below will help identify Relation to Junction codes <u>05 (Entrance/Exit Ramp Related)</u>, <u>17</u> (Acceleration/Deceleration Lane), <u>18 (Through Roadway)</u>, <u>19 (Other Location Within Interchange Area)</u>, and <u>20 (Entrance/Exit Ramp)</u>.

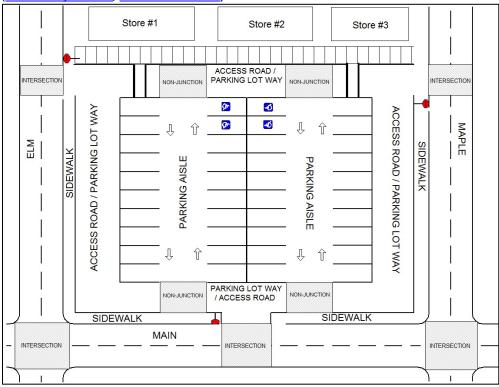
#### Figure 3: Interchange Area



(See ANSI D16.1 - 2007, 7<sup>th</sup> Edition)

#### Figure 4: Example Parking Lot Area

(01 - Non-junction, 02 - Intersection)



#### Figure 5: Driveway Access

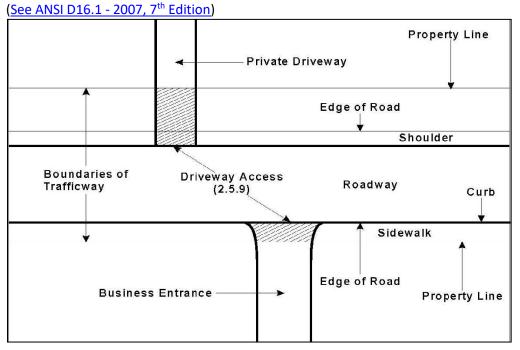
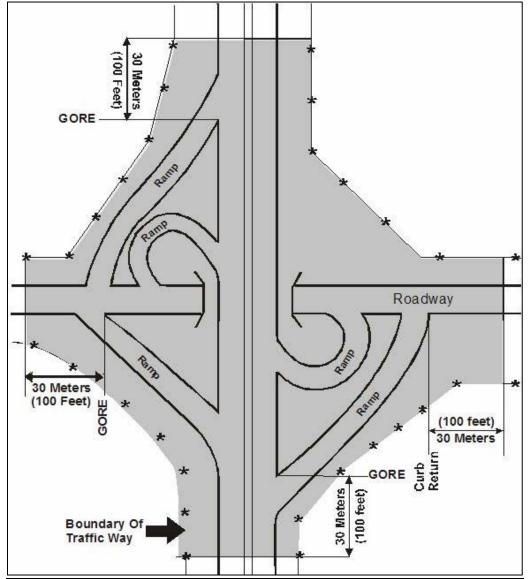


Figure 6 below will help identify if the crash occurred within an Interchange Area for Relation to Junction (C21a) – Within Interchange Area



#### Figure 6: Interchange Accidents

Accidents which occur within the shaded area are interchange accidents (See ANSI D16.1 - 2007, 7<sup>th</sup> Edition)

Check	IF	THEN
(1F1P)	RELATION TO JUNCTION (b) does not equal 02, 03,	the second TRAFFICWAY IDENTIFIER should be blank.
(1YOP)	RELATION TO JUNCTION (b) equals 06,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
(250P)	RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03,	TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the first harmful event.
(254P)	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20,	TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the first harmful event.
(3E00)	CRITICAL EVENT – PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should not equal 01 or 18.
(730P)	RELATION TO JUNCTION (b) equals 07,	RELATION TO TRAFFICWAY must not equal 04-07, 10, 11, 99.
(740P)	RELATION TO JUNCTION (b) equals 07,	TRAFFICWAY DESCRIPTION must equal 2, 3 for at least one vehicle.
(750P)	RELATION TO JUNCTION (b) equals 07,	RAIL GRADE CROSSING IDENTIFIER must equal 0000000.
(770P)	RELATION TO TRAFFICWAY equals 07,	RELATION TO JUNCTION (b) must equal 01, 03, 08, 19, 98, 99.
(772P)	<b>RELATION TO TRAFFICWAY equals 07</b> ,	<b>RELATION TO JUNCTION (a) must not equal 1.</b>
(773P)	RELATION TO JUNCTION (b) equals 01,	<b>RELATION TO JUNCTION (a) must equal 0.</b>
(773Q)	RELATION TO JUNCTION(b) equals 04, 06, 07, or 16,	RELATION TO JUNCTION (a) should not equal 1.
(775P)	RELATION TO JUNCTION (b) equals 17 or 18 or 19,	RELATION TO JUNCTION (a) must equal 1.
(778P)	RELATION TO JUNCTION (b) equals 01, 04-08, 16-20,	TYPE OF INTERSECTION must equal 01.
(77AP)	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) must not equal 02.
(77BP)	CRASH TYPE equals 68-91,	RELATION TO JUNCTION (b) should not equal 01.
(77CP)	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) should equal 01, 03, 19.
(77DP)	RELATION TO TRAFFICWAY equals 07, and RELATION TO JUNCTION (a) equals 1,	RELATION TO JUNCTION (b) should not equal 03, 08.
(780P)	RELATION TO TRAFFICWAY equals 10,	RELATION TO JUNCTION (b) must not equal 02, 04, 08.
(782P)	TYPE OF INTERSECTION equals 02-07, 10,	RELATION TO JUNCTION (b) must equal 02, 03.
(783P)	RELATION TO JUNCTION (b) equals 98, 99,	TYPE OF INTERSECTION should equal 01, 98, 99.
(784P)	TYPE OF INTERSECTION equals 01,	RELATION TO JUNCTION (b) must not equal 02, 03.
(A131)	RELATION TO JUNCTION (b) equals 02, 04, 06, 16, 17, or 20,	RELATION TO TRAFFICWAY must equal 01.
(A141)	RELATION TO JUNCTION (b) equals 18,	RELATION TO TRAFFICWAY must equal 01 or 11.

Check	IF	THEN
(A150)	LAND USE AND FUNCTIONAL SYSTEM (b)	RELATION TO JUNCTION (b) should not equal
	equals 01, 02, and RELATION TO JUNCTION	02-04, 06, 08.
	(a) equals 0,	
(A1B0)	TRAFFIC CONTROL DEVICE equals 20, 21 for a	RELATION TO JUNCTION (b) should not equal 01,
	vehicle involved in the first harmful event,	18.
(A1E0)	RELATION TO JUNCTION (b) equals 19,	RELATION TO TRAFFICWAY must not equal 01,
		05, 11, 98, 99.
(A1E1)	RELATION TO JUNCTION (b) equals 20,	RELATION TO TRAFFICWAY must equal 01.
(A200)	RELATION TO JUNCTION (b) equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should
		not equal 06, 07, or 96.
(A210)	LAND USE AND FUNCTIONAL SYSTEM (b)	TRAFFIC CONTROL DEVICE should not equal 01-
	equals 01, 02, and RELATION TO JUNCTION	04, 07, 20, 23, 40, 50, 65.
	(a) equals 0,	
(A220)	LAND USE AND FUNCTIONAL SYSTEM (b)	SPEED LIMIT should not equal 05-40 for any
	equals 01, 02, and RELATION TO JUNCTION	vehicle.
	(a) equals 0,	
(A240)	LAND USE AND FUNCTIONAL SYSTEM (b)	TRAVEL SPEED should not equal 005-040 for any
	equals 01, and RELATION TO JUNCTION (a)	vehicle.
	equals 0,	
(A250)	LAND USE AND FUNCTIONAL SYSTEM (b)	TOTAL LANES IN ROADWAY should not equal 1
	equals 01-03, and RELATION TO JUNCTION (a)	for the vehicles involved in the first harmful
	equals 1, and RELATION TO JUNCTION (b)	event.
	does not equal 03, 05, 20,	
(A290)	ROUTE SIGNING equals 1, and RELATION TO	RELATION TO JUNCTION (b) should not equal
	JUNCTION (a) equals 0,	02-04, 06, 08 16.
(A291)	RELATION TO JUNCTION (b) equals 07,	ROUTE SIGNING should not equal 5, 6.
(A293)	WORK ZONE equals 1-3, and RELATION TO	TRAFFIC CONTROL DEVICE should equal 01-03,
	JUNCTION (b) equals 02, 03,	20, 40, 97 or 98 for the vehicle(s) involved in the
		first harmful event.
(A294)	WORK ZONE equals 1-3, and RELATION TO	TRAFFIC CONTROL DEVICE should equal 00, 21,
	JUNCTION (b) equals 01, 04, 05, 08, 17-19,	28, 40, 50, 97 or 98 for the vehicle(s) involved in
		the first harmful event.
(A310)	ROUTE SIGNING equals 1, and RELATION TO	TOTAL LANES IN ROADWAY should not equal 1
	JUNCTION (a) equals 0,	for any vehicle.
(A320)	ROUTE SIGNING equals 1, and RELATION TO	SPEED LIMIT should not equal 05-40 for any
<u> </u>	JUNCTION (a) equals 0,	vehicle.
(A360)	RELATION TO JUNCTION (b) equals 07,	ROUTE SIGNING should not equal 4.
(A420)	FIRST HARMFUL EVENT equals 10,	RELATION TO JUNCTION (b) should equal 06.
(A430)	PRE-EVENT MOVEMENT (PRIOR TO	RELATION TO JUNCTION (b) should not equal 01,
	RECOGNITION OF CRITICAL EVENT) equals 10-	18.
	11 for a vehicle involved in the first harmful	
	event,	
(A440)	RELATION TO JUNCTION (b) equals 06,	TRAFFIC CONTROL DEVICE should equal 65 for
		any vehicle involved in the first harmful event.

Check	IF	THEN
(A481)	TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal 02, 03,	TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
(A4C0)	RELATION TO JUNCTION (b) equals 04,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) for the vehicles involved in the first harmful event should equal 10, 11, 13 or 98.
(A610)	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05,	TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the first harmful event.
(A611)	TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.
(A790)	FIRST HARMFUL EVENT equals 46,	RELATION TO JUNCTION (b) should not equal 01, 07.
(A810)	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
(A820)	FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and RELATION TO JUNCTION (b) does not equal 02, 03, 05,	ROUTE SIGNING should not equal 1.
(A890)	RELATION TO JUNCTION (b) equals 01,	TRAFFIC CONTROL DEVICE should not equal 01- 03 for any vehicle involved in the first harmful event.
(AC0A)	RELATION TO JUNCTION (b) equals 02, 03,	the second TRAFFICWAY IDENTIFIER should not be all blank.
(AZ5P)	CRITICAL EVENT-PRECRASH (EVENT) equals 70-73 for a vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should equal 04 or 08.
(D530)	any VIOLATIONS CHARGED equals 36 for a vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should equal 06.
(PB04)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the first harmful event equals 211, 212, 461, 465, 680, 830, 890, 900 or 910,	RELATION TO JUNCTION (b) must not equal 02. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
(PB07)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first harmful event equals 311, 312, 313, 321, 322 or 323,	RELATION TO JUNCTION (b) must equal 04 or 08. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).
(PB08)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first harmful event equals 141-144, 147, 151-157 or 159,	RELATION TO JUNCTION (b) must equal 02 or 03. Note: this edit is restricted to vehicles which are involved in only one event with bicyclist(s).

Check	IF	THEN
(PB34)	NUMBER OF FORMS SUBMITTED FOR	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	PERSONS NOT IN MOTOR VEHICLES equals	PEDESTRIAN must not equal 320, 330, 360, 680,
	01, and FIRST HARMFUL EVENT equals 08,	830, 890, 900, or 910.
	and RELATION TO JUNCTION (b) equals 02,	
(PB35)	NUMBER OF FORMS SUBMITTED FOR	PEDESTRIAN/BIKE TYPING - CRASH LOCATION -
	PERSONS NOT IN MOTOR VEHICLES equals	PEDESTRIAN must equal 1.
	01, and FIRST HARMFUL EVENT equals 08,	
	and RELATION TO JUNCTION (b) equals 02,	
(PC30)	PRE-IMPACT LOCATION for a vehicle involved	RELATION TO TRAFFICWAY should not equal 01
	in the first harmful event equals 4, 5, and	or 11.
	RELATION TO JUNCTION (b) does not equal	
	04, 05,	

### Consistency Checks (CRSS Only):

Check	IF	THEN
(A3G0)	INTERSTATE HIGHWAY equals 1, and	TOTAL LANES IN ROADWAY should not equal 1
	RELATION TO JUNCTION (a) equals 1, and	for at least one vehicle involved in the first
	RELATION TO JUNCTION (b) is not equal to 03	harmful event.
	or 05 or 20,	
(A3H0)	INTERSTATE HIGHWAY equals 1, and	TRAFFICWAY DESCRIPTION should not equal 4
	RELATION TO JUNCTION (a) equals 1, and	for at least one vehicle involved in the first
	RELATION TO JUNCTION (b) is not equal to 03	harmful event.
	or 05 or 20,	
(A3I0)	INTERSTATE HIGHWAY equals 1,	RELATION TO JUNCTION (b) should not equal 02,
		04, 06, 08 or 16.
(A3J0)	INTERSTATE HIGHWAY equals 1, and	SPEED LIMIT should not equal 01-40 for at least
	RELATION TO JUNCTION (a) equals 1, and	one vehicle involved in the first harmful event.
	RELATION TO JUNCTION (b) is not equal to 03	
	or 05 or 20,	
(A930)	INTERSTATE HIGHWAY equals 1, and	TRAFFIC CONTROL DEVICE should not equal 01-
	RELATION TO JUNCTION (a) equals 1, and	03, 20, 23 or 65 for at least one vehicle involved
	RELATION TO JUNCTION (b) is not equal to 03	in the first harmful event.
	or 05 or 20,	

# C22 - Type of Intersection

#### FORMAT: 2 numeric SAS NAME: Accident.Typ\_Int ELEMENT VALUES:

Codes	Attributes
01	Not an Intersection
02	Four-Way Intersection
03	<u>T-Intersection</u>
04	Y-Intersection
05	Traffic Circle
06	Roundabout
07	Five-Point, or More
10	<u>L-Intersection</u>
98	Not Reported
99	Unknown

**Definition:** This element identifies and allows separation of various intersection types.

**Remarks:** The data element value selected should be based on the location of the first harmful event and is only applicable to intersection or intersection-related crashes. If it is known that a rotary type of intersection was involved but it is not known if it was a traffic circle or a roundabout, default to a traffic circle.

Intersection refers to an area which 1) contains a crossing or connection of two or more roadways not classified as driveway access and 2) is embraced within the prolongation of the lateral curb lines, or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 33 feet, the two areas and the roadway connecting them are considered to be parts of a single intersection. (See <u>ANSI D.16 - 2.5.10</u>)

**01 (Not an Intersection)** identifies that this crash was not intersection or intersection-related.

02 (Four-Way Intersection) refers to two roadways which cross or connect.

**03 (T-Intersection)** refers to an intersection where two roadways connect and one roadway does not continue across the other roadway. The roadways form a "T".

**04 (Y-Intersection)** refers to an intersection where three roadways connect and none of the roadways continue across the other roadways. The roadways form a "Y".

**05 (Traffic Circle)** refers to an intersection of roads where motor vehicles must travel around a circle to continue on the same road or leave on any intersecting road.

A 05 (Traffic Circle) must meet the following criteria:

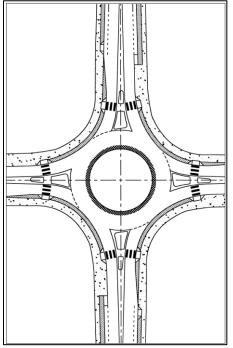
- Entering traffic is controlled by a stop sign, traffic signal or by no traffic control
- Parking is allowed within the circle
- Pedestrians are allowed access to the central island
- Circle traffic can be required to yield to entering traffic

**06 (Roundabout)** refers to an intersection of roads where motor vehicles must travel around a circle to continue on the same road or leave on any intersecting road. (See <u>Figure 7</u> below.) A **06 (Roundabout)** must meet the following criteria:

- Entering traffic is controlled by a yield sign only
- Circulating traffic has the right of way
- Pedestrian access is allowed behind the yield sign line
- No parking is allowed in the circle

#### Figure 7: Example of a Typical Single-Lane Roundabout

(See Roundabouts: An Informational Guide – FHWA)



07 (Five-Point, or More) refers to an intersection where more than two roadways cross or connect.

**10 (L-Intersection)** refers to a two-armed intersection in which one roadway intersects with another roadway but neither roadway extends beyond the other roadway. (Note: this should be configured as an intersection where the arms consist of two different named trafficways.)

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(251P)	RELATION TO TRAFFICWAY equals 98, 99,	TYPE OF INTERSECTION should equal 98, 99.
(778P)	RELATION TO JUNCTION (b) equals 01, 04-08, 16-20,	TYPE OF INTERSECTION must equal 01.
(781P)	TYPE OF INTERSECTION equals 02-07, 10,	TRAFFICWAY IDENTIFIER (b) should not be blank.
(782P)	TYPE OF INTERSECTION equals 02-07, 10,	RELATION TO JUNCTION (b) must equal 02, 03.
(783P)	RELATION TO JUNCTION (b) equals 98, 99,	TYPE OF INTERSECTION should equal 01, 98, 99.
(784P)	TYPE OF INTERSECTION equals 01,	RELATION TO JUNCTION (b) must not equal 02, 03.

# **C23** - Relation to Trafficway

#### FORMAT: 2 numeric SAS NAME: Accident.REL\_ROAD ELEMENT VALUES:

Codes	Attributes
01	On Roadway
02	On Shoulder
03	On Median
04	On Roadside
05	Outside Trafficway
06	Off Roadway – Location Unknown
07	In Parking Lane/Zone
08	Gore
10	<u>Separator</u>
11	Continuous Left-Turn Lane
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the location of the crash as it relates to its position within or outside the trafficway based on the <u>First Harmful Event</u>.

#### **Remarks:**

**O1 (On Roadway)** - The roadway is that part of a trafficway designed, improved, and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. Roadway may be noted as the "travel lanes" and, if present, includes the area between the painted "fog lines". Additionally, a driveway access area is considered part of the roadway of the trafficway to which it connects. This attribute may also be used for cases involving a parked vehicle opening a door into moving traffic, extended mirrors into the travel lane. *If a bike lane is immediately adjacent to the curb/edge of the road, code 04 (On Roadside); if the bike lane is between lanes of travel or a lane and the parking lane, code 01(On Roadway).* 

**02 (On Shoulder)** (if present) is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped vehicles, and for lateral support of the roadway structure. A shoulder should be improved or maintained for these purposes. Not all roadways have shoulders.

**03** (On Median) is defined as that area of a divided trafficway between parallel roads separating travel in opposite directions. The principal functions of a median are to provide the desired freedom from interference of opposing traffic, to provide a recovery area for out-of-control vehicles, to provide a stopping area in case of emergencies, and to minimize headlight glare. Medians may be depressed, raised or flush. Flush medians can be as little as 4-feet wide between roadway edge lines. Painted roadway edge lines four (4) or more feet wide denote medians. Medians of lesser width must have a barrier to be considered a median. Continuous Left-turn Lanes are **not** considered Medians (see <u>11 (Continuous Left-Turn Lane)</u>).

**04 (On Roadside)** refers to a location off the roadway, but inside the right-of-way. It is the outermost part of the trafficway which lay between the outer property line or other barrier and the edge of the first road encountered in the trafficway. Bicycle lanes and shared use path or trails contiguous with the roadway and sidewalks are also included. For cases involving a vehicle that goes off the roadway into a "tree line", "wood line", "brush line", etc. that is adjacent to the roadway, code as **04 (On Roadside)** unless there is specific information available in the case materials that identify the First Harmful Event was beyond the boundaries of the trafficway (e.g., a "tree line" in a homeowner's front yard). In addition, use this attribute if the first harmful event occurs in a raised or painted center island (directional or channeling) of a traffic circle, roundabout or junction. *If a bike lane is immediately adjacent to the curb/edge of the road, code 04 (On Roadside); if the bike lane is between lanes of travel or a lane and the parking lane, code <u>01 (On Roadway)</u>.* 

**05 (Outside Trafficway)** is used for areas not open to the public as a matter of right or custom for moving persons or property. This includes property beyond the roadside outside the boundaries of the trafficway. Also, a portion of the trafficway closed for construction is not a trafficway and would be considered **05 (Outside Trafficway)**.

**06 (Off Roadway - Location Unknown)** refers to a location off the roadway, but its relationship to the trafficway boundaries/right-of-way is not known. This should only be used when no reasonable assessment can be made as to the location of the FHE because the information in the case is too ambiguous.

**07 (In Parking Lane/Zone)** refers to an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of-roadway parking (for example, legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see <u>01 (On Roadway)</u>).

**08 (Gore)** is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadway, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or marked pavement if any, between the roadways. The third side is 60 meters (approximately 200 feet) from the point of divergence or convergence or, if any other road is within 70 meters (230 feet) of that point, a line 10 meters (33 feet) from the nearest edge of such road. (See Figure 10)

#### Gore Inclusions:

- Areas at rest area or exit ramps
- Areas at truck weight station entry or exit ramps
- Areas where two main roadways diverge or converge
- Areas where a ramp and another roadway or two ramps, diverge or converge
- Areas where a frontage road and another roadway or two frontage roads diverge or converge

#### **Gore Exclusions:**

- Islands for channelizing of vehicle movements
- Islands for pedestrian refuge

**10 (Separator)** is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road from other roads. A **10 (Separator)** may be a physical barrier or a depressed, raised, flush or vegetated area between roads.

**11 (Continuous Left-Turn Lane)** is a two-way left turn lane positioned between opposing straight-through travel lanes.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used when police indicate unknown.

#### Additional Guidance for Relation to Trafficway

#### For collision events when the vehicle is overlapping adjacent areas:

- For fixed object collisions (FHE), base "Relation to Trafficway" on the location of the object struck.
- Fixed objects that are associated with the trafficway such as curbs, ditches, guardrails, sign supports, utility poles, etc. are not located in the travel lanes or on the shoulder. Therefore, when these fixed objects are contacted in the FHE, Relation to Trafficway should be coded as <u>04 (On Roadside)</u>, regardless of the location of the entire vehicle.
- Non-fixed object collisions (e.g., striking a vehicle on the shoulder or pedestrian on the sidewalk) when the striking vehicle is overlapping two locations (e.g., roadway and shoulder) are also coded with respect to the object contacted, not the striking vehicle.

# For Rollover/Overturn crashes when the vehicle is overlapping two locations (e.g., roadway and shoulder) when the roll begins:

• When a vehicle begins an overturn and is overlapping two locations at the onset of the overturn, use the LAST area the vehicle entered as the location. For example, Roadside would be correct for a case where the documentation identifies a vehicle runs off the roadway, partially through the shoulder, and the front wheels enter the roadside.

#### Default rules for the location of Ditches, Culverts, Embankments, and Fences:

- Unless there is clear reason to believe otherwise in the case materials, ditches, culverts and embankments are design features common to trafficways. Therefore, if included as the FHE the appropriate Relation to Trafficway is <u>04 (On Roadside)</u>.
- All fences are considered <u>05 (Outside Trafficway)</u> unless, the case materials specifically identify the fence is within the trafficway property lines (e.g., a snow fence in the median, or fence identified as government property delineating the right of way and/or property line).

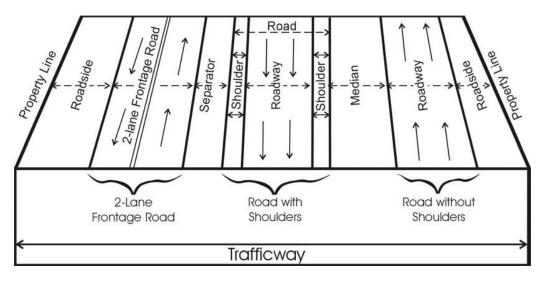
Check	IF	THEN
(250P)	RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03,	TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the first harmful event.
(251P)	RELATION TO TRAFFICWAY equals 98, 99,	TYPE OF INTERSECTION should equal 98, 99.
(252P)	RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 98 or 99,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event must not equal 3.
(253P)	RELATION TO TRAFFICWAY equals 03,	CRASH TYPE should equal 06-10, 98 or 99 for the in-transport vehicles involved in the first harmful event.
(254P)	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20,	TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the first harmful event.
(255P)	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) involved in the first harmful event must equal 1.
(256P)	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event should equal 1 or 4.
(257P)	RELATION TO TRAFFICWAY equals 05,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event must equal 1, 3 or 4.
(42AP)	NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01,	CRITICAL EVENT – PRECRASH (EVENT) should equal 01-06, 08-14 or 19.
(440F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98 or 99.
(450F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 14.
(460F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.
(470F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03, 08, 10,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, <b>28</b> , 98, 99.
(480F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04, 06,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.

Check	IF	THEN
(490F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
	<b>RELATION TO TRAFFICWAY equals 05,</b>	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 24, 25.
(530F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
	<b>RELATION TO TRAFFICWAY equals 99</b> ,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 09, 98,
		99.
(531F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
	<b>RELATION TO TRAFFICWAY equals 11</b> ,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 11.
(580F)	FIRST HARMFUL EVENT equals 14, and	RELATION TO TRAFFICWAY should not equal 01.
	RELATED FACTORS - PERSON (MV	
	OCCUPANT) LEVEL does not equal 32, 89 for	
	at least one occupant in the not in-transport	
	motor vehicle involved in the first harmful	
	event,	
(730P)	RELATION TO JUNCTION (b) equals 07,	RELATION TO TRAFFICWAY must not equal 04-
		07, 10, 11, 99.
(770P)	<b>RELATION TO TRAFFICWAY equals 07,</b>	RELATION TO JUNCTION (b) must equal 01, 03,
		08, 19, 98, 99.
(772P)	<b>RELATION TO TRAFFICWAY equals 07</b> ,	<b>RELATION TO JUNCTION (a) must not equal 1.</b>
(77DP)	<b>RELATION TO TRAFFICWAY equals 07, and</b>	RELATION TO JUNCTION (b) should not equal 03,
	RELATION TO JUNCTION (a) equals 1,	08.
(780P)	<b>RELATION TO TRAFFICWAY equals 10</b> ,	RELATION TO JUNCTION (b) must not equal 02,
		04, 08.
(A1E0)	RELATION TO JUNCTION (b) equals 19,	RELATION TO TRAFFICWAY must not equal 01,
		05, 11, 98, 99.
(A1E1)	RELATION TO JUNCTION (b) equals 20,	RELATION TO TRAFFICWAY must equal 01.
(A131)	RELATION TO JUNCTION (b) equals 02, 04, 06,	RELATION TO TRAFFICWAY must equal 01.
	16, 17 or 20,	
(A141)	RELATION TO JUNCTION (b) equals 18,	RELATION TO TRAFFICWAY must equal 01 or 11.
(A380)	FIRST HARMFUL EVENT equals 01 and this	LOCATION OF ROLLOVER should equal
	vehicle is involved in the first harmful event,	respectively.
	and BODY TYPE does not equal 80, 81, 83, 84,	
	88, 89, for this vehicle, and RELATION TO	
/ · · ·	TRAFFICWAY equals,	
(A390)	FIRST HARMFUL EVENT equals 17, 19-21, 23-	RELATION TO TRAFFICWAY should not equal 01,
	26, 30-35, 38-43, 52, 53, 57, <b>93</b> ,	02, 07, 11.
(A421)	FIRST HARMFUL EVENT equals 24, 25, 30, 33,	RELATION TO TRAFFICWAY should equal 03, 04,
1	34, 35, 40, 46, 52, 57, 59,	08 or 10.
(A4B0)	CRASH TYPE equals 01-10 or 14,	RELATION TO TRAFFICWAY must not equal 01,
		02, 07 or 11. If the first harmful event occurs on
		a different road than the road it departed, see
1		98 (Other Crash Type).
(A4B2)	CRASH TYPE equals 11,	RELATION TO TRAFFICWAY must not equal 01,
		03, 04, 05, 08, 10, or 11.

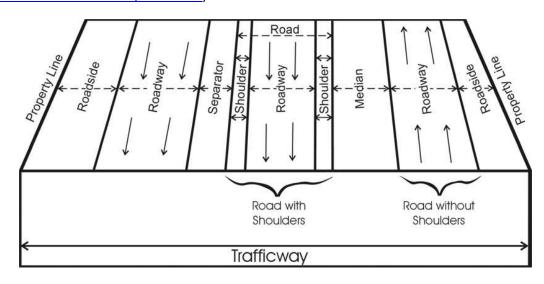
Check	IF	THEN
(A4B3)	CRASH TYPE equals 12 or 13,	RELATION TO TRAFFICWAY must not equal 03,
		05, 08, or 10.
(A4B4)	CRASH TYPE equals 12 or 13,	RELATION TO TRAFFICWAY should not equal 4
		unless the First Harmful Event occurs in a bicycle
		lane.
(A610)	RELATION TO TRAFFICWAY equals 01, and	TRAFFICWAY DESCRIPTION should equal 6 for at
	RELATION TO JUNCTION (b) equals 05,	least one vehicle involved in the first harmful
		event.
(A61F)	FIRST HARMFUL EVENT equals 08, 09, 11, 15,	CRASH TYPE should equal 13 for the vehicle
	49, and RELATION TO TRAFFICWAY equals 01,	involved in the first harmful event.
	02, 07, 11, and PRE-EVENT MOVEMENT	
	(PRIOR TO RECOGNITION OF CRITICAL EVENT)	
	is not equal to 00, 13 for the vehicle involved	
(4,62,0)	in the first harmful event,	
(A620)	CRASH TYPE equals 06-10, and TRAFFICWAY	RELATION TO TRAFFICWAY should equal 03.
	DESCRIPTION equals 3,	
(A62F)	FIRST HARMFUL EVENT equals 18, 43, 73, <b>91</b> ,	CRASH TYPE should equal 12 or 15 for the
	or 93, and RELATION TO TRAFFICWAY equals	vehicle involved in the first harmful event.
(4900)	01 or 11,	DELATION TO TRAFFICIALAY should not as used 01
(A800)	FIRST HARMFUL EVENT equals 46,	RELATION TO TRAFFICWAY should not equal 01,
(4001)		02, 05, 07, 11.
(A801)	FIRST HARMFUL EVENT equals 12,	RELATION TO TRAFFICWAY must not equal 5.
(A881)	RELATION TO TRAFFICWAY equals 11,	TRAFFICWAY DESCRIPTION should equal 5 for at least one vehicle.
(1007)		
(A882)	RELATION TO TRAFFICWAY equals 07,	ROUTE SIGNING should not equal 1.
(A883)	RELATION TO TRAFFICWAY equals 07,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01.
(PB05)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO TRAFFICWAY must equal 01 or 11.
	PEDESTRIAN for a person involved in the first	Note: this edit is restricted to vehicles which are
	harmful event equals 311, 312 or 313,	involved in only one event with pedestrian(s).
(PB12)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO TRAFFICWAY must not equal 01 or
	PEDESTRIAN for a person involved in the first	11. Note: this edit is restricted to vehicles which
	harmful event equals 510, 520 or 590,	are involved in only one event with
		pedestrian(s).
(PC20)	<b>RELATION TO TRAFFICWAY equals 02-08 or</b>	PRE-IMPACT LOCATION of the vehicle(s)
	10,	involved in the first harmful event should equal
		0, 4, 5 or 9.
(PC30)	PRE-IMPACT LOCATION for a vehicle involved	RELATION TO TRAFFICWAY should not equal 01
	in the first harmful event equals 4, 5, and	or 11.
	RELATION TO JUNCTION (b) does not equal	
	04, 05,	
(PC40)	PRE-IMPACT LOCATION for a vehicle involved	RELATION TO TRAFFICWAY should equal 01 or
	in the first harmful event equals 1-3, 6,	11.

### Figure 8: Trafficway with Frontage Road

(See ANSI D16.1 - 2007, 7<sup>th</sup> Edition)

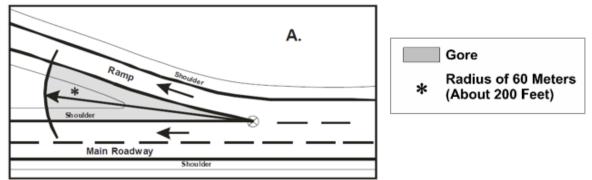


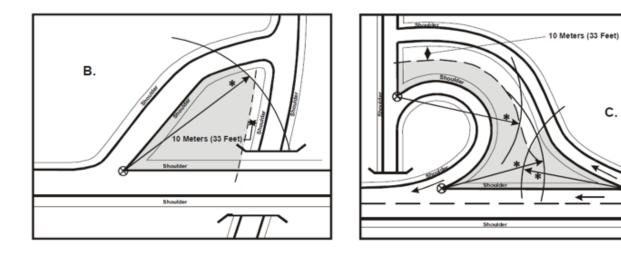
#### **Figure 9: Trafficway with Multiple Roadways in the Same Direction** (See ANSI D16.1 – 2007, 7<sup>th</sup> Edition)

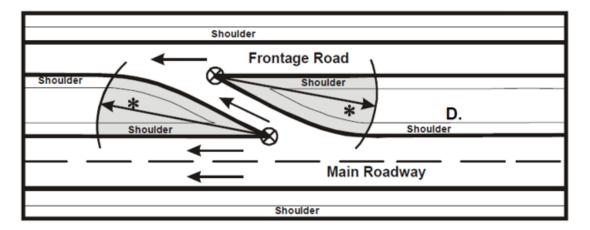


### Figure 10: Four Examples of Gores

(See ANSI D16.1 – 2007, 7<sup>th</sup> Edition)







С.

### C24 - Work Zone

#### FORMAT: 1 numeric SAS NAME: Accident.Wrk\_Zone ELEMENT VALUES:

Codes	Attributes
0	None
1	Construction
2	Maintenance
3	Utility
4	Work Zone, Type Unknown

**Definition:** This data element captures that this was a "Work Zone Accident" as defined in <u>ANSI D16.1, 7th</u> <u>Edition</u>. If the crash qualifies as a "Work Zone Accident" then the type of work activity is identified.

**Remarks:** If the crash is a work zone crash, work zone type must be clearly distinguished within the case materials; otherwise <u>4 (Work Zone, Type Unknown)</u> should be used.

The use of these codes does not imply that the crash was caused by the construction, maintenance, or utility activity.

#### Work Zone:

A work zone is defined as an area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/ indicators, including those on transport devices (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs, and arrow boards mounted on the vehicles in a mobile maintenance activity) that mark the beginning and end of a construction, maintenance or utility work activity. It extends from the first warning sign, signal, or flashing lights to the END ROAD WORK sign or the last traffic control device pertinent for that work activity. Work zones also include roadway sections where there is ongoing, moving (mobile) work activity such as lane line painting or roadside mowing only if the beginning of the ongoing, moving (mobile) work activity is designated by warning signs or signals.

#### Work Zone Crash:

A work zone crash is a motor vehicle traffic crash in which the first harmful event occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior or control related to the movement of the traffic units through the work zone.

See the <u>7<sup>th</sup> Edition of ANSI D16.1</u> definitions of "Work Zone" and "Work Zone Accident" for inclusions and exclusions.

To determine which attribute is appropriate, the duration of the work must be considered. If the work is shortterm (i.e., takes less than one period of daylight and is not performed during hours of darkness), 2 (Maintenance) or 3 (Utility) are applicable. If the maintenance or utility work is long-term, 1 (Construction) must be used.

**0** (None) is used when there is no indication that the crash is a work zone crash as defined above.

**1 (Construction)** is used when the available information indicates that there is long-term stationary construction such as building a new bridge, adding travel lanes to the roadway, extending an existing trafficway, etc. Highway construction includes construction of appurtenances such as guardrails or ditches, surveying activity, installation of utilities within the right-of-way, etc.

**2** (Maintenance) is used when the available information indicates that there are work activities, including moving work activities, such as striping the roadway, median and roadside grass mowing/landscaping, pothole repair, snowplowing, etc., where there are warning signs or signals marking the beginning of the moving work area.

**3** (Utility) is used when the available information indicates that there is short-term stationary work such as repairing/maintaining electric, gas, water lines or traffic signals. The utility company must perform the work.

**4 (Work Zone, Type Unknown)** is used when there is insufficient information to distinguish between <u>1</u> (Construction), <u>2 (Maintenance)</u>, or <u>3 (Utility)</u>.

Check	IF	THEN
(A293)	WORK ZONE equals 1-3, and RELATION TO	TRAFFIC CONTROL DEVICE should equal 01-03,
	JUNCTION (b) equals 02, 03,	20, 40, 97 or 98 for the vehicle(s) involved in the
		first harmful event.
(A294)	WORK ZONE equals 1-3, and RELATION TO	TRAFFIC CONTROL DEVICE should equal 00, 21,
	JUNCTION (b) equals 01, 04, 05, 08, 17-19,	28, 40, 50, 97 or 98 for the vehicle(s) involved in
		the first harmful event.
(A470)	WORK ZONE equals 0, and TRAFFICWAY	TOTAL LANES IN ROADWAY should not equal 1.
	DESCRIPTION equals 1-3, 5,	
(AL2P)	SEQUENCE OF EVENTS equals 45,	WORK ZONE should equal 1-4.

#### C25

# C25 - Light Condition

#### FORMAT: 1 numeric SAS NAME: Accident.LGT\_COND ELEMENT VALUES:

Codes	Attributes
1	Daylight
2	Dark - Not Lighted
3	Dark - Lighted
6	Dark - Unknown Lighting
4	Dawn
5	<u>Dusk</u>
7	<u>Other</u>
8	Not Reported
9	Unknown

**Definition:** This element records the type/level of light that existed at the time of the crash as reported in the case materials.

#### **Remarks:**

**2 (Dark - Not Lighted)** is used when the available information describes a condition where no "natural" light exists and no overhead "man-made" lighting is present on the roadway where the crash occurs.

**3 (Dark - Lighted)** is used when the available information describes a condition where no "natural" light exists but there is overhead "man-made" lighting on the roadway where the crash occurs. Lighted areas will generally include streets within cities or towns and some interchange areas. This does not include lighting from store fronts, houses, parking lots, etc.

6 (Dark - Unknown Lighting) is used if it cannot be determined if <u>2 (Dark - Not Lighted)</u> or <u>3 (Dark - Lighted)</u> applies.

Sometimes the case materials will have conflicting information because more than one light condition is indicated in the coded boxes and/or the narrative. If necessary, use the crash time to aid in determing the "best" attribute.

**4 (Dawn)** describes the transition period going from "dark of night" to a daylight condition. This is typically the 30-minute period before the sun rises.

**5** (Dusk) describes the transition period going from a daylight condition to the "dark of night". This is typically the 30-minute period after the sun sets.

Rules for determining applicable attribute:

- 1. If 4 (Dawn) or 5 (Dusk) are marked then use the crash time to select either 4 (Dawn) or 5 (Dusk).
- 2. If **3 (Dark Lighted)** and **4 (Dawn)** are marked then use <u>4 (Dawn)</u>.
- 3. If **3 (Dark Lighted)** and **5 (Dusk)** are marked then use <u>5 (Dusk)</u>.
- 4. If **Dark** and **5 (Dusk)** are marked then use <u>**5 (Dusk)**</u>.
- 5. If **Dark** and **4 (Dawn)** are marked then use <u>**4 (Dawn)**</u>.
- 6. If more than 2 attributes are checked then use 8 (Not Reported).

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **7 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code 8 (Not Reported) if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when the investigating officer indicates that the lighting condition was unknown.

Check	IF	THEN
(220P)	LIGHT CONDITION equals 4, and STATE is not equal	CRASH TIME must equal 0300-0900, 9999.
	to 02,	
(2300)	LIGHT CONDITION equals 5, and STATE is not equal	CRASH TIME must equal 1600-2200, 9999.
	to 02,	
(A010)	STATE equals 02, and LIGHT CONDITION equals 4,	CRASH TIME should equal 0300-1000, 9999.
(A020)	STATE equals 02, and LIGHT CONDITION equals 5,	CRASH TIME should equal 1500-2359, 9999.
(A050)	CRASH TIME equals 0900-1600,	LIGHT CONDITION should not equal 2-6.
(A060)	CRASH TIME equals 2300-0400,	LIGHT CONDITION should not equal 1, 4, 5, 9.
(U390)	UNLIKELY: LIGHT CONDITION equals 8.	

# C26 - Atmospheric Conditions

**FORMAT:** 2 numeric - occurring 2 times. **SAS NAME:** Accident.Weather; Accident.Weather1; Accident.Weather2 **ELEMENT VALUES:** 

Codes	Attributes
00	No Additional Atmospheric Conditions
01	Clear
10	Cloudy
02	Rain
03	Sleet or Hail
12	Freezing Rain or Drizzle
04	Snow
11	Blowing Snow
05	Fog, Smog, Smoke
06	Severe Crosswinds
07	Blowing Sand, Soil, Dirt
08	<u>Other</u>
98	Not Reported
99	Unknown

**Definition:** This element identifies the prevailing atmospheric conditions that existed at the time of the crash as recorded on the *Police Crash Report*.

**Remarks:** If the case materials indicate more than two atmospheric conditions, select the two conditions that most affect visibility. If the case material attributes are a combination of the above attributes (e.g., Clear/Cloudy, Clear or Cloudy, Sleet/Hail/Freezing Rain, Snow/Sleet/Hail), and you cannot determine which was the prevalent weather condition, then code <u>98 (Not Reported)</u>.

Temperature is not an atmospheric condition for the purposes of this element.

When coding this element, do not interpret indication of Rain, Sleet, or Snow as also Cloudy. Cloudy must be explicitly stated in the case materials.

**00 (No Additional Atmospheric Conditions)** should only be used for the second Atmospheric Condition subfield, when there is no second Atmospheric Condition listed on your case materials.

**01 (Clear)** includes partial cloudiness if sunlight is not diminished. If your case materials provide the attribute "no adverse condition," use <u>98 (Not Reported)</u> unless there is sufficient detail to establish that **01 (Clear)** or **10** (Cloudy) applies.

10 (Cloudy) usually refers to "overcast" but may include partial cloudiness if light is diminished.

**02 (Rain)** refers to precipitation other than snow, hail, or sleet. Mist should be coded as **02 (Rain)**.

03 (Sleet or Hail) would apply to conditions where precipitation is falling as ice (sleet or hail)

**12 (Freezing Rain or Drizzle)** would apply when precipitation is falling as liquid (rain) and then freezing on the roadway.

**04 (Snow)** is used when precipitation is falling as frozen flakes at the time of the crash.

**11 (Blowing Snow)** applies to snow that is falling and/or to snow that has fallen to the ground and is set aloft by wind.

05 (Fog, Smog, Smoke) refers to a natural or man-made condition that causes reduced visibility.

**06 (Severe Crosswinds)** refers to winds traveling at an angle with respect to the travel lanes at velocities significant enough to create a risk that vehicles could be diverted from their path or high profile vehicles could be blown over. These are winds that are strong enough to affect vehicle stability.

**07 (Blowing Sand, Soil, Dirt)** refers to particulate matter set aloft by winds creating a condition of reduced visibility which constitutes a hazard for vehicles operating in the area. This attribute should be used for "dust storms." This attribute should not be used in conjunction with <u>06 (Severe Crosswinds)</u> unless the winds are affecting vehicle stability in addition to reducing visibility.

**08 (Other)** atmospheric conditions not described above.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **08 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(A030)	CRASH MONTH equals 05-09,	ATMOSPHERIC CONDITIONS should not equal
		03, 04, 11, 12.
(A1A0)	ROADWAY SURFACE CONDITIONS equals 01	ATMOSPHERIC CONDITIONS should not equal
	for a vehicle involved in the first harmful	02-04, 11, 12.
	event,	
(A510)	any ATMOSPHERIC CONDITIONS equals 02-	ROADWAY SURFACE CONDITIONS should not
	04, 11, 12,	equal 01, 07, 08, 99 for any vehicle.
(AT00)	An ATMOSPHERIC CONDITIONS 01-08, 10-12,	
	98, 99 can be used only once per crash.	

Check	IF	THEN
(AT10)	the first ATMOSPHERIC CONDITIONS equals	the second ATMOSPHERIC CONDITIONS must
	99,	equal 00.
(AT20)	the first ATMOSPHERIC CONDITIONS equals	the second ATMOSPHERIC CONDITIONS must
	01-08, 10-12, 99,	not equal 99.
(AT30)	First ATMOSPHERIC CONDITIONS must not	
	equal 00.	
(AT40)	the first ATMOSPHERIC CONDITIONS equals	the second ATMOSPHERIC CONDITIONS must
	01,	equal 00.
(AT50)	the second ATMOSPHERIC CONDITIONS must	
	not equal 01.	

# C27 - School Bus Related

#### FORMAT: 1 numeric SAS NAME: Accident.SCH\_BUS, Person.SCH\_BUS ELEMENT VALUES:

Codes	Attributes
0	No
1	Yes

**Definition:** This data element indicates if a school bus, or motor vehicle functioning as a school bus, is related to the crash.

#### **Remarks:**

The "school bus" can be:

- with or without a passenger(s) on board
- involved as a contact motor vehicle, or
- indirectly involved as a non-contact motor vehicle

A school bus is a motor vehicle used for the transportation of any school pupil at or below the 12th-grade level to or from a public or private school or school-related activity. A motor vehicle is not a school bus while on trips which involve the transportation exclusively of other passengers or exclusively for other purposes.

A motor vehicle is a school bus only if it is externally identifiable by the following characteristics:

- 1. Its color is yellow
- 2. The words "school bus" appear on the front and rear
- 3. Flashing red lights are located on the front and rear
- 4. Lettering on both sides identifies the school or school district served, or the company operating the bus

**0** (No) is used when there is no indication of a school bus, or motor vehicle functioning as a school bus, being involved in the crash.

**1 (Yes)** is used when there is any indication that a school bus, or vehicle functioning as a school bus, is involved in any component of the crash.

For directly involved or contacted vehicles, **1 (Yes)** must be selected if the <u>Special Use</u> data element equals <u>02</u> (Vehicle Used for School Transport).

To capture those instances where the vehicle is involved indirectly (non-contact vehicle) the following rules apply:

- If the case materials indicate "School Bus" the assumption is that the Law Enforcement agency conformed to the definition of school bus, thus <u>1 (Yes)</u> School Bus Related.
- If there is no indication that a school bus was indirectly involved **<u>0 (No)</u>** must be selected.

#### Examples of School Bus Related (indirectly):

- 1. A police reported "school bus" stops on the roadway. Subsequently an approaching motor vehicle swerves to avoid the stopped bus and contacts another motor vehicle head-on.
- 2. A police report indicates that a "child" exited a "school bus" and was crossing in front of the stopped bus when a vehicle passed the bus on the left side and struck the child.

3. A line of cars is stopped for a school bus which is discharging passengers. A motor vehicle approaches and is unable to stop in time and strikes the last stopped motor vehicle in the line.

## **Examples of NOT School Bus Related:**

- 1. An empty school bus, having completed its route, is parked alongside the road. A motor vehicle approaching from the rear loses control and strikes the bus.
- 2. A "Bus" is reported as stopped in traffic and a vehicle swerves to avoid the bus and contacts another vehicle. In this example, there is no positive indication of a "school bus" being involved.

Check	IF	THEN
(3D0P)	SPECIAL USE for any vehicle equals 02,	SCHOOL BUS RELATED must equal 1.
(PB22)	SCHOOL BUS RELATED equals 1, and PERSON	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	TYPE equals 05 or 08,	PEDESTRIAN should equal 342.
(PB23)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	SCHOOL BUS RELATED should equal 1.
	PEDESTRIAN equals 342, and PERSON TYPE	
	equals 05 or 08,	
(V330)	SCHOOL BUS RELATED equals 1,	BODY TYPE of at least one of the involved vehicles should equal 50 (School Bus), or SPECIAL USE for at least one involved vehicle
		should equal 02 - Vehicle Used as School Bus, <i>or</i>
		BUS USE for at least one vehicle should equal
		01.
(V440)	BODY TYPE equals 50,	SCHOOL BUS RELATED should equal 1.

# **C28 - Rail Grade Crossing Identifier - FARS Only**

**FORMAT:** 6 numeric followed by 1 alphabetic **SAS NAME:** Accident.RAIL **ELEMENT VALUES:** 

Codes	Attributes	
0000000	Not Applicable	
nnnnnA	Six Numeric, Followed by One Alphabetic Valid F.R.A. Codes	
9999999	Unknown	

Definition: This element identifies if the crash occurred in or near a Rail Grade Crossing.

**Remarks:** Code complete identifier. The format must always be six numbers followed by a letter. (Two exceptions: **0000000 (Not Applicable)** and **99999999 (Unknown)**.)

Identifiers are obtainable from your Federal Railroad Administration representative or by accessing the <u>Federal</u> <u>Railroad Administration Office of Safety Analysis</u>.

**0000000 (Not Applicable)** is used for crashes that do not involve a rail grade crossing.

Code when any part of the crash occurs at a rail grade crossing. Include crashes in which a vehicle is waiting at a rail grade crossing but does not necessarily travel over the tracks.

Inform *NHTSA* if you have any problems obtaining identifiers.

Check	IF	THEN
(1YOP)	RELATION TO JUNCTION(b) equals 06,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
(650P)	TRAFFIC CONTROL DEVICE equals 65 for any vehicle,	RAIL GRADE CROSSING IDENTIFIER must not equal 0000000.
(651P)	RAIL GRADE CROSSING IDENTIFIER must equal BLANKS, 0000000, 99999999, or nnnnnA; where n is a numeric character and A is an uppercase alphabetic character.	
(750P)	RELATION TO JUNCTION(b) equals 07,	RAIL GRADE CROSSING IDENTIFIER must equal 0000000.

# **C29** - Notification Time EMS - FARS Only

FORMAT: 4 numeric
SAS NAME: Accident.NOT\_HOUR; Accident.NOT\_MIN
ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Not Notified)
0000-2359	Valid Military Times
0099-2399	Known Hours but Unknown Minutes
9998	Unknown if Notified
9999	Unknown EMS Notification Time

Definition: Notification Time EMS is the time Emergency Medical Service was notified.

**Remarks:** Every effort should be made to determine the Notification Time EMS, <u>Arrival Time EMS</u>, and <u>EMS</u> <u>Time at Hospital</u>.

Code the official EMS times as received. Do not alter the times because of discrepancies with the crash time.

All EMS time formats are in hours and minutes. If you receive an EMS time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

If the day of the crash and the day of EMS Notification have different dates, then be sure to use the <u>18 (Date of</u> <u>Crash and Date of EMS Notification Were Not the Same Day</u>) in <u>Related Factors-Crash Level</u>. Code Notification Time EMS and Arrival Time EMS no matter how much time has elapsed since the Crash Time.

#### 8888 (Not Applicable [Not Notified])

Enter this code only if EMS was never notified as part of an emergency transport.

- If it is known that EMS transport was called for non-emergency transport purposes (e.g., to transport a body to the morgue) then use this code.
- DO NOT use this code if the EMS was officially canceled. Cancellation is coded under <u>Arrival Time EMS</u> and <u>EMS Time at Hospital</u>.
- If the EMS was notified then canceled, code the actual notification time and <u>9997 (Officially Canceled)</u> under <u>Arrival Time EMS</u> and <u>EMS Time at Hospital</u>.

#### 0000 - 2359 (Valid Military Times), 0099 - 2399 (Known Hours but Unknown Minutes)

Code Notification Time of the first EMS unit to arrive on the scene. If unknown minutes, code the actual hour and "99" for the minutes. Code midnight as "0000." One minute after midnight is coded "0001." See remarks "How to Code Midnight" under <u>Crash Time</u>.

#### 9998 (Unknown if Notified)

Enter this attribute if you cannot determine whether or not any EMS was ever notified.

#### 9999 (Unknown EMS Notification Time)

Enter this attribute if EMS was notified but the time of notification is unknown.

Helicopters that transport victims to treatment facilities are coded as EMS units, but not police who may be trained to render emergency aid. This guidance is not meant to exclude helicopters that are used to transport victims for treatment that may be owned by police departments.

IF	THEN
NOTIFICATION TIME EMS is not 8888, 9998 or	NOTIFICATION TIME EMS should not be more
9999,	than 120 minutes later than CRASH TIME.
NOTIFICATION TIME EMS is not 8888, 9998,	ARRIVAL TIME EMS should not be more than
or 9999, and ARRIVAL TIME EMS is not 8888,	120 minutes later than NOTIFICATION TIME
9997, 9998, 9999,	EMS.
NOTIFICATION TIME EMS is not 8888, 9998,	EMS TIME AT HOSPITAL should not be more
or 9999, and EMS TIME AT HOSPITAL is not	than 180 minutes later than NOTIFICATION TIME
8888, 9997, 9998, 9999,	EMS.
NOTIFICATION TIME EMS equals 9998,	ARRIVAL TIME EMS must equal 9998, and EMS
	TIME AT HOSPITAL must equal 8888 or 9998.
ARRIVAL TIME EMS equals 8888,	NOTIFICATION TIME EMS and EMS TIME AT
	HOSPITAL must equal 8888.
NOTIFICATION TIME EMS equals 8888,	ARRIVAL TIME EMS and EMS TIME AT HOSPITAL
	must equal 8888.
ARRIVAL TIME EMS equals 9997,	NOTIFICATION TIME EMS must not equal 8888,
	9998.
NOTIFICATION TIME EMS is not 8888, 9998,	ARRIVAL TIME EMS must not equal 9997 or
and EMS TIME AT HOSPITAL is not 8888,	9998.
9996, 9997, 9998,	
all persons TRANSPORTED TO FIRST MEDICAL	NOTIFICATION TIME EMS, ARRIVAL TIME EMS,
FACILITY BY equals 2, 4,	EMS TIME AT HOSPITAL must equal 8888.
	NOTIFICATION TIME EMS is not 8888, 9998 or 9999, NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and ARRIVAL TIME EMS is not 8888, 9997, 9998, 9999, NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and EMS TIME AT HOSPITAL is not 8888, 9997, 9998, 9999, NOTIFICATION TIME EMS equals 9998, ARRIVAL TIME EMS equals 8888, NOTIFICATION TIME EMS equals 8888, ARRIVAL TIME EMS equals 8888, ARRIVAL TIME EMS equals 9997, NOTIFICATION TIME EMS is not 8888, 9998, and EMS TIME AT HOSPITAL is not 8888, 9996, 9997, 9998, all persons TRANSPORTED TO FIRST MEDICAL

# C30 - Arrival Time EMS - FARS Only

## FORMAT: 4 numeric SAS NAME: Accident.ARR\_HOUR; Accident.ARR\_MIN ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Not Notified)
0000-2359	Valid Military Times
0099-2399	Known Hours but Unknown Minutes
9997	Officially Canceled
9998	Unknown if Arrived
9999	Unknown EMS Scene Arrival Time

Definition: Arrival Time EMS is the time Emergency Medical Service arrived on the crash scene.

**Remarks:** This excludes any transport by anyone other than EMS. (e.g., Law Enforcement, POV, etc.). Every effort should be made to determine the <u>Notification Time EMS</u>, Arrival Time EMS, and <u>EMS Time at Hospital</u>. Code the official EMS times as received. **Do not alter the times because of discrepancies with the <u>crash time</u>.** 

All EMS time formats are in hours and minutes. If you receive an EMS time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

Code Notification Time EMS and Arrival Time EMS no matter how much time has elapsed since the Crash Time.

#### 8888 (Not Applicable [Not Notified])

Enter this attribute only if EMS was never notified. DO NOT use this code if the EMS was notified then canceled.

#### 0000 - 2359 (Valid Military Times), 0099 - 2399 (Known Hours but Unknown Minutes)

Code the arrival time of the first EMS unit to arrive on the scene. If unknown minutes, code the actual hour and "99" for the minutes. Code midnight as "0000." One minute after midnight is coded "0001". See remarks "How to Code Midnight" under <u>Crash Time</u>.

#### 9997 (Officially Canceled)

Enter this attribute if EMS was officially canceled.

#### 9998 (Unknown if Arrived)

Enter this attribute if there is no indication of official cancellation, but there is uncertainty or doubt that EMS ever arrived on the scene or not.

#### 9999 (Unknown EMS Scene Arrival Time)

Enter this code if EMS did arrive on scene, but the time of arrival is unknown.

Check	IF	THEN
(A540)	NOTIFICATION TIME EMS is not 8888, 9998,	ARRIVAL TIME EMS should not be more than
	or 9999, and ARRIVAL TIME EMS is not 8888,	120 minutes later than NOTIFICATION TIME
	9997, 9998, 9999,	EMS.
(A550)	ARRIVAL TIME EMS is not 8888, 9997, 9998,	EMS TIME AT HOSPITAL should not be more
	or 9999, and EMS TIME AT HOSPITAL is not	than 60 minutes later than ARRIVAL TIME EMS.
	8888, 9997, 9998, 9999,	
(E01P)	NOTIFICATION TIME EMS equals 9998,	ARRIVAL TIME EMS must equal 9998, and EMS
		TIME AT HOSPITAL must equal 8888 or 9998.
(E02P)	ARRIVAL TIME EMS equals 9998,	EMS TIME AT HOSPITAL must equal 8888 or
		9998.
(E03P)	ARRIVAL TIME EMS equals 8888,	NOTIFICATION TIME EMS and EMS TIME AT
		HOSPITAL must equal 8888.
(E04P)	NOTIFICATION TIME EMS equals 8888,	ARRIVAL TIME EMS and EMS TIME AT HOSPITAL
		must equal 8888.
(E05P)	EMS TIME AT HOSPITAL equals 9997,	ARRIVAL TIME EMS must equal 9997.
(E06P)	ARRIVAL TIME EMS equals 9997,	EMS TIME AT HOSPITAL must equal 9997.
(E07P)	ARRIVAL TIME EMS equals 9997,	NOTIFICATION TIME EMS must not equal 8888,
		9998.
(E08P)	NOTIFICATION TIME EMS is not 8888, 9998,	ARRIVAL TIME EMS must not equal 9997 or
	and EMS TIME AT HOSPITAL is not 8888,	9998.
	9996, 9997, 9998,	
(P093)	all persons TRANSPORTED TO FIRST MEDICAL	NOTIFICATION TIME EMS, ARRIVAL TIME EMS,
	FACILITY BY equals 2, 4,	EMS TIME AT HOSPITAL must equal 8888.

# C31 - EMS Time at Hospital - FARS Only

FORMAT: 4 numeric SAS NAME: Accident.HOSP\_HR; Accident.HOSP\_MN ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Not Transported)
0000-2359	Valid Military Times
0099-2399	Known Hours but Unknown Minutes
9996	Terminated Transport
9997	Officially Canceled
9998	Unknown if Transported
9999	Unknown EMS Hospital Arrival Time

**Definition:** EMS Time at Hospital is the time Emergency Medical Service arrived at the treatment facility to which it was transporting victims of the crash.

**Remarks:** This excludes any transport by anyone other than EMS. (e.g., Law Enforcement, POV, etc.). Every effort should be made to determine the <u>Notification Time EMS</u>, <u>Arrival Time EMS</u>, and EMS Time at Hospital.

Code the official EMS times as received. Do not alter the times because of discrepancies with the crash time.

All EMS time formats are in hours and minutes. If you receive an EMS time that includes the seconds' position, truncate to the reported minutes. Example: 10:51:35 would be 10:51.

Questions arise when there is more than one EMS unit or when there is more than one injured person. Code EMS Time at Hospital according to the following guidelines:

#### 8888 (Not Applicable [Not Transported])

Use this attribute if all the injuries are on-scene fatalities (no one is transported for treatment.) Also use this attribute if there are live victims, but no one is transported to a treatment facility by EMS.

#### 0000 - 2359 (Valid Military Time), 0099 - 2399 (Known Hours but Unknown Minutes)

Code the EMS time at hospital of the unit transporting the most severely injured victim. The most severely injured victim includes (and usually is) the victim who dies en route to the treatment facility or later, but not the one who dies on-scene.

If unknown minutes, code the actual hour and "99" for the minutes. Code midnight as "0000." One minute after midnight is coded "0001." See remarks. "How to Code Midnight" under <u>Crash Time</u>.

#### 9996 (Terminated Transport)

Enter this attribute if there is indication that EMS was notified, arrived at the scene but while in transit terminated the trip to hospital because the person died en route. This attribute should not be used when there is a hospital arrival time available for a person dead on arrival at the hospital.

#### 9997 (Officially Canceled)

Enter this attribute if EMS was officially canceled before on scene.

## 9998 (Unknown if Transported)

Enter this attribute if there is no indication of official cancellation, but there is un-certainty or doubt that any victims were transported for treatment or not.

# 9999 (Unknown EMS Hospital Arrival Time)

Enter this attribute if EMS transported victims for treatment, but the time of arrival at the hospital or treatment facility is unknown.

Check	IF	THEN
(A550)	ARRIVAL TIME EMS is not 8888, 9997, 9998,	EMS TIME AT HOSPITAL should not be more
	or 9999, and EMS TIME AT HOSPITAL is not	than 60 minutes later than ARRIVAL TIME EMS.
	8888, 9997, 9998, 9999,	
(A551)	EMS TIME AT HOSPITAL equals 8888, 9997,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	9998,	should not equal 1, 3, 5 for any PERSON.
(A560)	NOTIFICATION TIME EMS is not 8888, 9998,	EMS TIME AT HOSPITAL should not be more
	or 9999, and EMS TIME AT HOSPITAL is not	than 180 minutes later than NOTIFICATION TIME
	8888, 9997, 9998, 9999,	EMS.
(E01P)	NOTIFICATION TIME EMS equals 9998,	ARRIVAL TIME EMS must equal 9998, and EMS
		TIME AT HOSPITAL must equal 8888 or 9998.
(E02P)	ARRIVAL TIME EMS equals 9998,	EMS TIME AT HOSPITAL must equal 8888 or
		9998.
(E03P)	ARRIVAL TIME EMS equals 8888,	NOTIFICATION TIME EMS and EMS TIME AT
		HOSPITAL must equal 8888.
(E04P)	NOTIFICATION TIME EMS equals 8888,	ARRIVAL TIME EMS and EMS TIME AT HOSPITAL
		must equal 8888.
(E05P)	EMS TIME AT HOSPITAL equals 9997,	ARRIVAL TIME EMS must equal 9997.
(E06P)	ARRIVAL TIME EMS equals 9997,	EMS TIME AT HOSPITAL must equal 9997.
(E08P)	NOTIFICATION TIME EMS is not 8888, 9998,	ARRIVAL TIME EMS must not equal 9997 or
	and EMS TIME AT HOSPITAL is not 8888,	9998.
	9996, 9997, 9998,	
(P091)	TRANSPORTED TO FIRST MEDICAL FACILITY	EMS TIME AT HOSPITAL should not equal 8888,
	BY equals 1, 3, 5,	9997, 9998.
(P093)	all persons TRANSPORTED TO FIRST MEDICAL	NOTIFICATION TIME EMS, ARRIVAL TIME EMS,
	FACILITY BY equals 2, 4,	EMS TIME AT HOSPITAL must equal 8888.
(P095)	TRANSPORTED TO FIRST MEDICAL FACILITY	EMS TIME AT HOSPITAL must not equal 0000-
	BY equals 0 for every person in the case,	2399, 9999.
(P510)	EMS TIME AT HOSPITAL equals 8888, 9997,	DIED AT SCENE/EN ROUTE should not equal 8
	9998,	for any PERSON.
(P530)	EMS TIME AT HOSPITAL equals 9996,	DIED AT SCENE/EN ROUTE must equal 8 for at
		least one person.
(P54P)	DIED AT SCENE/EN ROUTE equals 8,	EMS TIME AT HOSPITAL should not equal 8888,
		9997, 9998.

# C32 - Related Factors – Crash Level

## **FORMAT:** 2 numeric occurring 3 times **SAS NAME:** Accident.CF1; Accident.CF2; Accident.CF3 **ELEMENT VALUES:**

Codes	Attributes	
00	None	
*01	Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.	
*02	Shoulder Design or Condition	
03	Other Maintenance or Construction-Created Condition	
*04	No or Obscured Pavement Marking	
05	Surface Under Water	
*06	Inadequate Construction or Poor Design of Roadway, Bridge, etc.	
07	Surface Washed Out (caved-in, road slippage)	

#### **Special Circumstances:**

Codes	Attributes
13	Aggressive Driving / Road Rage by Non-Contact Vehicle Driver
14	Motor Vehicle Struck by Falling Cargo, or Something That Came Loose from, Or Something That
	was Set-in-Motion by a Vehicle.
15	Non-Occupant Struck by Falling Cargo, or Something That Came Loose from, or Something that
	was Set-in-Motion by a Vehicle
16	Non-Occupant Struck Vehicle
17	Vehicle Set-in-Motion by Non-Driver
*18	Date of Crash and Date of EMS Notification Were Not the Same Day
19	Recent Previous Crash Scene Nearby
20	Police Pursuit Involved
21	Within Designated School Zone
*22	Speed Limit is a Statutory Limit as Recorded or was Determined as This State's "Basic Rule"
23	Indication of a Stalled/Disabled Vehicle
24	Unstabilized Situation Began and All Harmful Events Occurred Off of the Roadway
25	Toll Booth / Plaza Related
26	Backup Due to Prior Non-Recurring Incident
27	Backup Due to Prior Crash
28	Backup Due to Regular Congestion
99	<u>Unknown</u>
* EADS OI	NIX ATTRIBUTES

#### \* FARS ONLY ATTRIBUTES

Definition: This element identifies factors related to the crash expressed by the investigating officer.

**Remarks:** Code information provided by the investigating officer in the narrative or contributing factors/circumstances field on the crash report.

**For attributes 01-07**, if the officer states "the witness said," these should not be coded. Care must be used in coding these attributes. The Police *Crash* Report should state that the environmental condition was a factor or existed at this location; cannot be inferred.

Attributes 13-28 - SPECIAL CIRCUMSTANCES, are exceptions to the prior remarks. These are codes for unusual factors that occurred during the crash. If you can determine that any of these factors did happen, then these codes should be used.

This element can be coded in conjunction with other elements even if similar information is identified; for example, if a traffic control is temporarily down, it can be coded under both <u>DEVICE FUNCTIONING</u> and RELATED FACTORS-CRASH LEVEL <u>01 (Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.)</u>. In the case that more than three factors are identified, you may omit factors that are coded/identifiable in other elements.

**00 (None)** is used when no applicable related factors are noted in the case materials. Zero-fill all fields. Also, use **00 (None)** to complete the remaining fields when you will be recording less than three crash related factors. DO NOT leave any remaining fields blank.

\*01 (Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.) is used when the case materials identify that there was inadequate warning provided to motorists associated with the trafficway. In the case of more than three applicable factors, this attribute takes precedence over <u>06 (Inadequate Construction or Poor</u> <u>Design of Roadway, Bridge, etc.)</u> and <u>03 (Other Maintenance or Construction-Created Condition)</u>. Do not use this attribute in situations that would include construction sites or work areas (see <u>03 (Other Maintenance or Construction-Created Condition)</u>).

**Examples include:** 

- Inadequate warning due to obscured signs.
- Inadequate warning because signs were temporarily down.
- Lack of necessary signage (e.g., merge or diverge warning, downhill grade).

\*02 (Shoulder Design or Condition) is used when the case materials identify problem conditions pertaining to the actual design or condition of the shoulder. In the case of more than three applicable factors, this attribute takes precedence over <u>06 (Inadequate Construction or Poor Design of Roadway, Bridge, etc.)</u> and <u>03 (Other</u> <u>Maintenance or Construction-Created Condition</u>).

Examples include:

- Soft or collapsing shoulders.
- Inadequate shoulder width.
- Shoulder is at a different level from the roadway (e.g., drop-off, lifted, not flat).

**03 (Other Maintenance or Construction-Created Condition)** is used when the case materials identify problem conditions pertaining to "inadequate maintenance" of the roadway (e.g., potholes, ruts in roadway) or conditions cited by the officer that are related to construction activity (e.g., addition of barricades, change in traffic patterns, merging lanes, etc.).

**\*04 (No or Obscured Pavement Marking)** is used when the case materials identify problem conditions pertaining to any pavement marking situations. In the case of more than three applicable factors, this attribute takes precedence over <u>06 (Inadequate Construction or Poor Design of Roadway, Bridge, etc.)</u> and <u>03 (Other</u> <u>Maintenance or Construction-Created Condition</u>).

**Examples include:** 

- New asphalt that has covered old pavement markings.
- Areas where pavement marking has worn off.
- The case materials mention ice/snow/mud was obscuring the pavement markings.

**05 (Surface Under Water)** is used when the case materials identify that the roadway surface is under water beyond normal accumulation (i.e., depth of water). Also use this attribute when the case materials mention situations where the roadway is permanently under water (i.e., fords). In the case of more than three applicable factors, this attribute takes precedence over <u>06 (Inadequate Construction or Poor Design of Roadway, Bridge, etc.)</u> and <u>03 (Other Maintenance or Construction-Created Condition)</u>.

\*06 (Inadequate Construction or Poor Design of Roadway, Bridge, etc.) is used when the case materials identify problems with the roadway design. This attribute does not include shoulder-related situations, pavement marking situations, or situations with inadequate warnings (See attributes <u>01 (Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.)</u>, <u>02 (Shoulder Design or Condition)</u> and <u>04 (No or Obscured Pavement Marking)</u>).

# Examples include:

- Original design of the trafficway (i.e., roadway bridges, medians, guardrails, traffic barriers) is poor.
- Blind intersections due to highway design, not due to visual obstructions (i.e., shrubbery) etc.
- Improper banking.
- Lack of a lane for merging.
- Inadequate road surface (dirt, gravel surfaces, etc.); however, this must not be inferred; must be explicitly stated in police report as a "factor."

**07 (Surface Washed Out [caved-in, road slippage])** is used when the case materials identify the roadway was previously washed out, caved-in, or had slipped due to prior events associated with the environment (e.g. flooding, earthquakes, etc.).

**13** (Aggressive Driving/Road Rage by Non-Contact Vehicle Driver) is only used for situations where the investigating officer indicates that a non-contact vehicle ("phantom vehicle") was being operated aggressively. The officer must use the term "Aggressive" in describing a driver's behavior. This can be indicated in the case materials under related/contributing factors/circumstances or in the narrative. You may encounter the term "Road Rage" used to describe aggressive driving behavior. Always be cautious with this term as the two terms are not technically interchangeable. For contact vehicles, see Driver Level-Related Factor <u>O8 (Aggressive Driving/Road Rage)</u>.

14 (Motor Vehicle Struck by Falling Cargo, or Something That Came Loose from, Or Something that was Set-In-Motion by a Vehicle) is used when the case materials identify that a vehicle became a contact vehicle in the crash as a result of being struck by cargo or objects that fell from another vehicle or by something that was setin-motion by another vehicle. The term "set-in-motion" generally applies to non-fixed or fixed objects struck and propelled by a vehicle (including pedestrians or parked vehicles). This can also include a circumstance where one vehicle overrides another and then directs or controls the overridden vehicle's movement.

#### Examples include:

- Cargo falls from a truck (in-transport) and lands on another motor vehicle in-transport or a parked vehicle.
- A car runs off the roadway at an intersection, hits a stop sign and propels the stop sign into a vehicle traveling on the intersecting roadway.
- A motorcycle rider overturns in a curve, the rider is separated from the vehicle and the rider slides across the centerline into a vehicle traveling in the opposing lanes.
- A tractor trailer overrides a passenger car and with the car still pinned under the truck, the combined vehicles continue on to contact other objects.

**15 (Non-Occupant Struck by Falling Cargo, or Something That Came Loose from, or Something that was Set-in-Motion by a Vehicle)** is used when the case materials identify that a non-occupant (e.g. pedestrian, bicyclist, person on personal conveyance) was struck by cargo or objects that fell from a motor vehicle or by something that was set-in-motion by motor vehicle. The term "set-in-motion" generally applies to non-fixed or fixed objects struck and propelled by a vehicle (including pedestrians or parked vehicles).

# **Examples include:**

- Cargo falls from a truck (in-transport) and lands on a bicyclist on the shoulder.
- A car runs off the roadway at an intersection, hits a stop sign and propels the stop sign into skateboarder waiting to cross the intersection.
- A car strikes a deer in the roadway and propels the deer into person jogging on the sidewalk.

**16 (Non-Occupant Struck Vehicle)** is used when the case materials identify that a non-occupant (e.g. pedestrian, bicyclist, person on personal conveyance) "struck" or "ran into" a motor vehicle (usually the side or back of the vehicle). This does not include non-occupants which are struck in the vehicle's path of travel.

## **Examples include:**

- A bicyclist runs into the mirror of a parked car and falls into the path of a motor vehicle in-transport.
- A runner collides with the side of a vehicle that comes to a sudden stop and the runner is subsequently struck by another vehicle.

**17 (Vehicle Set-In-Motion by Non-Driver)** is used when the case materials identify the crash involved a passenger's action.

**Examples include:** 

- Passenger shifting gears on the vehicle.
- Passenger hitting the accelerator.
- Passenger turning the ignition key or hitting the ignition button.

**NOTE:** This attribute is different from Related Factors-Person Level **<u>05</u>** (Interfering with the Driver).

**\*18 (Date of Crash and Date of EMS Notification Were Not the Same Day)** is used when the crash victim(s) is not discovered immediately or when the effects of the crash are not immediately known.

**19 (Recent Previous Crash Scene Nearby)** is used when the case materials identify that a previous crash somehow influenced or contributed to the occurrence of this crash.

#### Examples include:

- A change in the traffic patterns.
- An obstruction on the roadway.
- A reduction in traffic speed.
- Occupants and/or vehicles on the roadway.

**20 (Police Pursuit Involved)** is used when the case materials identify a police pursuit had been initiated by the police and was active at the time of the crash. This attribute is also used when a pursuit had been initiated and terminated, but the pursuit action is still related to the crash. This applies for both air and ground pursuing vehicles. To identify the individual(s) involved in the pursuit, please see <u>Related Factors-Driver Level</u> for <u>37</u> (Police Pursuing this Driver or Police Officer in Pursuit).

**Definition of Police Pursuit:** A pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop (either through the use of visual or audible emergency signals or a combination of emergency devices) to a motorist who the officer is attempting to apprehend, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the

motorist. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued by the officer or at the direction of a competent authority.

**21 (Within Designated School Zone)** is used when the case materials identify the crash occurred in an area signed or marked as a "School Zone". This may or may not be a school-bus-related. "School Zones" are zones near or at a school which exist during months and hours when zone signing is in effect.

**\*22 (Speed Limit is a Statutory Limit as Recorded or was Determined as This State's "Basic Rule")** is used when the case materials identify there is no posted speed limit but the state law sets the maximum speed limit on a local road or street.

**23 (Indication of a Stalled/Disable Vehicle)** is used when the case materials identify that a stalled or mechanically disabled vehicle was somehow related to the crash. It includes both contact and non-contact vehicles that are stalled/disabled for mechanical reasons not due to crash-related damage.

## **Examples include:**

- A pedestrian is struck when walking from their stalled vehicle.
- A vehicle is stalled in the travel lanes causing another vehicle to lose control and crash.

**24 (Unstabilized Situation Began and All Harmful Events Occurred Off of the Roadway)** is used when the case materials identify the unstabilized situation began within the trafficway but off the roadway and all harmful events occurred off the roadway.

## Examples include:

- A vehicle stopped on the roadside begins to accelerate to re-enter the roadway and runs into a ditch and overturns.
- An ATV is driving along the roadside and strikes a tree stump.
- A vehicle strikes a pedestrian while driving down the road shoulder.

**25 (Toll Booth/Plaza Related)** is used when the case materials identify that the crash occurred at or in the vicinity of a toll booth (manned or unmanned) or a toll plaza. These are crashes that occur in the upstream approach to the toll booth/plaza area and continues as the approach area (where the toll road begins to widen) leading up to the toll booths and in the departure area where the road begins to narrow leading back to the normal number of lanes comprising the toll road downstream departure area.

**26 (Backup Due to Prior Non-Recurring Incident)** is used when the case materials identify that the crash occurred in or related to an area of the trafficway where there was congestion on the roadway caused by an unusual and unplanned event.

#### **Examples include:**

- A tractor trailer transporting a trailer designated as a Wide Load.
- Debris in the roadway causing a backup.
- Backup due to traffic going to or coming from a funeral procession, sporting event, parade or traffic signal outage.

**27 (Backup Due to Prior Crash)** is used when the case materials identify there was an accumulation of traffic caused by vehicles slowing or stopping due to traffic flow being impacted by a prior crash. The distance from the prior crash does not matter; only the relevance to this crash.

**28 (Back up Due to Regular Congestion)** is used when the case materials identify the crash occurred in or related to an area of trafficway where there was congestion due to heavy traffic during rush hour.

**99 (Unknown)** is used when the circumstances surrounding the crash are unknown and reported as **Unknown** by the investigating officer. In these circumstances, nine-fill all fields. If **99 (Unknown)** is used for any field, ALL fields must be **Unknown**. DO NOT leave any remaining fields blank.

## \* FARS ONLY ATTRIBUTES

Check	IF	THEN
(1A0P)	RELATED FACTORS-CRASH LEVEL equals 14,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
(1A1P)	RELATED FACTORS-CRASH LEVEL equals 05,	ROADWAY SURFACE CONDITIONS must equal 06 for at least one vehicle.
(640F)	TRAFFIC CONTROL DEVICE equals 23 for any vehicle,	RELATED FACTORS-CRASH LEVEL should equal 21.
(641F)	RELATED FACTORS-CRASH LEVEL equals 21,	TRAFFIC CONTROL DEVICE should not equal 00 for every vehicle.
(642F)	TRAFFIC CONTROL DEVICE equals 00 for any vehicle,	RELATED FACTORS-CRASH LEVEL should not equal 21.
(840P)	any RELATED FACTORS-CRASH LEVEL equals 99,	all RELATED FACTORS-CRASH LEVEL must equal 99.
(850P)	the first RELATED FACTORS-CRASH LEVEL equals 00,	all RELATED FACTORS-CRASH LEVEL must be 00. If the second equals 00, then the third must also.
(860P)	any RELATED FACTORS-CRASH LEVEL is blank,	all RELATED FACTORS-CRASH LEVEL must be blanks.
(870P)	A RELATED FACTORS-CRASH LEVEL 01-07, 13- 28 can be used only once per crash.	
(880F)	RELATED FACTORS-CRASH LEVEL equals 16,	there must be a Person Level (Not a MV Occupant) form with PERSON TYPE equal to 04- 08, 19.
(890F)	RELATED FACTORS-CRASH LEVEL equals 15,	there must be a Person Level (Not a MV Occupant) form with PERSON TYPE equal to 04- 08, 10, 19.
(8L8S)	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, <i>or 20</i> in the CRASH EVENTS and the corresponding event in that row equals 14, 45 or 54,	RELATED FACTORS-CRASH LEVEL must equal 14.
(8L8T)	RELATED FACTORS-CRASH LEVEL equals 14,	there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE or OTHER VEHICLE) equals 18, 19, <i>or 20</i> and the corresponding event in that row equals 14, 45 or 54.
(8L8U)	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, <i>or 20</i> in the CRASH EVENTS and the corresponding event in that row equals 08, 09, 15, 49,	RELATED FACTORS-CRASH LEVEL must equal 15.

Check	IF	THEN
(8L8V)	RELATED FACTORS-CRASH LEVEL equals 15,	there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, <i>or 20</i> , and the corresponding event in that row equals 08-10, 15, 18, 49, <i>or 91</i> .
(AM1P)	FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle,	one RELATED FACTORS-CRASH LEVEL must equal 14.
(D470)	any RELATED FACTORS-DRIVER LEVEL equals 37,	at least one RELATED FACTORS-CRASH LEVEL should equal 20.
(D500)	VIOLATIONS CHARGED equals 05,	at least one RELATED FACTORS-CRASH LEVEL should equal 20.
(PB63)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one RELATED FACTORS - CRASH LEVEL should equal 19 or 23.

# C33 - Interstate Highway - CRSS Only

## FORMAT: 1 numeric SAS NAME: Accident.Int\_Hwy ELEMENT VALUES:

Codes	Attributes
0	No
1	Yes
9	Unknown

**Definition:** This element identifies whether or not the crash occurred on an interstate highway. Interstate highway is a Federal Highway Administration classification.

**Remarks:** The Interstate Highway System includes those trafficways that are within the national system for interstate transport and defense purposes. Interstates typically have limited access and multiple lanes of travel.

Crashes which occur on ramps leading to or away from an Interstate should be coded 1 (Yes).

Enter **0 (No)** when the *Police Crash Report* indicates that the crash occurred on any of the following: US Highway, State Highway, County Road, Township Road, or Municipal Road.

Enter **1** (Yes) when the *Police Crash Report* indicates the crash occurred on an interstate highway. Some *Police Crash Reports* use a specific block to indicate interstate. Interstate can also be identified by the prefix "I" used in the roadway name.

Check	IF	THEN
(A3G0)	INTERSTATE HIGHWAY equals 1, and RELATION	TOTAL LANES IN ROADWAY should not equal 1
	TO JUNCTION (a) equals 1, and RELATION TO	for at least one vehicle involved in the first
	JUNCTION (b) is not equal to 03 or 05 or 20,	harmful event.
(A3H0)	INTERSTATE HIGHWAY equals 1, and RELATION	TRAFFICWAY DESCRIPTION should not equal 4
	TO JUNCTION (a) equals 1, and RELATION TO	for at least one vehicle involved in the first
	JUNCTION (b) is not equal to 03 or 05 or 20,	harmful event.
(A3I0)	INTERSTATE HIGHWAY equals 1,	RELATION TO JUNCTION (b) should not equal
		02, 04, 06, 08 or 16.
(A3J0)	INTERSTATE HIGHWAY equals 1, and RELATION	SPEED LIMIT should not equal 01-40 for at
	TO JUNCTION (a) equals 1, and RELATION TO	least one vehicle involved in the first harmful
	JUNCTION (b) is not equal to 03 or 05 or 20,	event.
(A3K0)	FIRST HARMFUL EVENT equals 10,	INTERSTATE HIGHWAY should not equal 1.
(A930)	INTERSTATE HIGHWAY equals 1, and RELATION	TRAFFIC CONTROL DEVICE should not equal
	TO JUNCTION (a) equals 1, and RELATION TO	01-03, 20, 23 or 65 for at least one vehicle
	JUNCTION (b) is not equal to 03 or 05 or 20,	involved in the first harmful event.

#### Consistency Checks (CRSS) Only:

# C34 - Stratum - CRSS Only

# FORMAT: 1 numeric SAS NAME: Accident.Stratum ELEMENT VALUES:

Codes	Stratum Numbers
2	Stratum 2
3	Stratum 3
4	Stratum 4
5	Stratum 5
6	Stratum 6
7	Stratum 7
8	Stratum 8
9	Stratum 9
10	Stratum 10

Definition: The CRSS stratum applicable to this Police Crash Report.

**Remarks:** Only motor vehicle traffic crashes are included in the CRSS. See the current **CRSS Sampling Manual**, for the definition of a CRSS crash.

Stratum #	Definition	
Stratum 2	Crashes involving at least one injured (A, B, C, or ISU*) or Killed (K) person who was not in motor vehicle (i.e., non-motorist).	
Stratum 3	Crashes not qualifying for Stratum 2 involving at least one injured (A, B, C, or ISU*) or Killed (K) occupant of a motorcycle or moped.	
Stratum 4	Crashes not qualifying for Strata 2 or 3 involving at least one occupant of a late model year (LMY) passenger vehicle who was injured with a Suspected Serious Injury (A) or Killed (K).	
Stratum 5	Crashes not qualifying for Strata 2, 3, or 4 involving at least one occupant of a non-late model year (NLMY) passenger vehicle who was injured with a Suspected Serious Injury (A) or Killed (K).	
Stratum 6	Crashes not qualifying for Strata 2, 3, 4, or 5 involving at least one occupant of a late model year (LMY) passenger vehicle who was injured (B, C, or ISU*).	
Stratum 7	Crashes not qualifying for Strata 2, 3, 4, 5, or 6 involving at least one medium or heavy truck or bus (includes school bus, transit bus, and motor coach) with GVWR equal to or greater than 10,001 pounds.	
Stratum 8	Crashes not qualifying for Strata 2, 3, 4, 5, 6, or 7 involving at least one occupant of a non- late model year (NLMY) passenger vehicle who was injured (B, C, or ISU*).	
Stratum 9	Crashes not qualifying for Strata 2, 3, 4, 5, 6, 7, or 8 involving at least one late model year (LMY) passenger vehicle <u>AND</u> no one in the <i>in-transport vehicle(s) were</i> injured (A, B, C, or ISU*) or Killed (K).	
Stratum 10	Crashes not qualifying for Strata 2, 3, 4, 5, 6, 7, 8, or 9.	

#### **CRSS Strata Definitions**

\*ISU = Injured, Severity Unknown

#### Important Notes:

- A. In stratum 2, non-motorist does not include occupants of a motor vehicle not in-transport.
- B. Motor vehicles that are not in-transport are not considered for stratification. Likewise, injuries sustained by occupants of motor vehicles that are not in-transport are also not considered for stratification.
- C. A motor vehicle with no occupants that is in-transport IS considered in the stratification.
- D. Late model year (LMY): the vehicle model year is equal to the crash year, the following year, or 4 prior years.
- E. Non-late model year (NLMY): the vehicle model year is older than 4 prior years or the model year of the vehicle is unknown.

# **Unstabilized Situations**

As defined by <u>ANSI D-16 7<sup>th</sup> Edition</u>, Section 2.4.4, "An unstabilized situation is a set of events not under human control. It originates when control is lost and terminates when control is regained, or in the absence of persons who are able to regain control, when all persons and property are at rest." "Property" can refer to the involved vehicles, separated components of the vehicles, cargo, or objects set in motion. The duration of an unstabilized situation establishes the beginning and end of an individual crash.

At times, one *Police Crash Report* may contain more than one crash. This may happen when events constituting a crash have stabilized and units involved in the first sequence are subsequently involved in another crash sequence and recorded on the same *Police Crash Report*. If more than one crash is recorded on a *Police Crash Report*, ALL of the crashes are to be listed and stratified separately. This includes CRSS, NTS, and those which are Out-of-Scope. In a multi-vehicle crash, if it cannot be determined conclusively that all persons and property had come to rest at some point prior to the involvement of all vehicles listed on the *Police Crash Report*, the events would be part of a single unstabilized situation and thus considered one crash.

# Consistency Check (CRSS Only):

Check	Language
5AAP	The Final Stratum should equal the Original Stratum.

# **C35** - Police Jurisdiction - CRSS Only

## FORMAT: 3 numeric SAS NAME: Accident.PJ ELEMENT VALUES:

Codes	Attributes
001-128	Range

**Definition:** The number (range 1 through 120) of the police jurisdiction from which the **Police Crash Report** was originally sampled.

**Remarks:** This is the police jurisdiction from which the *Police Crash Report* is selected; it is written at the top of the *Police Crash Report* and is prefaced by the character "PJ". The police jurisdiction may also be shown as the second of three numbers separated by -s. The first number in the set of three is the primary sampling unit, the second is the police jurisdiction, and the third is the *Police Crash Report* number. The jurisdiction number written on the *Police Crash Report* must match the number shown in the "CRSS Input Form" *Police Crash Report*/Jurisdiction field.

# **Additional State Information**

## FORMAT: Alphanumeric SAS NAME: None ELEMENT VALUES:

- Blanks
- Any Alphanumeric Characters

**Remarks:** This space is reserved for each individual state's use. Suggested uses depend on potential needs of the state. This space may contain:

- 1. Police *Crash* Report number.
- 2. Additional crash location information.

If HPMS number is available, it may be inserted here.

# **Vehicle Level Data Elements**

V1 – State Number – FARS Only V2 – Consecutive Number – FARS Only V3 – Vehicle Number – Vehicle Level V4 – Number of Occupants V5 – Unit Type V6 - Hit-and-Run V7 – Registration State – FARS Only V8 – Registered Vehicle Owner – FARS Only Vehicle Make/Vehicle Model Overview V9 – Vehicle Make V10 – Vehicle Model Alphabetical Listing of Makes Numerical Listing of Makes Vehicle Make/Model/Body Type Tables V11 – Body Type V12 – Vehicle Model Year V13 – Vehicle Identification Number V14 – Vehicle Trailing V15 – Trailer Vehicle Identification Number V16 – Jackknife V17 – Motor Carrier Identification Number V18 – GVWR/GCWR V19 – Vehicle Configuration V20 – Cargo Body Type V21 – Hazardous Materials Involvement/Placard V22 – Bus Use V23 – Special Use V24 – Emergency Motor Vehicle Use V25 – Travel Speed V26 – Underride/Override – FARS Only V27 – Rollover V28 – Location of Rollover V29 – Areas of Impact – Initial Contact Point/Damaged Areas V30 – Extent of Damage V31 – Vehicle Removal V32 – Sequence of Events V33 – Most Harmful Event V34 – Related Factors – Vehicle Level V35 – Fire Occurrence

# V3 - Vehicle Number – Vehicle Level

FORMAT: 3 numeric SAS NAME: Vehicle.Veh\_No; Parkwork.VEH\_NO ELEMENT VALUES:

• 001-999

**Definition:** This element identifies the number assigned to this vehicle in the crash.

**Remarks:** Each motor vehicle in a crash must be assigned a unique number. The numbers assigned to vehicles must be consecutive, starting with '001' with no missing numbers.

Motor vehicles are assigned the **Police Crash Report's** vehicle number unless a number is skipped because of a non-contact vehicle included on the **Police Crash Report** with a vehicle number or a non-motorist included with a unit number.

Check	IF	THEN
(060P)	VEHICLE NUMBER OF MOTOR VEHICLE	the VEHICLE NUMBER OF MOTOR VEHICLE
	STRIKING NON-MOTORIST is not equal to	STRIKING NON-MOTORIST must equal some
	000, 999,	VEHICLE NUMBER in the case, and the UNIT
		TYPE must equal 1.
(CSI5)	VEHICLE NUMBER at the Person Level is	VEHICLE NUMBER at the Person Level must
	greater than 000,	equal a VEHICLE NUMBER at the Vehicle Level.
(CSI6)	For each VEHICLE NUMBER, PERSON	
	NUMBERS must be consecutive, beginning	
	with 001 and with no gaps.	
(PBA0)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	BICYCLE equals 111, 211, 212, and VEHICLE	RECOGNITION OF CRITICAL EVENT) should equal
	NUMBER - VEHICLE LEVEL equals VEHICLE	11.
	NUMBER OF MOTOR VEHICLE STRIKING NON-	
	MOTORIST,	
(PBA1)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	BICYCLE equals 112, 151, 213, 214, 217 or	RECOGNITION OF CRITICAL EVENT) should equal
	218, and VEHICLE NUMBER - VEHICLE LEVEL	10.
	equals VEHICLE NUMBER OF MOTOR VEHICLE	
	STRIKING NON-MOTORIST,	

# V4 - Number of Occupants

FORMAT: 2 numeric SAS NAME: Vehicle.Numoccs; Parkwork.PNUMOCCS ELEMENT VALUES:

Codes	Attributes
00	None
01-98	Actual Value* [if Total Known]
99	<u>Unknown</u>

**Definition:** This element identifies the number of occupants in each vehicle.

**Remarks:** This data element must be coded for each motor vehicle involved in the crash. Code the total number of occupants (**injured and uninjured**) in this motor vehicle. In bus crashes, the total number of occupants, including the driver, must be entered.

**00 (None)** is used when this motor vehicle is unoccupied.

**01-98 (Actual Value\* [If Total Known])** is used when the number of occupants in the vehicle is known. <u>Person</u> <u>Level (MV Occupant) forms</u> should be submitted for all known occupants (even if there is no information in the case materials).

**Buses are an exception.** For buses (Body Types 50-52, 55, 58,59), the total number of occupants, including the driver, should be recorded, but Person Level (MV Occupant) forms should only be submitted for occupants known to be injured and for the driver, whether the driver is known to be injured or not. **NOTE:** This does NOT apply to small van-based buses (Body Type 21). Always submit a person level form for all occupants of van-based vehicles, including small van-based buses.

**99 (Unknown)** is used when the number of occupants for the motor vehicle is unknown. Unless evidence clearly establishes the number of occupants present, this code is used when this motor vehicle is a "hit-and-run" vehicle.

If the actual number of motor vehicle occupants is unknown, <u>Person Level (MV Occupant) forms</u> should be submitted for all known occupants (even if there is no information on the **Police Crash Report**).

**Buses are an exception.** For buses (<u>Body Types 50-52, 55, 58, 59</u>), if the total number of occupants is unknown, Person Level (MV Occupant) forms should be submitted for the driver (if there was one) and all occupants known to be injured. This does NOT apply to small van-based buses (<u>Body Type 21</u>). If the total number of occupants is unknown for small van-based buses (Body Type 21), always submit a person level form for all known occupants (even if there is no information in the case materials).

Also use **99 (Unknown)** when the State reports information only on drivers and INJURED passengers and the total number of occupants is unknown.

\* Values greater than 30 are unlikely and will raise a "U" flag.

Check	IF	THEN
(2F0F)	NUMBER OF OCCUPANTS equals 00,	DRIVER PRESENCE must equal 0.
(4C1P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94, 95, <b>96,</b> 97, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 20.
(4C2P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 22.
(4C3P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 25.
(4C4P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals <b>80-89</b> , and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than <i>15</i> .
(4C5P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 30.
(4C6P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 55.
(4C7P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 77.
(4C8P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(4C9P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 20.
(4C0P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 99, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(4F1P)	NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 01-05, 07-10, 13, 17, <b>90-</b> <b>97</b> , and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 15.
(4F2P)	NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 06, 11, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 22.
(4F3P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 25.
(4F4P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals <b>80-89</b> , and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 5.

Check	IF	THEN
(4F5P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 15, 16, 42, 73, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 30.
(4F6P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 55.
(4F7P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 50.
(4F8P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(4F9P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 20.
(4F9Q)	NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 06, 11, 12, 14-16, 19, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS should not be greater than 15.
(4F0P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 99, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(5F0F)	NUMBER OF OCCUPANTS equals 00-98, and BODY TYPE does not equal 50-52, 55, 58, 59,	the number of Person Level forms for that vehicle must be equal to the NUMBER OF OCCUPANTS.
(622P)	HIT-AND-RUN equals 1,	it is unlikely that NUMBER OF OCCUPANTS equals 0-98.
(BJ4P)	any DRIVER DISTRACTED BY equals 03,	NUMBER OF OCCUPANTS must be greater than 01.
(V170)	NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94, 95, <b>96,</b> 97,	NUMBER OF OCCUPANTS should not be greater than 8.
(V180)	NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY TYPE equals 06, 11,	NUMBER OF OCCUPANTS should not be greater than 12.
(V190)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 12,	NUMBER OF OCCUPANTS should not be greater than 15.
(V200)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 80-83, 88, 89,	NUMBER OF OCCUPANTS should not be greater than 2.
(V210)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 15, 16, 42, 73,	NUMBER OF OCCUPANTS should not be greater than 12.

Check	IF	THEN
(V220)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 60-65, 71, 72, 79,	NUMBER OF OCCUPANTS should not be greater than 12.
(V230)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 66,	NUMBER OF OCCUPANTS should not be greater than 5.
(V240)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 91,	NUMBER OF OCCUPANTS should not be greater than 2.
(V250)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 90,	NUMBER OF OCCUPANTS should not be greater than 8.
(V260)	NUMBER OF OCCUPANTS is, 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 99,	NUMBER OF OCCUPANTS should not be greater than 5.
(V290)	BODY TYPE equals 90,	NUMBER OF OCCUPANTS should equal 01.
(V340)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, <b>94</b> , <b>95, 96,</b> 97, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than <b>15</b> .
(V350)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V360)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 15.
(V370)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 80-83, 88, 89, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 2.
(V380)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V390)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V400)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 5.
(V410)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 2.
(V420)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 8.

Check	IF	THEN
(V430)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 98, 99, and VEHICLE TRAILING	NUMBER OF OCCUPANTS should not be greater than 5.
	does NOT equal 0,	

# V5 - Unit Type

**FORMAT:** 1 numeric **SAS NAME**: Vehicle.UNITTYPE; Parkwork.PTYPE **ELEMENT VALUES:** 

Codes	Attributes	
1	Motor Vehicle In-Transport (Inside or Outside the Trafficway)	
2	Motor Vehicle Not In-Transport Within the Trafficway	
3	Motor Vehicle Not In-Transport Outside the Trafficway	
4	Working Motor Vehicle (Highway Construction, Maintenance, Utility only)	

**Definition:** This element identifies the type of unit that applies to this motor vehicle at the time it became an involved vehicle in the crash and was reported as a unit on the *Police Crash Report*.

**Remarks: IMPORTANT:** Remember, you must have at least one motor vehicle "In-Transport" involved in the crash for this to be a reportable case.

**NOTE:** For Unit Type attributes "2-4," you must only submit selected elements on the Vehicle Level. <u>V15</u>, <u>V25</u>, and <u>V32</u> are not coded. Also, all elements on the Driver level must be left blank, except <u>D4 (Driver Presence)</u> and <u>D24 (Related Factors-Driver Level)</u>. Related Factors-Driver Level must be coded all "00."

**1 (Motor Vehicle In-Transport [Inside or Outside the Trafficway])** is used to indicate that this is a motor vehicle in-transport. "In-Transport" means any part of the vehicle's primary outline as defined by the four sides of the vehicle (excluding open doors or mirrors) or load, if any, is within the roadway (travel lanes) or the vehicle is in motion anywhere within or outside the trafficway boundaries.

#### **Examples:**

- 1. Motor vehicle in traffic on the highway.
- 2. Motionless motor vehicle abandoned on the roadway travel lanes.
- 3. Motor vehicle on roadway stopped at traffic signal.
- 4. Motor vehicle driving or in motion on the shoulder, median or roadside.
- 5. Motor vehicle driving down a private driveway.
- 6. Motor vehicle in motion, outside the trafficway boundaries (e.g., vehicle pulling up to a pump in a gas station, not within trafficway; vehicle in motion in a parking lot aisle; lawn tractor driving in a field adjacent to the trafficway; ATV driving on a dirt track next to trafficway; etc.).
- 7. A tractor trailer with its load hanging over the roadway edge line.
- 8. A pickup truck on the shoulder with lumber extending into the travel lanes.

2 (Motor Vehicle Not In-Transport Within the Trafficway) is used to indicate that this is a motor vehicle not intransport located within the trafficway boundaries when it became an involved unit. The trafficway boundaries are from property line to property line. If it can't be determined if a not in-transport, non-working motor vehicle is within or outside the trafficway, default to <u>3 (Motor Vehicle Not In-Transport Outside the</u> <u>Trafficway</u>).

#### Examples:

- 1. Motor vehicle parked in designated curbside parking lane.
- 2. Motor vehicle parked in designated curbside parking lane with an open door crossing into the travel lane.
- 3. Motor vehicle stopped completely on the shoulder, median or roadside.

**3 (Motor Vehicle Not In-Transport Outside the Trafficway)** is used to indicate that this is a motor vehicle **not** intransport located **outside** the trafficway boundaries when it became an involved unit by being struck by a motor vehicle in-transport. If it can't be determined if a not in-transport, non-working motor vehicle is within or outside the trafficway, default to **3 (Motor Vehicle Not In-Transport Outside the Trafficway)**.

# Examples:

- 1. Motor vehicle parked in a private driveway, parking lot space, or other private property (outside the trafficway boundaries).
- 2. Any vehicle (not in motion) used for private construction occurring outside the trafficway boundaries.

**4 (Working Motor Vehicle [Highway Construction, Maintenance, Utility only])** is used to indicate that this is a motor vehicle that was in the act of performing highway construction, maintenance, or utility work related to the trafficway when it became an involved unit. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles (except example #8 below), tow trucks, etc.

#### Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker", performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A state, county, or privately owned snow plow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.
- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle which is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling, or calming influence.

When not in the act of performing "work" and involved in the crash, these highway construction, maintenance or utility vehicles can be:

- In-Transport when traveling from one construction site to the next (Unit Type <u>1 (Motor Vehicle In-</u> <u>Transport [Inside or Outside the Trafficway]</u>).
- 2. Not In-Transport Within the Trafficway when stopped on the shoulder or within a highway work zone (Unit Type <u>2 (Motor Vehicle Not In-Transport Within the Trafficway)</u>).
- 3. Not In-Transport Outside the Trafficway when parked and refueling at a depot (Unit Type <u>3 (Motor</u> <u>Vehicle Not In-Transport Outside the Trafficway</u>).
- 4. In-Transport Outside the Trafficway when relocating off the trafficway from a work activity area to another off-trafficway parking location.

Check	IF	THEN
(060P)	<b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is not equal to 000, 999,	the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal some VEHICLE NUMBER in the case, and the UNIT TYPE must equal 1.
(252P)	RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 98 or 99,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event must not equal 3.
(255P)	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (THIS VEHICLE) involved in the first harmful event must equal 1.
(256P)	RELATION TO TRAFFICWAY equals 01 or 11,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event should equal 1 or 4.
(257P)	RELATION TO TRAFFICWAY equals 05,	UNIT TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event must equal 1, 3 or 4.
(2H1F)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER'S VISION OBSCURED BY must equal 95.
(3BAP)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0,	CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93 or 98.
(3C0P)	UNIT TYPE equals 1, and EXTENT OF DAMAGE equals 6,	VEHICLE REMOVAL should equal 2, 8, 9.
(42BP)	there is only one vehicle involved in the First Harmful Event where UNIT TYPE equals 1,	the number of vehicles where CRASH TYPE is coded 00, 1-16, 92, 93 or 99 (excluding from the vehicles being counted, those where CRASH TYPE equals 98) must not equal 0 or be greater than 1.
(4Z1P)	UNIT TYPE equals 1, and FIRE OCCURRENCE equals 1,	at least one SEQUENCE OF EVENTS must equal 02.
(5A0P)	BODY TYPE equals 80, 81, 83, <b>84,</b> 88, 89, and any RELATED FACTORS - VEHICLE LEVEL does not equal 30,	ROLLOVER must equal 0.
(9A2P)	UNIT TYPE equals 2, 3,	REGISTERED VEHICLE OWNER must equal 6.
(9A3P)	UNIT TYPE equals 2-4,	DRIVER PRESENCE must equal 0.
(9A5P)	PERSON TYPE equals 03,	UNIT TYPE must equal 2-4.
(9B3P)	UNDERRIDE/OVERRIDE equals 7,	there must be at least one vehicle with UNIT TYPE equal to 1.
(9B4P)	UNDERRIDE/OVERRIDE equals 8,	there must at least one vehicle with UNIT TYPE equal 2-4.
(9B5P)	UNIT TYPE equals 2, 3,	UNDERRIDE/OVERRIDE must equal 0.
(9B7P)	UNIT TYPE equals 2-4,	PERSON TYPE of all occupants of this vehicle must equal 03.
(9B9P)	any SEQUENCE OF EVENTS equals 55,	there must be at least one other vehicle with UNIT TYPE equal to 1.
(9C0P)	FIRST HARMFUL EVENT equals 55,	there must be at least one vehicle with UNIT TYPE equal to 1.

Check	IF	THEN
(9C1P)	UNIT TYPE equals 4,	RELATED FACTORS-VEHICLE LEVEL must not
		equal 39.
(9C4P)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER MANEUVERED TO AVOID must only
	equals 0 or 9,	equal 95.
(9C6P)	UNIT TYPE equals 2-4,	RELATED FACTORS-DRIVER LEVEL must equal 0.
(AL3P)	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT must not equal 54 for
		this vehicle.
(AL5P)	UNIT TYPE equals 1,	at least one event in the SEQUENCE OF EVENTS must equal the MOST HARMFUL EVENT.
(AL7P)	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT should not equal 04-07, 16, 51, 72.
(AL9P)	there is one and only one parked vehicle	MOST HARMFUL EVENT for the parked vehicle
(/(L))	(UNIT TYPE equals 2 or 3) in the crash,	must not equal 14.
(AZ20)	UNIT TYPE equals 1, and DRIVER PRESENCE	PRE-EVENT MOVEMENT (PRIOR TO
(AZZO)	equals 0 or 9,	
	equais 0 of 9,	RECOGNITION OF CRITICAL EVENT) must equal 00.
(0140)		
(BJ1P)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER DISTRACTED BY must equal 16.
(2:22)	equals 0 or 9,	
(BJ2P)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER DISTRACTED BY must not equal 16 or
	equals 1,	blank.
(BJ3P)	UNIT TYPE equals 1, and DRIVER DISTRACTED	DRIVER PRESENCE must equal 0 or 9.
	BY equals 16,	
(BJ5P)	If UNIT TYPE equals 1 and HIT AND RUN	then DRIVER PRESENCE should not equal 0.
	equals 1,	
(FP2F)	UNIT TYPE equals 1, and CRASH TYPE equals	
	blank, case status is flawed.	
(FP3F)	UNIT TYPE is blank, case status is flawed.	
(FP6F)	UNIT TYPE equals 1, and CRITICAL EVENT –	
. ,	PRECRASH (CATEGORY) equals blank, case	
	status is flawed.	
(FP7F)	UNIT TYPE equals 1, and CRITICAL EVENT –	
()	PRECRASH (EVENT) equals blank, case status	
	is flawed.	
(U690)	UNLIKELY: UNIT TYPE equals 2-4 and HIT and	
(0050)	RUN equals 1.	
(V74P)	UNIT TYPE equals 1, and ROLLOVER equals 1,	at least one SEQUENCE OF EVENTS must equal
(v/4r)	2, 9, or LOCATION OF ROLLOVER equals 1,	01 for this vehicle.
	· · ·	of for this vehicle.
() (1) (2)	9,	
(VH25)	UNIT TYPE equals 4,	REGISTERED VEHICLE OWNER should not equal
() () (70)		
(VH70)	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, and
		SEQUENCE OF EVENTS must all be left blank.
(VH75)	UNIT TYPE equals 4,	VEHICLE CONFIGURATION should not equal 05,
		20, 21, 10.
(VH80)	UNIT TYPE equals 4,	CARGO BODY TYPE should not equal 06, 07, 11,
(1100)		······································

# V6 - Hit-and-Run

FORMAT: 1 numeric
SAS NAME: Vehicle.Hit\_Run, Parkwork.PHit\_Run
ELEMENT VALUES:

Codes	Attributes
0	No
1	Yes
9	<u>Unknown</u>

**Definition:** This element refers to cases where a vehicle is a contact vehicle in the crash and does not stop to render aid (this can include drivers who flee the scene on foot).

**Remarks:** In many states, the investigating officer will note this in the narrative or check the appropriate box on the *Police Crash Report*. In some cases, the driver can be cited for failing to render assistance. Review the case materials carefully for references to hit-and-run or failure to render aid.

It does not matter whether the hit-and-run vehicle was striking or struck. The hit-and-run vehicle(s) is (are) the one(s) that "departed prior to investigation by the police," or that vehicle which is "abandoned" at the scene when its occupant(s) fled from the area. If the police crash report indicates that the vehicle was involved in a collision which was investigated, but there is no information on that vehicle or the driver/owner because of departure prior to police arrival on-scene, then hit-and-run is indicated.

**0** (No) is used if there is no reason to believe a hit-and-run occurred involving this vehicle or its driver. Example: If a vehicle is involved in a multi-vehicle collision and one of the other contact vehicles leaves the scene.

#### Examples include:

- 1. if occupants of a vehicle are taken or go directly from the scene to a medical treatment facility or physician. However, if doubt exists concerning the departure for treatment, assume hit-and-run.
- a driver who leaves the scene but furnishes name, address, vehicle make, model and model year such that it is recorded in the available information and the available information does not indicate hit-andrun.
- 3. vehicles which set an object in motion such that (a) the object is contacted, before it stabilizes, by another in-transport motor vehicle, and (b) the vehicle which set the object in motion leaves the scene without providing the pertinent information (compare with exception two above), and (c) the available information does not indicate hit-and-run.
- **1 (Yes)** is used when it has been determined that this vehicle's driver left the scene with or without their vehicle. A hit-and-run occurred when this vehicle's driver left the scene after:
  - striking a pedestrian or other type of non-motorist.
  - striking a parked/stopped off roadway motor vehicle (with or without occupants).
  - being struck while parked or in-transport.

If Hit-and-Run is **1 (Yes)**, <u>Driver</u> and <u>Person Level (MV Occupant)</u> forms must be submitted for the driver and any known passengers of this vehicle involved in the crash regardless of the fact that it was a hit-and-run.

When the presence of a hit-and-run vehicle is indicated and the available information does not provide the number of occupants, <u>Number of Occupants</u> must equal <u>99 (Unknown)</u>.

9 (Unknown) is used when the police indicate "Unknown."

Check	IF	THEN
(622P)	HIT-AND-RUN equals 1,	it is unlikely that NUMBER OF OCCUPANTS equals 0-98.
(8KOP)	VIOLATIONS CHARGED equals 07, 08,	HIT-AND-RUN must not equal 0.
(BJ5P)	If UNIT TYPE equals 1 and HIT AND RUN equals 1,	then DRIVER PRESENCE should not equal 0.
(U340)	UNLIKELY: HIT-AND-RUN equals 0 or 9, and SEX equals 9.	
(U360)	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.	
(U070)	UNLIKELY: More than one vehicle with HIT- AND-RUN equal to 1.	
(U690)	UNLIKELY: UNIT TYPE equals 2-4 and HIT and RUN equals 1.	
(V860)	HIT-AND-RUN equals 0, and BODY TYPE equals 61-64,	VEHICLE CONFIGURATION should equal 01, 02, 04, and CARGO BODY TYPE should equal 01-10, 12, 96-98
(V880)	HIT-AND-RUN equals 0, and BODY TYPE equals 66,	VEHICLE CONFIGURATION should equal 05-08, 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
(VH87)	HIT-AND-RUN equals 0, and AREAS OF IMPACT-INITIAL CONTACT POINT equals 01- 14,	the corresponding code should be included in DAMAGED AREAS or DAMAGED AREAS should equal 15.
(U410)	UNLIKELY: DRIVER'S LICENSE STATE equals 98 <i>if HIT AND RUN does not equal 1</i> .	
(U450)	UNLIKELY: REGISTRATION STATE equals 91 <i>if</i> <i>HIT AND RUN does not equal 1</i> .	
(U460)	UNLIKELY: VEHICLE MODEL equals 997 <i>if HIT</i> AND RUN does not equal 1.	
(U470)	UNLIKELY: BODY TYPE equals 98 <i>if HIT AND</i> <i>RUN does not equal 1</i> .	
(U480)	UNLIKELY: VEHICLE MAKE equals 97 <i>if HIT</i> AND RUN does not equal 1.	
(U510)	UNLIKELY: VEHICLE MODEL YEAR equals 9998 <i>if HIT AND RUN does not equal 1</i> .	
(U520)	UNLIKELY: RESTRAINT SYSTEM/HELMET USE equals 98 <i>if HIT AND RUN does not equal 1</i> .	

# **V7** - Registration State – FARS Only

FORMAT: 2 numeric
SAS NAME: Vehicle.REG\_STAT; Parkwork.PREG\_STAT
ELEMENT VALUES:

Codes	Attributes
00	Not Applicable
01	Alabama
02	Alaska
03	American Samoa
04	Arizona
05	Arkansas
06	California
08	Colorado
09	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
14	Guam
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	lowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana
31	Nebraska
32	Nevada
33	New Hampshire
34	New Jersey

Codes	Attributes
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
43	Puerto Rico
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
52	Virgin Islands
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming
91	Not Reported
92	No Registration
93	Multiple State Registration
94	U.S. Government Tags (includes military)
95	Canada
96	Mexico
97	Other Foreign Country*
98	Other Registration
99	<u>Unknown</u>

\*This value is an unlikely occurrence and will raise an error flag.

**Definition:** This element identifies the state in which this vehicle was registered.

**Remarks:** For a vehicle with an expired registration, code the state where the vehicle was registered at the time of expiration.

#### 91 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code 91 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

For combination vehicles, use the registration state of the power unit only.

**00 (Not Applicable)** is used for vehicles that are not required to be registered. This is state specific based on state vehicle registration requirements.

Use state codes for all state registered vehicles, including state government vehicles. However, if your state does not register government-owned vehicles, use **00 (Not Applicable)**.

92 (No Registration) applies to vehicles that are required by state law to be registered and are NOT registered.

**93 (Multiple State Registration)** is used for commercial vehicles that are registered in more than one state under a valid reciprocal agreement (such as the International Registration Plan (IRP)).

**94 (U.S. Government Tags)** is used to indicate the license was issued by the U.S. Government, such as military or State Department Foreign Service.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code <u>98 (Other Registration)</u> if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- Code <u>91 (Not Reported)</u> if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

## 98 (Other Registration) is used for other registrations that are not identified by their own attribute (e.g. Native American Indian Nations, Other US Territories, or US owned outlying areas such as Northern Marianas Islands, Wake Islands, etc.).

**99 (Unknown)** is used when the registration information for a vehicle cannot be identified. Example unidentified hit-and-run vehicle's registration reported as "Unknown" by police.

consistent			
Check	IF	THEN	
(6G0P)	RELATED FACTORS-VEHICLE LEVEL equals 32,	REGISTRATION STATE must not equal 00, 92.	
(9K0P)	HM2 equals 2,	REGISTRATION STATE must not equal 00.	
(AQ0P)	<b>REGISTRATION STATE equals 00, 92,</b>	REGISTERED VEHICLE OWNER must equal 0, 5, 6.	
(AVOP)	REGISTERED VEHICLE OWNER equals 3, 4,	<b>REGISTRATION STATE must not equal 99.</b>	
(D330)	DRIVER PRESENCE equals 0, and	REGISTERED VEHICLE OWNER should equal 3-6.	
	REGISTRATION STATE is not equal to 00, 92,		
	99,		
(U040)	UNLIKELY: REGISTRATION STATE equals 97.		
(U450)	UNLIKELY: REGISTRATION STATE equals 91 if		
	HIT AND RUN does not equal 1.		
(V060)	SPECIAL USE equals 04,	REGISTRATION STATE should equal 94.	
(V070)	HM1 equals 2,	REGISTRATION STATE should not equal 92.	
(V550)	<b>REGISTRATION STATE equals 93, 94,</b>	REGISTERED VEHICLE OWNER should equal 3, 4.	
(V560)	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER should equal 3,	
		and REGISTRATION STATE should equal 94.	
(V592)	RELATED FACTORS-VEHICLE LEVEL equals 37,	REGISTRATION STATE should not equal 00, 92.	
(V600)	<b>REGISTERED VEHICLE OWNER equals 9</b> ,	REGISTRATION STATE should equal 99.	
(V630)	<b>REGISTRATION STATE equals 00, 92,</b>	REGISTERED VEHICLE OWNER should NOT equal	
		5.	
(V670)	REGISTERED VEHICLE OWNER equals 1, 2,	REGISTRATION STATE should NOT equal 99.	
(V960)	<b>REGISTRATION STATE equals 99</b> ,	REGISTERED VEHICLE OWNER should equal 5, 6,	
		9.	

# **V8 - Registered Vehicle Owner - FARS Only**

FORMAT: 1 numeric SAS Name: Vehicle.OWNER, parkwork.POWNER ELEMENT VALUES:

Codes	Attributes	
0	Not Applicable, Vehicle Not Registered	
1	Driver (in this crash) Was Registered Owner	
2	Driver (in this crash) Not Registered Owner (other private owner listed)	
3	Vehicle Registered as Business/Company/Government Vehicle	
4	Vehicle Registered as Rental Vehicle	
5	Vehicle Was Stolen (reported by police)	
6	Driverless/Motor Vehicle Parked/Stopped Off Roadway	
9	Unknown	

**Definition:** This element is used to determine the type of registered owner of the vehicle.

**Remarks:** The type of ownership, "loan vs. lease," does not change the coding. An individual or company should be the Registered Vehicle Owner, regardless of the bank holding the loan or lease. Banks and leasing companies should be the Registered Vehicle Owner for their own fleets only.

Vehicle Registration data takes precedence over police reported information.

**0 (Not Applicable, Vehicle Not Registered)** applies to vehicles that are not registered, both not required to be registered (state specific based on state vehicle registration requirements) and illegally not registered. (See <u>5</u> <u>(Vehicle Was Stolen [reported by police])</u> for stolen vehicles.) For plated Business/Company/Government Vehicles that are exempt from normal registration see <u>3 (Vehicle Registered as Business/ Company/</u><u>Government Vehicle</u>).

**2 (Driver (in this crash) Not Registered Owner [other private owner listed])** is used for private owners other than the driver. Also, this includes when if the driver is a spouse of the owner but is not a co-owner.

**3 (Vehicle Registered as Business/Company/Government Vehicle)** is used for vehicles that are registered in a Business or Company name, or as a local, county, state or federal Government Vehicle. Use this attribute even if the Government vehicle is exempt from normal registration. Example: city owned police cruisers.

4 (Vehicle Registered as Rental Vehicle) applies for rental vehicles, such as: Hertz, Ryder trucks, etc.

**5 (Vehicle Was Stolen [reported by police])** takes precedence over codes "0, 2, 3, 4, 6," when multiple conditions exist.

**6 (Driverless/Motor Vehicle Parked/Stopped Off Roadway)** is used for both in-transport and not in-transport motor vehicles. This attribute should always be used if Unit Type is coded as "2" or "3," even if other applicable conditions exist. This attribute is also used to indicate that this is a "driverless" motor vehicle in-transport (e.g., driverless vehicle stopped in a travel lane). If indicating this is a "driverless" motor vehicle in-transport, this attribute does not take precedence over codes "0, 3, 4, 5," when multiple conditions exist.

**9 (Unknown)** is used when information on the registered owner is unknown or unclear; and in certain cases when the driver cannot be determined, but the registered owner is known.

### **Consistency Checks:**

Check	IF	THEN
(9A2P)	UNIT TYPE equals 2, 3,	REGISTERED VEHICLE OWNER must equal 6.
(AQ0P)	REGISTRATION STATE equals 00, 92,	REGISTERED VEHICLE OWNER must equal 0, 5, 6.
(AROP)	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER must not equal 0,
		1, 2, 4.
(ASOP)	RELATED FACTORS-VEHICLE LEVEL equals 32,	REGISTERED VEHICLE OWNER must not equal 0.
(AVOP)	REGISTERED VEHICLE OWNER equals 3, 4,	REGISTRATION STATE must not equal 99.
(CBOP)	REGISTERED VEHICLE OWNER equals 6,	DRIVER PRESENCE must equal 0.
(D330)	DRIVER PRESENCE equals 0, and	REGISTERED VEHICLE OWNER should equal 3-6.
	REGISTRATION STATE is not equal to 00, 92,	
	99,	
(V550)	REGISTRATION STATE equals 93, 94,	REGISTERED VEHICLE OWNER should equal 3, 4.
(V560)	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER should equal 3,
		and REGISTRATION STATE should equal 94.
(V570)	HM1 equals 2,	REGISTERED VEHICLE OWNER should not equal
		0, 1, 2, 4.
(V580)	HM1 equals 2,	REGISTERED VEHICLE OWNER should equal 3.
(V600)	<b>REGISTERED VEHICLE OWNER equals 9</b> ,	REGISTRATION STATE should equal 99.
(V630)	<b>REGISTRATION STATE equals 00, 92,</b>	REGISTERED VEHICLE OWNER should NOT equal
		5.
(V670)	REGISTERED VEHICLE OWNER equals 1, 2,	REGISTRATION STATE should NOT equal 99.
(V960)	<b>REGISTRATION STATE equals 99</b> ,	REGISTERED VEHICLE OWNER should equal 5, 6,
		9.
(VH25)	UNIT TYPE equals 4,	REGISTERED VEHICLE OWNER should not equal
		6, 9.

# Consistency Checks (FARS Only):

Check	IF	THEN
(V590)	RELATED FACTORS-VEHICLE LEVEL equals 32,	REGISTERED VEHICLE OWNER should equal 1-3.
(V593)	RELATED FACTORS-VEHICLE LEVEL equals 37,	REGISTERED VEHICLE OWNER should not equal 0.

# Vehicle Make/Vehicle Model Overview

#### FARS SPECIAL INSTRUCTION:

VEHICLE MAKE, VEHICLE MODEL, BODY TYPE, and VEHICLE MODEL YEAR as shown on crash reports must be verified with registration data. In the case of inconsistencies, registration data takes precedence over crash report data. Note that vehicle information should be gathered only from state records. Do not use any other sources to determine any of these elements; that is, you should not use sources such as the NATB Passenger Vehicle Identification Manual.

Codes	Attributes	
01-28	Domestic Passenger Car	
29	Other Domestic Passenger Car	
30-67	Import Passenger Car	
69	Other Import Passenger Car	
70-77	Motored Cycle/Moped	
80-89	Truck/Bus	
90-94	Bus	
97	Not Reported	
98	Other Make (where MAKE "29" or "69" are not applicable)	
99	Unknown Make	

#### **VEHICLE MAKE** attributes are organized into general groups. These groups are:

VEHICLE MODEL refers to the series of vehicles for a make (e.g., Pintos, Galaxies, Mustangs are Models of Ford). It does not refer to the various styles within a model unless they are listed in the codes for VEHICLE MODEL.

Codes	Attributes	
001-399	Passenger Car (automobile)	
400-499	Light Trucks (including truck based utility vehicles, light duty pickup trucks, standard pickup	
	trucks, vans, mini vans, van-based station wagons, van-based buses, van derivatives, and	
	truck-based station wagons).	
598	Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)	
700-739	Motored Cycles (including motorcycles, mini-bikes, motor scooters, dirt bikes, and mopeds).	
850	Motor Home (truck based)	
870	Medium/Heavy Van-Based Vehicle	
880-897 Trucks (including all trucks over 10,000 lbs. GVWR except those pickup type trucks		
	under BODY TYPE code "30-31" [Pickup]).	
898	Other, Unknown, truck over 10,000 lbs. GVWR.	
980-996	All buses except those that are van-based.	
988	Other bus over 10,000 lbs. GVWR.	
989	Unknown Bus	
997	Not Reported	
998	Other Vehicle	
999	Unknown Vehicle	

#### **VEHICLE MODEL** attributes are organized into general groups. These groups are:

Note that for both <u>VEHICLE MAKE</u> and <u>VEHICLE MODEL</u> the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a VEHICLE MAKE or VEHICLE MODEL that is known but is not explicitly listed.

#### Vehicle Make / Vehicle Model Overview

"Unknown" refers to the situation where no specific named VEHICLE MAKE or VEHICLE MODEL is known. Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle BODY TYPE in accordance with the applicable BODY TYPE for given combinations of "other" and/or "unknown" VEHICLE MAKE and VEHICLE MODEL.

4WD, FWD, or Four-Wheel Drive does not automatically imply on/off road vehicle (Utility Vehicles), body types "14" and "15."

**Reconstructed/Altered Vehicles:** In cases where someone builds a "homemade" vehicle from drastically mixed parts, there may be no clear MAKE or MODEL. In addition, the state may issue an Identification Number in place of the Standard VIN. In such cases, code the VIN as all "0s"; code MAKE, MODEL, and MODEL YEAR as "9s." Code BODY TYPE as appropriate. Be sure to use <u>RELATED FACTORS-VEHICLE LEVEL</u> code <u>Reconstructed/Altered</u> <u>Vehicle</u>.

In reconstructed/altered vehicles where the modifications are less drastic and you can determine the MAKE, MODEL, and VIN, code these elements appropriately and be sure to use the <u>Related Factors-Vehicle Level</u> code for <u>Reconstructed/Altered Vehicle</u>.

If any detail is known regarding the vehicle's Make/Model/Body/Year, code what is known and then code the other elements as unknown. For example, you know it's a Ford 4-door passenger car but the specific model and year are not reported. Code Vehicle Make as **12 (Ford)**, Vehicle Model as **399 (Unknown (Automobile)**), Body Type as **04 (4-Door Sedan, Hard Top)**, and Vehicle Model Year as **9999 (Unknown)**.

Code **Not Reported** only when Vehicle Make, Vehicle Model, Body Type, and Vehicle Model Year are all **Not Reported**.

### Not Reported

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported".

Code **Not Reported** in these situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

# V9 - Vehicle Make

FORMAT: 2 numeric SAS NAME: Vehicle.Make, Person.Make; Parkwork.PMAKE ELEMENT VALUES:

	VALUES.
Codes	Attributes
01	American Motors
02	Jeep/Kaiser-Jeep/Willys-Jeep
03	AM General
06	<u>Chrysler</u>
07	<u>Dodge</u>
08	Imperial
09	<u>Plymouth</u>
10	Eagle
12	Ford
13	Lincoln
14	Mercury
18	Buick/Opel
19	<u>Cadillac</u>
20	<u>Chevrolet</u>
21	<u>Oldsmobile</u>
22	<u>Pontiac</u>
23	<u>GMC</u>
24	<u>Saturn</u>
25	<u>Grumman</u>
26	<u>Coda</u>
29	Other Domestic Manufacturers
30	<u>Volkswagen</u>
31	<u>Alfa Romeo</u>
32	Audi
33	Austin/Austin Healey
34	BMW
35	Datsun/Nissan
36	<u>Fiat</u>
37	<u>Honda</u>
38	lsuzu
39	Jaguar
40	Lancia
41	Mazda
42	<u>Mercedes-Benz</u>
43	MG
44	Peugeot
45	Porsche
46	Renault
47	<u>Saab</u>
48	<u>Subaru</u>
49	Toyota
50	Triumph
51	Volvo

Codes	Attributes
52	Mitsubishi
53	Suzuki
54	Acura
55	Hyundai
56	Merkur
57	Yugo
58	Infiniti
59	Lexus
60	Diahatsu
61	Sterling
62	Land Rover
63	Kia
64	<u>Daewoo</u>
65	Smart
67	Scion
69	Other Import
70	BSA
71	<u>Ducati</u>
72	Harley-Davidson
73	Kawasaki
74	Moto-Guzzi
75	Norton
76	Yamaha
77	Victory
80	Brockway
81	Diamond Reo/Reo
82	Freightliner
83	<u>FWD</u>
84	International Harvester/Navistar
85	<u>Kenworth</u>
86	Mack
87	<u>Peterbilt</u>
88	Iveco/Magirus
89	White/Autocar White/GMC
90	Bluebird
91	Eagle Coach
92	Gillig
93	MCI
94	Thomas Built
97	Not Reported
98	Other Make
99	Unknown Make

Definition: This element identifies the make (manufacturer) of this vehicle.

### Remarks: SEE ADDITIONAL REMARKS UNDER VEHICLE MAKE/ VEHICLE MODEL OVERVIEW

Note that for both Vehicle Make and Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known. Examples: **399 (Unknown (Automobile)), 499 (Unknown (Light Truck)), 739 (Unknown cc (ATV)), 884 (Medium/Heavy Truck - Unknown Engine Location), 999 (Unknown).** 

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, Vehicle Make is coded **OTHER MAKE (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, Vehicle Make is coded **99 (Unknown Make)** and Vehicle Model is coded **989 (Unknown (Bus)**.

**99 (Unknown Make)** is used *when the vehicle is reported as Unknown,* unless reliable evidence indicates the vehicle's make.

### 97 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **97 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute, AND no other information is available to code the element (e.g., narrative, diagram, case materials). If a vehicle make or vehicle model is encountered that is not listed, NHTSA headquarters is notified.

Check	IF	THEN
(920P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, equals Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also equal Not Reported.
(921P)	MAKE is not 97, 98, 99, and equals, and MODEL equals,	MODEL YEAR must equal, or CRASH YEAR plus 1.
(930P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, does not equal Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.
(960P)	MAKE is not 98, 99, and equals, and MODEL equals,	BODY TYPE must equal (MAKE, MODEL and BODY TYPE must be valid according to Vehicle Tables).
(U480)	UNLIKELY: VEHICLE MAKE equals 97 <i>if HIT</i> AND RUN does not equal 1.	

### **Consistency Checks:**

Check	IF	THEN
(U688)	UNLIKELY: VEHICLE MODEL equals 707 and	
	VEHICLE MAKE does not equal 77, 98, or 99.	
(V922)	MAKE equals 98, 99, and MODEL equals,	MODEL YEAR should equal (MODEL and MODEL YEAR should be valid according to Vehicle Tables).
(V961)	MAKE equals 98, 99, and MODEL equals,	BODY TYPE should equal (MODEL and BODY TYPE should be valid according to the Vehicle Tables).

# V10 - Vehicle Model

# FORMAT: 3 numeric SAS NAME: Vehicle.Model; Person.Model; Parkwork.PMODEL ELEMENT VALUES:

Codes	Attributes	
001-397	Automobiles	
398	Other (Automobile)	
399	Unknown (Automobile)	
401-497	Light Trucks	
498	Other (Light Trucks)	
499	Unknown (Light Trucks)	
598	Other (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV))	
599	Unknown (Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV))	
701-706	Motorcycles	
707	Electric Motorcycle	
709	Unknown cc (Motorcycles)	
731-734	All-Terrain Vehicles	
739	Unknown cc (ATV)	
801-809	Other Make (Medium/Heavy Trucks)	
850	Motor Home	
870	Medium/Heavy Van-Based Vehicle	
880	Medium/Heavy Pickup (pickup-style only – over 10,000 lbs.)	
881	Medium/Heavy Trucks – CBE	
882	Medium/Heavy Trucks – COE (low entry)	
883	Medium/Heavy Trucks – COE (high entry)	
884	Medium/Heavy Trucks – Unknown engine location	
890	Medium/Heavy Trucks – COE (entry position unknown)	
898	Other (Medium/Heavy Trucks)	
901-908	Other Make (Buses)	
981-987	Buses	
988	Other (Bus)	
989	Unknown (Bus)	
997	Not Reported	
998	Other (Vehicle)	
999	Unknown	

**Definition:** This element identifies the model of this vehicle within a given make.

### Remarks: SEE ADDITIONAL REMARKS UNDER VEHICLE MAKE/VEHICLE MODEL OVERVIEW

Note that for both Vehicle Make and Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known. Examples: **399 (Unknown (Automobile)), 499 (Unknown (Light Trucks)), 739 (Unknown cc (ATV)), 884 (Medium/Heavy Trucks - Unknown Engine Location), 999 (Unknown).** 

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, Vehicle Make is coded **OTHER MAKE (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, Vehicle Make is coded **99 (Unknown Make)** and Vehicle Model is coded **989 (Unknown (Bus)**.

### 997 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **997 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

If a vehicle make or vehicle model is encountered that is not listed, NHTSA headquarters is notified.

Check	IF	THEN
(920P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, equals Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also equal Not Reported.
(921P)	MAKE is not 97, 98, 99, and equals, and MODEL equals,	MODEL YEAR must equal, or CRASH YEAR plus 1.
(930P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, does not equal Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.
(960P)	MAKE is not 98, 99, and equals, and MODEL equals,	BODY TYPE must equal (MAKE, MODEL and BODY TYPE must be valid according to Vehicle Tables).
(U460)	UNLIKELY: VEHICLE MODEL equals 997 <i>if HIT</i> AND RUN does not equal 1.	
(U688)	UNLIKELY: VEHICLE MODEL equals 707 and VEHICLE MAKE does not equal 77, 98, or 99.	
(V922)	MAKE equals 98, 99, and MODEL equals,	MODEL YEAR should equal (MODEL and MODEL YEAR should be valid according to Vehicle Tables).
(V961)	MAKE equals 98, 99, and MODEL equals,	BODY TYPE should equal (MODEL and BODY TYPE should be valid according to the Vehicle Tables).

### **Consistency Checks:**

-

FARS	Make	NCIC
Make Code		Code*
54	Acura	(ACUR)
31	Alfa Romeo	(ALFA)
03	AM General	(AMGN)
01		(AMER)
69-031	American Motors Aston Martin	(ANTO)
32	Audi	(AUDI)
33	Austin/Austin Healey	(AUST)
29-001	Avanti	(AVTI)
98-802	Auto-Union-DKW	(AVTI) (AUTU)
69-042	Bentley Bertene	(BENT)
69-052	Bertone Bluebird	(BERO)
90 34	Bluebird	(BLUI)
	<u>BMW</u>	(BMW)
69-032	Bricklin Breakway	(BRIC)
80	Brockway	(BROC)
70	<u>BSA</u>	(BSA)
69-064	<u>Bugatti</u>	
18	Buick	(BUIC)
19	Cadillac	(CADI)
98-903	Carpenter	
69-062	<u>Caterham</u>	
29-002	Checker	(CHEC)
20	<u>Chevrolet</u>	(CHEV)
06	<u>Chrysler</u>	(CHRY)
69-033	<u>Citroen</u>	(CITR)
26	<u>Coda</u>	
98-904	Collins Bus	
64	<u>Daewoo</u>	(DAEW)
60	<u>Daihatsu</u>	(DAIH)
35	<u>Datsun</u>	(DATS)
69-034	<u>DeLorean</u>	(DELO)
29-398	<u>Desoto</u>	(DESO)
69-048	<u>Desta</u>	
81	Diamond Reo or Reo	(DIAR)
98-905	<u>DINA</u>	(DINA)
98-803	<u>Divco</u>	(DIVC)
07	<u>Dodge</u>	(DODG)
71	<u>Ducati</u>	(DUCA)
10	<u>Eagle</u>	(EGIL)
91	Eagle Coach	

FARS Make	Make	NCIC Code*
Code		couc
29-398	Excalibur	(EXCL)
69-035	Ferrari	(FERR)
36	Fiat	(FIAT)
69-398	Fisker	
12	Ford	(FORD)
82	Freightliner	(FRHT)
83	FWD	(FWD)
69-398	Gazelle	(GZL)
92	Gillig	
23	GMC	(GMC)
25	Grumman	(GRUM)
72	Harley-Davidson	(HD)
69-036	Hillman	(HILL)
98-806	Hino	(HINO)
37	Honda	(HOND)
29-398	Hudson	(HUDS)
55	<u>Hyundai</u>	(HYUN)
08	Imperial	(CHRY)
58	Infiniti	(INFI)
84	International Harvester	(INTL)
38	lsuzu	(ISU)
88	lveco/Magirus	(IVEC)
39	Jaguar	(JAGU)
69-037	Jensen	(JENS)
02	Jeep	(AMER)
02	Kaiser-Jeep	(AMER)
73	Kawasaki	(KAWK)
85	Kenworth	(KW)
63	Kia	(KIA)
69-058	Koenigsegg	
69-053	Lada	(LADA)
69-038	Lamborghini	(LAMO)
40	Lancia	(LNCI)
62	Land Rover	(LNDR)
59	<u>Lexus</u>	(LEXS)
13	<u>Lincoln</u>	(LINC)
69-039	Lotus	(LOTU)
86	Mack	(MACK)
69-061	Mahindra	
69-040	Maserati	(MASE)

FARS Make	Make	NCIC Code*
Code		couc
69-056	Maybach	(MAYB)
41	Mazda	(MAZD)
69-063	<u>McLaren</u>	
93	<u>MCI</u>	(MCIN)
42	Mercedes-Benz	(MERZ)
14	<u>Mercury</u>	(MERC)
56	<u>Merkur</u>	(MERK)
98-302	Meyers Motors	
98-906	Mid Bus	
69-054	Mini-Cooper	(MNNI)
43	MG	(MG)
52	<u>Mitsubishi</u>	(MITS)
69-055	<u>Morgan</u>	(MORG)
69-041	<u>Morris</u>	(MORR)
74	<u>Moto-Guzzi</u>	(MOGU)
84	<u>Navistar</u>	(NAVI)
98-902	<u>Neoplan</u>	(NEOP)
35	<u>Nissan</u>	(NISS)
75	<u>Norton</u>	(NORT)
21	<u>Oldsmobile</u>	(OLDS)
18	<u>Opel</u>	(OPEL)
98-907	<u>Orion</u>	(ONTR)
98-805	<u>Oshkosh</u>	(OSHK)
29-398	Packard	(PACK)
29-003	<u>Panoz</u>	(PANZ)
87	<u>Peterbilt</u>	(PTRB)
44	Peugeot	(PEUG)
09	<u>Plymouth</u>	(PLYM)
22	<u>Pontiac</u>	(PONT)
45	<u>Porsche</u>	(PORS)
69-049	Reliant (British)	(RELA)
46	<u>Renault</u>	(RENA)
69-042	Rolls Royce	(ROL)

FARS Make Code	Make NCIC Code <sup>3</sup>	
47	<u>Saab</u>	(SAA)
29-004	<u>Saleen</u>	
24	<u>Saturn</u>	(STRN)
98-807	<u>Scania</u>	(SCAN)
67	<u>Scion</u>	(SCIO)
69-044	<u>Simca</u>	(SIM)
69-398	<u>Singer</u>	(SIN)
65	<u>Smart</u>	(SMRT)
69-057	<u>Spyker</u>	
61	Sterling	(STLG)
98-809	<u>Sterling</u>	(STLG)
29-001	<u>Studebaker</u>	(STU)
29-398	<u>Stutz</u>	(STUZ)
48	<u>Subaru</u>	(SUBA)
69-045	<u>Sunbeam</u>	(SUNB)
53	<u>Suzuki</u>	(SUZI)
29-005	<u>Tesla</u>	
98-301	<u>Think</u>	
94	Thomas Built	(THMS)
49	<u>Toyota</u>	(TOYT)
50	<u>Triumph</u>	(TRIU)
69-046	<u>TVR</u>	(TVR)
98-808	<u>UD</u>	(UD)
98-908	<u>Van Hool</u>	
77	<u>Victory</u>	(VCTY)
30	<u>Volkswagen</u>	(VOLK)
51	<u>Volvo</u>	(VOLV)
98-804	Western Star	(WSTR)
89	White/Autocar	(WHIT)
89	White/GMC	(WHGM)
02	Willys-Jeep	(AMER)
76	<u>Yamaha</u>	(YAMA)
57	<u>Yugo</u>	(YUGO)

FARS Make	Make	NCIC Code*
Code		
01	American Motors	(AMER)
02	<u>Jeep</u>	(AMER)
02	Kaiser-Jeep	(AMER)
02	Willys-Jeep	(AMER)
03	AM General	(AMGN)
06	<u>Chrysler</u>	(CHRY)
07	Dodge	(DODG)
08	<u>Imperial</u>	(CHRY)
09	<u>Plymouth</u>	(PLYM)
10	Eagle	(EGIL)
12	Ford	(FORD)
13	Lincoln	(LINC)
14	Mercury	(MERC)
18	Buick	(BUIC)
18	<u>Opel</u>	(OPEL)
19	<u>Cadillac</u>	(CADI)
20	<u>Chevrolet</u>	(CHEV)
21	<u>Oldsmobile</u>	(OLDS)
22	<u>Pontiac</u>	(PONT)
23	<u>GMC</u>	(GMC)
24	<u>Saturn</u>	(STRN)
25	<u>Grumman</u>	(GRUM)
26	<u>Coda</u>	
30	<u>Volkswagen</u>	(VOLK)
31	<u>Alfa Romeo</u>	(ALFA)
32	<u>Audi</u>	(AUDI)
33	Austin/Austin Healey	(AUST)
34	BMW	(BMW)
35	<u>Datsun</u>	(DATS)
35	<u>Nissan</u>	(NISS)
36	<u>Fiat</u>	(FIAT)
37	<u>Honda</u>	(HOND)
38	<u>lsuzu</u>	(ISU)
39	<u>Jaguar</u>	(JAGU)
40	<u>Lancia</u>	(LNCI)
41	<u>Mazda</u>	(MAZD)
42	Mercedes-Benz	(MERZ)
43	MG	(MG)
44	<u>Peugeot</u>	(PEUG)

FARS Make Code	Make	NCIC Code*
45	Porsche	(PORS)
46	Renault	(RENA)
47	Saab	(SAA)
48	<u>Subaru</u>	(SUBA)
49	<u>Toyota</u>	(TOYT)
50	Triumph	(TRIU)
51	Volvo	(VOLV)
52	Mitsubishi	(MITS)
53	Suzuki	(SUZI)
54	Acura	(ACUR)
55	Hyundai	(HYUN)
56	Merkur	(MERK)
57	Yugo	(YUGO)
58	Infiniti	(INFI)
59	Lexus	(LEXS)
60	Daihatsu	(DAIH)
61	Sterling	(STLG)
62	Land Rover	(LNDR)
63	Kia	(KIA)
64	Daewoo	(DAEW)
65	Smart	(SMRT)
67	Scion	(SCIO)
70	BSA	(BSA)
71	Ducati	(DUCA)
72	Harley-Davidson	(HD)
73	Kawasaki	(KAWK)
74	Moto-Guzzi	(MOGU)
75	Norton	(NORT)
76	Yamaha	(YAMA)
77	Victory	(VCTY)
80	Brockway	(BROC)
81	Diamond Reo or Reo	(DIAR)
82	Freightliner	(FRHT)
83	FWD	(FWD)
84	International Harvester	(INTL)
84	<u>Navistar</u>	(NAVI)
85	<u>Kenworth</u>	(KW)
86	Mack	(MACK)
87	<u>Peterbilt</u>	(PTRB)
88	Iveco/Magirus	(IVEC)

FARS Make Code	Make NCI Code		
89	White/Autocar	(WHIT)	
89	White/GMC	(WHGM)	
90	<u>Bluebird</u>	(BLUI)	
91	Eagle Coach		
92	Gillig		
93	<u>MCI</u>	(MCIN)	
94	<u>Thomas Built</u>	(THMS)	
29-001	<u>Avanti</u>	(AVTI)	
29-001	<u>Studebaker</u>	(STU)	
29-002	<u>Checker</u>	(CHEC)	
29-003	<u>Panoz</u>	(PANZ)	
29-004	<u>Saleen</u>		
29-005	<u>Tesla</u>		
29-398	<u>Desoto</u>	(DESO)	
29-398	<u>Excalibur</u>	(EXCL)	
29-398	<u>Hudson</u>	(HUDS)	
29-398	<u>Packard</u>	(PACK)	
29-398	<u>Stutz</u>	(STUZ)	
69-031	Aston Martin	(ASTO)	
69-032	<u>Bricklin</u>	(BRIC)	
69-033	<u>Citroen</u>	(CITR)	
69-034	<u>DeLorean</u>	(DELO)	
69-035	<u>Ferrari</u>	(FERR)	
69-036	<u>Hillman</u>	(HILL)	
69-037	<u>Jensen</u>	(JENS)	
69-038	<u>Lamborghini</u>	(LAMO)	
69-039	<u>Lotus</u>	(LOTU)	
69-040	<u>Maserati</u>	(MASE)	
69-041	<u>Morris</u>	(MORR)	
69-042	<u>Bentley</u>	(BENT)	
69-042	Rolls Royce	(ROL)	
69-044	<u>Simca</u>	(SIM)	
69-045	<u>Sunbeam</u>	(SUNB)	
69-046	TVR	(TVR)	

FARS	Make NC		
Make		Code*	
Code			
69-048	<u>Desta</u>		
69-049	Reliant (British)	(RELA)	
69-052	<u>Bertone</u>	(BERO)	
69-053	<u>Lada</u>	(LADA)	
69-054	Mini-Cooper	(MNNI)	
69-055	<u>Morgan</u>	(MORG)	
69-056	<u>Maybach</u>	(MAYB)	
69-057	<u>Spyker</u>		
69-058	<u>Koenigsegg</u>		
69-061	<u>Mahindra</u>		
69-062	<u>Caterham</u>		
69-063	<u>McLaren</u>		
69-064	<u>Bugatti</u>		
69-398	<u>Fisker</u>		
69-398	<u>Gazelle</u>	(GZL)	
69-398	<u>Singer</u>	(SIN)	
98-301	<u>Think</u>		
98-302	Meyers Motors		
98-802	Auto-Union-DKW	(AUTU)	
98-803	<u>Divco</u>	(DIVC)	
98-804	Western Star	(WSTR)	
98-805	<u>Oshkosh</u>	(OSHK)	
98-806	<u>Hino</u>	(HINO)	
98-807	<u>Scania</u>	(SCAN)	
98-808	<u>UD</u>	(UD)	
98-809	<u>Sterling</u>	(STLG)	
98-902	Neoplan	(NEOP)	
98-903	<u>Carpenter</u>		
98-904	Collins Bus		
98-905	DINA	(DINA)	
98-906	Mid Bus		
98-907	Orion	(ONTR)	
98-908	Van Hool		

# Vehicle Make / Model / Body Type Tables

Passenger Vehicles

**Motored Cycles** 

<u>Trucks</u>

**Buses** 

Other Make

**Unknown Make** 

# **Passenger Vehicles**

# MAKE: Acura (54) (ACUR)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
031	Integra	GS, LS, RS, GS-R, Type R	1986-2001, 9999	<u>03-05,07,09</u>
032	Legend	L, LS, GS, Special Edition, GS-R	1986-95,9999	<u>02,04,08,09</u>
033	NSX (For 1991-2005 only. For 2016 on see model 043.)	NSX-T	1991-2005, 9999	<u>02</u>
034	Vigor		1992-94,9999	<u>04</u>
035	TL	3.2, 3.5, 3.7, SH-AWD (AT/MT)	1996-2014, 9999	<u>04</u>
036	RL/RLX	3.5, 3.7, Hybrid <b>, Sport Hybrid</b>	1996-20 <b>18</b> , 9999	<u>04</u>
037	CL	2.2, 2.3, 3.0, 3.2, Type S	1997-2003, 9999	<u>02</u>
038	RSX	2.0, Type S	2002-06,9999	<u>03</u>
039	TSX	2.4, 3.5, Hybrid, Special Edition, V6	2004-14,9999	<u>04, 06, 09</u>
040	ZDX	3.7, SH-AWD	2010-13,9999	<u>05</u>
041	ILX	2.0, 2.4, Hybrid, Premium, A- Spec, <i>Special Edition,</i> <i>AcuraWatch Plus, Technology</i> <i>Plus</i>	2013- <b>18</b> ,9999	<u>04</u>
043	NSX (2016 on. For 1991- 2005 see model 033.)	Sport, <b>GT3, Sport Hybrid</b>	2016- <b>18</b> ,9999	<u>02</u>
044	TLX	2.4, 3.6 V-6, Standard, GT Package, A-Spec, Advance Package, Technology Package	2015- <b>18</b> ,9999	04
398	Other (automobile)		1986-20 <b>18</b> , 9999	<u>02-09</u>
399	Unknown (automobile)		1986-20 <b>18</b> , 9999	<u>02-09</u>

# LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	SLX		1996-2000,	<u>14</u>
			9999	
402	RDX	2.3, SH-AWD, Standard,	2007- <b>18</b> ,9999	<u>14</u>
		Advance, AcuraWatch Plus,		
		Technology		
421	MDX	Standard, Sport Hybrid,	2001- <b>18</b> ,9999	<u>15</u>
		Technology/Advance/		
		Entertainment Package		

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1996-20 <b>18</b> ,	<u>19</u>
			9999	

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (ACURA)		1986-20 <b>18</b> ,	<u>49</u>
			9999	

# MAKE: Alfa Romeo (31) (ALFA)

Codes	Models	Includes	Model Years	Body Types
031	Spider (Spyder)	Roadsters, Veloce,	1933-94,9999	01,02,09
		Quadrifoglio, Duetto,		
		Graduate, 1600/1750/1900/		
		2000 roadsters, Giulia,		
		Giulietta, Giulietta Veloce, Tipo		
032	Sports Sedan	4-door sedans (except 164);	1933-89,9999	<u>04</u>
		Milano, Giulietta, Super,		
		Berlina, Alfetta, Giulia		
		1750/1900/2000/2600 sedans,		
		Alpha 90		
033	Sprint/Special	2-door coupes; Alfetta GT,	1933-80,9999	<u>02</u>
		Monteal, 1750/1900/2000/		
		2600 GTV, Sprint GT, GT		
		Veloce, Giulia, Giulietta, Super,		
		GTA, GTV, GTZ, TZ2		
034	GTV-6		1981-86,9999	<u>02</u>
035	164 (Alpha 164)	LS, Q, Quadrifoglio	1990-95,9999	<u>04</u>
036	4c	Launch Edition, Base	2014- <b>18</b> ,9999	<u>01,02,09</u>
037	Giulia	Base, Ti, Quadrifoglio	2016- <b>18</b> ,9999	<u>04</u>
398	Other (automobile)	Alfa, Montreal	1933-95,	01-04,08,09
			2014- <b>18</b> ,9999	
399	Unknown (automobile)		1933-95,	01-04,08,09
			2014- <b>18</b> ,9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Stelvio	Base, Ti, Quadrifoglio	2018	<u>14</u>

## UNKNOWN

Codes	Models	Includes	Model Years	Body Types
<i>999</i>	Unknown (ALFA ROMEO)		2018	<u>49</u>

# MAKE: AM General (03) (AMGN)

Codes	Models	Includes	Model Years	Body Types
401	Dispatcher	Post Office (Jeep)	1965-94,9999	<u>14</u>
402	Hummer	H3 (Base, Luxury, Adventure, Limited Edition), x, Alpha	2006-11,9999	<u>14</u>
421	Hummer (SUV from 1993- 2003; see 431 for 2004 on) (for Pickup, see model 481)	Slantback-HMSB, H1, H2	1992-2003, 9999	<u>15</u>
431	Hummer (2004 on; see model 421 for 1993-2003)	H1 (Base, Luxury, Adventure), H2 (Base, Luxury, Adventure), Limousine	2004-11,9999	<u>16</u>
441	MV-1	SE, DX, LX, Taxi	2013-15,9999	<u>20</u>
466	Dispatcher	DJ-Series-Post Office Van	1965-91,9999	<u>22</u>
481	Hummer (Pickup) (for SUV see model 421 for 1993- 2003; see 431 for 2004 on)	H1, H2 (Base, Luxury, Adventure, Limited Edition), Alpha	1992-2011, 9999	<u>34</u>
482	Hummer	H3T (Adventure, Luxury, Alpha)	2009-11,9999	<u>34</u>
498	Other (light truck)		1940-2011, 2013-15,9999	14-16,19,20, 22, 32, 33, <b>34,</b> 39,, 40, 41, 42, 45, 48
499	Unknown (light truck)		1940-2011, 2013-15,9999	14-16,19, 20, 22,           32, 33, 34, 39, 40,           41, 42, 45, 48, 49

# MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
884	Medium/Heavy Truck	Military off-road	1965-2011, 9999	<u>60-64,71,72,78</u>
898	Other (medium/heavy truck)		1965-94,9999	<u>60-64,71,72,78</u>

## BUSES

Codes	Models	Includes	Model Years	Body Types
983	Bus: Rear engine, Flat front	Transit	1965-94,9999	<u>52</u>
988	Other (bus)		1965-94,9999	<u>50-52,58,59</u>
989	Unknown Bus Type		1965-94,9999	<u>50-52,58,59</u>

# OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965-94,9999	<u>92,93,97</u>
999	Unknown (AM GENERAL)		1965-2011,	<u>49</u> , <u>79</u> , <u>99</u>
			2013-15, 9999	

Codes	Models	Includes	Model Years	Body Types
001	Rambler American	Rogue, 220, 330, 440, 440-H,	1954-69,9999	01,02,04,06,
		Scrambler Deluxe, Custom,		<u>08,09</u>
		Super, Classic, Brougham, SC		
002	Rebel	Mariner, Briarcliff,	1967-70,9999	<u>01,02,04,06,</u>
		Westerner, The Machine,		<u>08,09</u>
		SST, 550, Grant, King		
002	Matador	Brougham, X, Oleg Cassini,	1971-78,9999	02,04,06,08,09
		Barcelona, Police, The		
		Machine		
002	Marlin	Black, Radar, Tahiti, Marlin II	1965-67,9999	<u>02,08,09</u>
003	Ambassador	800, 880, 990, SST, DPL,	1958-74,9999	02,04,06,08,09
		Brougham, DDL, Limited		
004	Pacer	D/L, X, Limited	1975-80,9999	02,03,06,09
005	AMX	(2-seater only)	1968-70,9999	<u>02,03,09</u>
006	Javelin	SST, AMX (1971-1974)	1968-74,9999	<u>02,03,09</u>
007	Hornet	SST, Sportabout, AMX D/L,	1970-77,9999	02-04,06,08,09
		SC-360, Gucci Edition, Levi		
		Trim Package, X		
007	Concord	AMX Limited, D/L, Levi Trim,	1978-83,9999	<u>01-04,06,08,09</u>
		Sport, Base, Sundancer		
008	Gremlin	Base, X, Levi Trim, GT, AMX	1970-78,9999	<u>03,09</u>
008	Spirit	GT, AMX, D/L, SST	1979-83,9999	02,03,09
009	Eagle	Sport, Series 30, Sundancer,	1980-88,9999	01-04,06,08,09
		Limited		
010	Eagle SX-4	50 Series, Kammback, Sport	1981-84,9999	<u>02,03,09</u>
398	Other (automobile)		1940-88,9999	01-04,06,08,09
399	Unknown (automobile)		1940-88,9999	01-04,06,08,09

MAKE: American Motors\* (01) (AMER)

#### AUTOMOBILES

\* NOTE: Alliance, Encore, Premier (including L, DL, and Limited) are coded under <u>Renault (46)</u>.

# **AUTOMOBILES**

# MAKE: Audi (32) (AUDI)

Codes	Models	Includes	Model Years	Body Types
031	Super 90		1966-72,9999	02,04,06,08,09
032	100	S, CS, LS, GL, Quattro (1989-	1970-77; 1989-	02,04,06,08,09
		on)	94,9999	
033	Fox		1973-79,9999	<u>02,04,06,08,09</u>
034	4000	Quattro, Coupe, Coupe GT,	1980-93,9999	02,04,08,09
		CS, S		
035	5000	Quattro, CS, S, CS Turbo	1978-93,9999	<u>04,06,09</u>
		Quattro, T		
036	80/90	Quattro, Coupe Quattro	1988-95,9999	<u>04</u>
037	200	Turbo Quattro	1989-92,9999	<u>04,06,09</u>
038	V-8 Quattro	100 series	1990-94,9999	04

Codes	Models	Includes	Model Years	Body Types
039	Coupe Quattro	4000 series	1990-91,9999	02,03,09
040	S4 (1992-1994; 2000-2011 only. See model 055 for 2012 on)/S6 (1992-1994; 2000-2011 only. See model 056 for 2013 on.)	Quattro, Avant Quattro (Wagon), 3.0, 4.2 Saloon, Avant (2.7), RS4, Special Edition, V10, 5.6, 5.2	1992-95; 2000- 11,9999	01,04,06,09
041	Cabriolet (1994-1998)		1994-98,9999	01
042	A6	Avant Quattro Wagon (3.0L, 3.0T), Quattro (2.7T, 4.2), FrontTrak (2.8, 3.0L), RS6, 3.2, S Line, 3.0T (Premium, Premium Plus, Prestige), 2.0T (Premium, Premium Plus), Special Edition	1995- <b>2018</b> , 9999	04,06,09
043	A4	Avant Wagon (1.8T, 2.0T, 2.8, 3.0, 3.2), Avant Quattro Wagon, FrontTrak (1.8, 2.8, 3.0), Quattro (1.8T, 2.0T, 3.0, 3.2), Special Edition, S Line, 2.0T (Premium, Premium Plus, Prestige)	1996- <b>2018</b> , 9999	01,04,06,09
044	A8	4.2 Quattro, L, W12, NWB, 3.0T, 4.0T, TDI, Sport	1997- <b>2018</b> , 9999	<u>04</u>
045	TT/TTS	FWD, Quattro AWD, 180, 225 Quattro Roadster, FrontTrak (180), 1.8L, 2.0, 3.2L, S Line, RS (Premium, Premium Plus, Prestige), 2.0T (Premium Plus, Prestige), RS	2000- <b>18</b> ,9999	<u>01-03, 09</u>
046	58	4.2 Quattro, 5.2, 4.0 TFSI, <i>Plus (4.0)</i>	2001-03; 2007- 09; 2012- <b>18</b> , 9999	<u>02,04</u> , <b>08,</b> 09
047	Allroad (2001-05 only. See 403 for 2013 on)	QuattroWagon, 2.7T, 4.2	2001-05, 9999	<u>06</u>
048	A3	2.0T/FSI, 3.2 S Line (Premium, Premium Plus), TDI, 1.8, Prestige, Sportback e-tron ( <i>Premium, Premium</i> <i>Plus, Prestige</i> )	2006- <b>18</b> ,9999	01, 03, 04, 05, 09
049	A5	2.0, 2.0T, 3.2, (Premium, Premium Plus, Prestige), <i>Quattro</i>	2008- <b>18</b> ,9999	<u>01,02,<b>05</b>,09</u>
050	R8	4.2, 5.2, Spyder (V8, V10), GT (Spyder), (V8, V10, V10 Plus)	2008- <b>18</b> ,9999	01,02,09
051	A7	Premium, Premium Plus, Prestige, (3.0 TFSI/TDI)	2008-10, 2012- <b>18</b> , 9999	<u>04, 05, 09</u>

Codes	Models	Includes	Model Years	Body Types
052	S5	4.2, 3.0T (Premium Plus,	2008- <b>18</b> ,9999	<u>01,02,<b>05</b>,09</u>
		Prestige) <i>, Quattro</i>		
054	RS5	4.2 Prestige, V8	2013-15,9999	<u>01,02,09</u>
055	S4 (2012 on only. See model 040 for 1992-1994; 2000-2011)	3.0T Prestige, Premium Plus	2012- <b>18</b> ,9999	<u>04</u>
056	S6 (2013 on. See model 040 for 1992-1994; 2000- 2011)	4.0TFSI Premium Plus, Prestige	2013- <b>18</b> ,9999	<u>04</u>
057	S7	4.0, Premium Plus, Prestige	2013- <b>18</b> ,9999	<u>04, 05, 09</u>
058	RS7	4.0 TFSI, Performance	2014- <b>18</b> ,9999	<u>05</u>
059	S3	2.0 (Premium Plus, Prestige)	2015- <b>18</b> ,9999	<u>04, 05, 09</u>
060	RS3		2018	<u>04</u>
398	Other (automobile)		1970- <b>2018</b> , 9999	<u>01-06,08,09</u>
399	Unknown (automobile)		1970- <b>2018</b> , 9999	01-06,08,09

Codes	Models	Includes	Model Years	Body Types
401	Q7	3.6/4.2, 3.0T, TDI (Premium,	2007- <b>18</b> ,9999	<u>14</u>
		Premium Plus, Prestige)		
		Hybrid, S Line,		
402	Q5	2.0T, 3.2, 3.0T (Premium,	2008- <b>18</b> ,9999	<u>14</u>
		Premium Plus, Prestige),		
		Hybrid (2.0)		
403	Allroad (2013 on. For	2.0T (Premium, Premium	2013- <b>18</b> ,9999	<u>14</u>
	2001-2005 see model 047.)	Plus, Prestige)		
404	SQ5	3.0 (Premium Plus, Prestige)	2014- <b>18</b> ,9999	<u>14</u>
405	Q3	2.0 TFSI (Premium Plus,	2015- <b>18</b> ,9999	<u>14</u>
		Prestige)		
499	Unknown (light truck)		2007- <b>18</b> ,9999	<u>14</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (AUDI)		1966- <b>2018</b> ,	<u><b>19</b></u> , <u>99</u>
			9999	

# MAKE: Austin/Austin Healey (33) (AUST)

### **AUTOMOBILES**

Codes	Models	Includes	Model Years	Body Types
031	Marina	GT	1973-75,9999	<u>01-04,08,09</u>
032	America		1968-72,9999	<u>02</u>
033	Healey Sprite	Mark II, MKIV/Princess	1958-70,9999	<u>01,04,09</u>
		(Special Order)		
034	Healey 100/3000	M, S, Mark III	1953-67,9999	<u>01</u>

Codes	Models	Includes	Model Years	Body Types
035	Mini/Mini Cooper/Mini Moke	850, S	1960-69,9999	<u>01,02,06,09</u>
398	Other (automobile)	A35, A40, Westminster, Cambridge, Somerset, Seven, Hereford, Sports, Sheerline, Atlantic, Countryman, Dorset, Devon	1947-75,9999	<u>01-04,06,08,09</u>
399	Unknown (automobile)		1947-75,9999	<u>01-04,06,08,09</u>

# MAKE: BMW (34) (BMW)

Codes	Models	Includes	Model Years	Body Types
031	1600/1800/2000/2002	Ti, Tii, Tilux, TR, CS, 1600-2, SA, Turbo, A, 1500, 2600, 501, 502	1955-76,9999	<u>01-04,08,09</u>
032	Coupe (before 1975)	2800CS, 3.0CS, 3.0csi, 3.0csl, 3200, 503, 507, M1, 1802, 2000c/cs, 2002	1956-76,9999	01-03,09
033	Bavarian Sedan	2500, 2800, 2.8 Bavarian	1969-74,9999	04
034	3-series	3.0s/si, 318i/is/ti/ic, 320i, 323iS/iC/i/Ci,325e/es/i/iS/ii/ C/Ci/Cic/xi/iT/xiT, Sport Wagon (iT/xiT), 328 d/i/iS/ti/ iC/Ci/x/xi, xDrive, 330 <i>e/</i> i/Ci/ Cic/xi, 335i/is/xi/d, <b>340i</b> , xDrive, ActiveHybrid, M3, Gran Tourismo (328i), 340i	1971- <b>2018</b> , 9999	<u>01-06,08,09</u>
035	5-series	524i,525i/xi,528i/iT/xi, xDrive, 530 <i>e/</i> i/iT/xi,533i, 535d/i/xi, xDrive, 550i, xDrive 540/i/iA/iT, TD Sport Wagon,525i/iT, (wagon 1992-93), M5, 545i, 550i/ix, Gran Turismo (535i, 550i), ActiveHybrid 5	1975- <b>2018</b> , 9999	<u>04-06,09</u>
036	6-series	630, 633, 635, csi, M6, L6, 640i, 645Ci, 650i/ix, Neiman Marcus Edition, xDrive, Alpina B, <i>B6, Gran Turismo</i> (640i)	1976-89, 2004- <b>18</b> , 9999	01,02,04, <b>05, 08</b> 09
037	7-series	733i, 735i, L7, 740 <i>e/</i> d/i/L/iL /iA/Li Protection, 750 i/iL/Li/ Lxi/ix Protection, 745i/Li, 760i/Li, Alpina B7, Individual, ActiveHybrid 7, xDrive, <i>M760i</i>	1978- <b>2018</b> , 9999	<u>04</u>

Codes	Models	Includes	Model Years	Body Types
038	8-series	840Ci/cia, 850i/iS/Ci/Cia	1991-97, 9999	<u>02</u>
039	Z3	2.3/2.8/2.5i/3.0i Roadster,	1996-2003,	<u>01-03, 09</u>
		MRoadster, MCoupe,	9999	
		2.8/3.0i Coupe		
040	Z8		2000-03, 9999	<u>01</u>
041	V5		2007-08, 9999	<u>06</u>
042	Z4	2.5i, 2.8i, 3.0i/si, 3.5i/is,	2003-16, <b>2018,</b>	<u>01,02,09</u>
		Z4M/s/sDrive, 28i, 30i, 35 <b>i/</b> s	9999	
043	1-Series	128i, 135i/is, Electric	2008-14, 9999	01,02,09
044	X6 (For 2008-2015. For	35i, 50i, ActiveHybrid, M,	2008-15, 9999	<u>05</u>
	2016 on, see model 404.)	xDrive		
045	i3	Base, Range Extender	2014-17, 9999	<u>03</u>
046	i8		2014-17, 9999	<u>02</u>
047	4-Series	428i, 435i, xDrive, M4, 430i,	2014- <b>18</b> , 9999	<u>01, 02, 04, <b>08,</b> 09</u>
		440i		
048	2-Series	228i, 230i, M235i, M240i <b>,</b>	2015- <b>18</b> , 9999	<u>01, 02, 09</u>
		XDrive		
049	X4	28i, 35i <b>, M40i</b>	2015- <b>18</b> , 9999	<u>05</u>
398	Other (automobile)		1955- <b>2018</b> ,	01-06,08,09
			9999	
399	Unknown (automobile)		1955- <b>2018</b> ,	01-06,08,09
			9999	

Codes	Models	Includes	Model Years	Body Types
401	X5 (For 2000-17 (for models manufactured as 2017 during the 2016 model year). For 2017 models manufacutred during the 2017 model year on, see model 421)	3.0i/si, 4.0is, 4.4i, 4.6is, 4.8is, M, 35d, Premium, 35d/i, 50i, Sport Activity, Premium. sDrive	2000- <b>17</b> ,9999	14
402	X3	25i, 28 d/i, 3.0i/xDrive, 35i, 4.8is, <b>M40i,</b> M Sports, <i>xLine,</i> <i>Luxury</i> Package	2004- <b>18</b> ,9999	14
403	X1	28i/is, 35i, xDrive <b>, xLine</b>	2012- <b>18</b> , 9999	<u>14</u>
404	X6 (For 2016 on. For 2008- 2015, see model 044.)	35i, 50i, xDrive, sDrive <b>, M</b>	2016- <b>18</b> , 9999	<u>14</u>
405	X2		2018	<u>14</u>
421	X5 (For 2017 models manufactured during the 2017 model year on. For 2000-17 (for models manufactured as 2017 during the 2016 model year), see model 401)	35i/d, 40e, 50i, M	2017 <b>-18, 9999</b>	15

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		2000- <b>18</b> ,9999	<u>14, 15, <b>19</b></u>

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
703	125-349cc	G310	1948-66, <b>2017-</b>	<u>80, <b>84, 89</b></u>
			<b>18,</b> 9999	
705	450-749cc		1950-2003;	<u>80, <b>84, 89</b></u>
			2006- <b>18</b> ,9999	
706	750cc and over		1969- <b>2018</b> ,	<u>80, <b>84, 89</b></u>
			9999	
709	Unknown cc		1948- <b>2018</b> ,	<u>80, <b>84, 89</b></u>
			9999	

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (BMW)		1948- <b>2018</b> ,	<u>49</u> , <u>99</u>
			9999	

# MAKE: Buick (18) (BUIC)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
001	Special/Skylark	GS (350, 400, 455), Deluxe GS	1936-73, 9999	<u>01,02,04,06,</u>
		California, Sport Wagon,		<u>08,09</u>
		Custom Roadmaster (1946-		
		59), Skylark Edition		
002	LeSabre/Centurion/	Estate Wagon, Invicta,	1959-2005,	<u>01,02,04,06,</u>
	Wildcat	Custom, Limited, T-Type, Ltd,	9999	<u>08,09</u>
		C.M.I, LE, Celebration		
	-	Edition, Best Seller		
003	Electra/Electra 225/Park	Limited, Park Avenue, Ultra,	1959-2005,	<u>01,02,04,06,</u>
	Avenue (1991-on)	Base, Prestige, SE	9999	<u>08,09</u>
004	Roadmaster	Estate Wagon, Limited	1991-96,9999	<u>04,06,09</u>
005	Riviera	S-Type, T-Type, Coupe	1963-93; 1995-	<u>01,02,09</u>
		Anniversary Edition, Silver	99,9999	
		Arrow		
007	Century	Luxus, T-Type, FWD (82-on),	1954-2005,	<u>01,02,04,06,</u>
		Custom, Regal (72-77),	9999	<u>08,09</u>
		Limited, LE, SE, Base, Special		
008	Apollo/Skylark	Skylark (75), S/R	1973-76,9999	<u>02-04,08,09</u>
010	Regal (RWD only)	Turbo, Luxus, Grand National	1978-88,9999	<u>02,04,06,08,09</u>
		GNX, T-Type		
012	Skyhawk	S-Type, Roadhawk, T-Type,	1975-80; 1982-	02-04,06,08,09
		GT	89,9999	
015	Skylark (76-85)	S/R, S, Limited, Sport, T-Type	1975-85,9999	02-04,08,09

Codes	Models	Includes	Model Years	Body Types
018	Somerset/Skylark	Skylark (86-on), Somerset,	1985-98,9999	<u>02,04,08,09</u>
		GS, Regal, Custom, Limited,		
		Т-Туре		
019	Regal (2011 on)	GS, CXL, Turbo, Premium I/ II,	2011- <b>18</b> ,9999	<u>04, <b>05, 06, 09</b></u>
		Base, Grand National, Sport		
		Touring, Sportback/GS,		
		TourX		
020	Regal (FWD)	Limited, Custom, Gold, Grand	1987-2004,	<u>02,04,08,09</u>
		Sport GS, LS, Sport	9999	
021	Reatta		1988-91,9999	01,02,09
022	LaCrosse	CX, CXL (FWD/AWD), CXS,	2005- <b>18</b> ,9999	<u>04</u>
		Super, Leather, Premium I/II,		
		Touring, Preferred, <i>Essence,</i> <i>Avenir</i>		
023	Lucerne	CX, CXL V6, CXL V8, CXS,	2006-11,9999	<u>04</u>
		Super, Special Edition		
024	Enclave (2008-12 model	CX, CXL (FWD/AWD)	2008-12,9999	<u>06</u>
	years only. For 2013 on			
	see model 421.)			
025	Verano	Base, Convenience, Leather,	2012- <b>18</b> ,9999	<u>04</u>
		Turbo, Premium, Sport,		
		Touring		
026	Cascada	1SV, <b>Base,</b> Premium, Sport	2016- <b>18</b> , 9999	<u>01</u>
		Touring		
031	Opel Kadett		1965-72,9999	02,04,06,08,09
032	Opel Manta	1900, Luxus, Ralley, Sports	1966-75,9999	<u>02,04,06,08,09</u>
		Coupe		
033	Opel GT		1969-75,9999	02
034	Opel Isuzu	Deluxe, Sport	1976-79,9999	02,04,08,09
398	Other (automobile)		1965- <b>2018</b> , 9999	<u>01-04,06,08,09</u>
399	Unknown (automobile)		1950- <b>2018</b> ,	01-04,06,08,09
			9999	

Codes	Models	Includes	Model Years	Body Types
401	Rendezvous	CX, CXL, Ultra, Plus	2002-07,9999	<u>14</u>
402	Rainier	CXL, CXL Plus	2004-07,9999	<u>14</u>
404	Encore	Convenience, Leather, Premium, Base, Sport Touring, Preferred (I, II), Essence	2013- <b>18</b> , 9999	14
405	Envision	Preferred, Premium (I, II) Essence, <b>Base</b>	2016- <b>18</b> , 9999	14

Codes	Models	Includes	Model Years	Body Types
421	Enclave (2013 on. See	Convenience, Leather,	2013- <b>18</b> , 9999	<u>15</u>
	model 024 for 2008-12	Premium <b>, Avenir</b>		
	model years.)			
441	Terraza	CX, CXL	2005-07, 9999	<u>20</u>
498	Other (light truck)		2002-07, 2013-	<u>14, 15, <b>19</b>, 20</u>
			<b>18</b> , 9999	
499	Unknown (light truck)		2002-07, 2013-	<u>14, 15, <b>19</b>, 20</u>
			<b>18</b> , 9999	

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (BUICK)		1946- <b>2018</b> ,	<u>49</u>
			9999	

# MAKE: Cadillac (19) (CADI)

Codes	Models	Includes	Model Years	Body Types
003	Deville/Fleetwood (except Limousine)	Coupe de Ville, Sedan de Ville, Fleetwood Brougham, Fleetwood 60 Special, d'Elegance, Concours, DHS, DTS	1940-2005, 9999	01,02,04,08,09
004	Limousine	Fleetwood 75, Formal, Deville-based, DTS	1940- <b>2018</b> , 9999	<u>12</u>
005	Eldorado	Biarritz, El-doro, Touring Coupe, ESC, ETC	1967-2003, 9999	01,02,09
006	Commercial Series	Ambulance/Hearse, Professional	1940- <b>2018</b> , 9999	<u>09</u> , <u>10-12</u>
009	Allante'		1987-93,9999	01,02,09
014	Seville	Elegante, STS, SLS	1976-2004, 9999	<u>04</u>
016	Cimarron	D'Oro	1982-88,9999	04
017	Catera	Sport	1997-2001, 9999	<u>04</u>
018	CTS/CTC	Luxury, Luxury Sport, V- Series, <i>2.0L</i> , 2.8L, 3.0L, 3.6L, 6.2L Supercharged, Premium, Performance, Standard, Luxury, <i>V-Sport</i>	2003- <b>18</b> ,9999	<u>02-04,06</u> , <b>08,</b> 09
019	XLR	Neiman Marcus Edition, V- Series, Standard, Platinum	2004-09,9999	<u>01</u>
020	SRX	V6, V8, Sports Package, 2.8L Turbo, 3.0L, Luxury, Performance, Premium, Standard	2004-16,9999	<u>06</u>

Codes	Models	Includes	Model Years	Body Types
021	STS	V6, V8, V-Series, Luxury,	2005-11,9999	<u>04</u>
		Premium, Standard,		
		Platinum, 3.6L		
022	DTS	Luxury I, II, III, V8, 3.6L,	2006-11,9999	<u>04</u>
		Performance, Platinum		
023	XTS	Standard, Luxury, Premium,	2013- <b>18</b> ,9999	<u>04, 09</u> , <u>11, 12</u>
		Platinum, V-Sport,		
		Limousine, Funeral Hearse,		
		Twin Turbo		
024	ATS	2.0L/2.5L/3.6L (Standard,	2013- <b>18</b> ,9999	<u>02,04</u> , <b>08,</b> 09
		Luxury, Performance,		
		Premium, Turbo) V-Series		
025	ELR		2014-16,9999	<u>02</u>
026	CT6	2.0L (Turbo, Luxury) 3.0L	2016 <b>-18,9999</b>	<u>04</u>
		(Twin Turbo, Platinum,		
		Luxury), 3.6L (Premium		
		Luxury, Platinum), Plug-In		
398	Other (automobile)		1965- <b>2018</b> ,	<u>01,02,04,06,</u>
			9999	<u>08,09</u> , <u>11, 12</u>
399	Unknown (automobile)		1950- <b>2018</b> ,	<u>01,02,04,06,</u>
			9999	<u>08,09</u> , <u>11, 12</u>

Codes	Models	Includes	Model Years	Body Types
401	XT5	3.6L (Base, Luxury, Premium,	2017 <b>-18, 9999</b>	<u>14</u>
		Platinum)		
421	Escalade/ESV (from 2004	4WD, 2WD, <i>6.2L,</i> Standard,	1999-2000;	<u>15</u>
	on; see 431 for 2003 only)	Platinum, Limousine, Hybrid,	2002- <b>18</b> ,9999	
		Luxury, Premium		
431	Escalade ESV (2003 only)	Luxury, Premium, Platinum	2003, 9999	<u>16</u>
480	Escalade EXT (from 2002 -	4WD, 2WD	2002-06,9999	<u>34</u>
	2006; for 2007 on see 481)			
481	Escalade EXT (from 2007	4WD, 2WD, Luxury,	2007-13, 9999	<u>34</u>
	on; see 480 for 2002-2006)	Premium, Standard		
498	Other (light truck)		1999-2000;	<u><b>14,</b> 15, 16, <b>19</b>, <b>34</b></u>
			2002- <b>18</b> , 9999	
499	Unknown (light truck)		1999-2000;	<u>19, 39, 49</u>
			2002- <b>18</b> ,9999	

# UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (CADILLAC)		1940- <b>2018</b> ,	<u>49</u>
			9999	

### AUTOMOBILES

# MAKE: Chevrolet (20) (CHEV)

Codes	Models	Includes	Model Years	Body Types
001	Chevelle/Malibu (thru '83)	Classic, Councours, Laguna**, S-3, Greenbriar, Estate, 300, SS-396/454, Deluxe	1963-83,9999	01,02,04,06, 08,09
002	Impala/Caprice (For SS from 2014 on, use 20- 021.)	Biscayne, Belair, Super Sport, Classic, Classic Brougham, Townsman, Brookwood, Kingswood, LS, LT, LTZ, Sport, SS, Luxury, <b>Premier</b>	1955-96; 2000- <b>18</b> , 9999	01,02,04,06, 08,09
004	Corvette	Stingray, C5, Z06, Z06-R 50 <sup>th</sup> Anniversary Edition, Commemorative Edition, Indy Pace Car, ZR1, Grand Sport, 427, 1LZ, 2LZ, 3LZ, ZL1	1953-82; 1984- <b>2019</b> , 9999	<u>01-03,09</u>
006	Corvair	Monza, Corsa, 500, Yenko	1960-69,9999	01,02,04,06, 08,09
007	El Camino	Royal Knight, SS	1958-94,9999	<u>10</u>
008	Nova (-'79)	Chevy II, LN, LE, Concours, SS- 350/396, Rally	1962-79,9999	<u>01-04,06,<b>08,</b>09</u>
009	Camaro	SS, RS, LT, Berlinetta, Iroc-Z, Z/28, LS, LT, ZL1, 2.0L, 3.6L, 6.2L	1967-2002, 2010- <b>18</b> ,9999	<u>01-03,09</u>
010	Monte Carlo (thru '88)	LS, SS, Aerocoupe, Landau, Z34	1970-88,9999	<u>02</u>
011	Vega	GT, Cosworth	1971-77,9999	<u>02-04,06,08,09</u>
012	Monza	Spyder, 2 + 2, Towne Coupe	1974-80,9999	<u>02-04,06,08,09</u>
013	Chevette	S, Scooter, CS	1976-87,9999	<u>03-05,07,09</u>
015	Citation	X-11, Citation II	1980-85,9999	<u>02-05,07,<b>08,</b>09</u>
016	Cavalier	CS, RS, Z24, LS, Sport, Special Value Package	1982-2005, 9999	01-04,06,08,09
017	Celebrity	CS, Eurosport, VR	1982-90,9999	02,04,06,08,09
019	Beretta/Corsica	GT, GTZ, LT, LTZ, PX, QX, KX, LX, MX, Z26	1982-96,9999	02,04,05,08,09
020	Lumina	Z-34, Euro, LTZ, LS	1990-2001, 9999	02,04,06,08,09
021	SS (For 2014 on. For Impala/Caprice SS use model 20-002.)	LS, LT, LTZ	2014- <b>17</b> ,9999	<u>04</u>
022	Cobalt	LS, LT, LTZ, SS, SS, Base Supercharged, Sport, VL	2005-11,9999	<u>02,04,<b>08</b>,09</u>
023	HHR	LS, 1LT, 2LT, SS, Panel	2006-11,9999	<u>06</u>
024	Traverse (2009-2012 only. For 2013 on see model 423.)	LS, LT, LTZ	2009-12,9999	06
025	Cruze	LS, LT, LTZ, ECO, Turbo Diesel, Limited, <i>Premier</i>	2011- <b>18</b> ,9999	<u>02, 04, 05, <b>08,</b> 09</u>

Codes	Models	Includes	Model Years	Body Types
026	Volt	Premier <b>, LT</b>	2011- <b>18</b> ,9999	<u>05</u>
027	Caprice PPV		2011- <b>18</b> ,9999	<u>04</u>
028	Sonic	Base, LS, LT, LTZ, RS, Premier	2012- <b>18</b> ,9999	<u>04,05,09</u>
029	Spark	LS, LT, EV <b>, ACTIV</b>	2013- <b>18</b> ,9999	<u>05</u>
031	Spectrum		1985-89,9999	<u>02-05,08,09</u>
032	Nova/Geo Prism/Prism	CL, NUMMI-built vehicles, LSi	1985-2002, 9999	<u>02-05,07-09</u>
033	Sprint/Geo Sprint	(Cultus - foreign)	1985-89,9999	<u>03,05,07,09</u>
034	Geo Metro/Metro	Lsi, Xfi	1989-2001, 9999	01,03-05,07,09
035	Geo Storm	Gsi	1985-93,9999	<u>02,03,09</u>
036	Monte Carlo (1995 on)	FWD, LS, Z34, LS, LT, LTZ, SS, Sport Edition	1995-2007, 9999	<u>02</u>
037	Malibu/Malibu Maxx	Base, <i>L</i> , LS, LT, LTZ, SS, Hybrid, ECO, Classic, Limited, <i>Premier</i>	1997- <b>2018</b> , 9999	<u>04-06,09</u>
038	SSR	Signature Series, LS, LS5, 1SS, 2SS, 3SS	2003-06,9999	<u>10</u>
039	Aveo/Aveo 5	Base, LS, LT, Special Value	2004-11,9999	<u>04,05,09</u>
040	Bolt	LT, Premier	2017-18, 9999	<u>05</u>
398	Other (automobile)	Fleetmaster, Fleetline, Styline Special, One-fifty, Bel-Air, Del Ray, Biscayne	1930- <b>2018</b> , 9999	<u>01-09, 10-11</u>
399	Unknown (automobile)		1930- <b>2018</b> , 9999	<u>01-09</u> , <u>10-11</u>

\*\*Nomad, Malibu, Laguna, and other similar terms may be used on all models as a reflection of trim type.

## LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	S-10 Blazer/TrailBlazer	S-10 p/u based, LS, LT, ZR2	1982-2005,	<u>14</u>
	(2002 only; for 2003 on, see	TrailBlazer, Xtreme, ZR2, LS,	9999	
	403)	LT, LTZ, EXT		
402	Geo Tracker/Tracker	Lsi, LT, ZR2	1989-2004,	<u>14</u>
			9999	
403	TrailBlazer (from 2003 on;	LS, LT, LTZ, North Face	2003-09,9999	<u>14</u>
	for 2002, see 401)	Edition, EXT, SS (LS/LT)		
404	Equinox	L, LS, LT, LTZ, Sport, Premier,	2005- <b>18</b> ,9999	<u>14</u>
		Turbo (Base and Diesel)		
405	Captiva	Sport, LS, LT, LTZ	2012-15,9999	<u>14</u>
406	Trax	LS, LT, LTZ <b>, Premier</b>	2015- <b>18</b> ,9999	<u>14</u>
421	Fullsize Blazer/Tahoe	K-series, fullsized p/u based,	1969- <b>2018</b> ,	<u>15</u>
		LS, LT, LTD, LTZ, 4WD, Z71,	9999	
		Hybrid <i>, Premier</i>		
422	Suburban (from 2004 on;	LS, LT, LTZ, Z71 <b>, Premier</b>	2004- <b>18</b> ,9999	<u>15</u>
	see 431 for 1950-2003)			
423	Traverse (2013 on. For	L, LS, LT (Cloth, Leather), LTZ,	2013- <b>18</b> ,9999	<u>15</u>
	2009-2012 see model 024.)	Premier		
431	Suburban (from 1950-2003;	all models (C1500/2500,	1950-2003,	<u>16</u>
	see 422 for 2004 on)	K1500/2500), LS, LT, Z71	9999	

Codes	Models	Includes	Model Years	Body Types
441	Astro Van	Minivan, Cargo, Passenger,	1985-2005,	<u>20</u>
		LT, LS, Conversion	9999	
442	Lumina APV	Minivan, MPV	1990-96,9999	<u>20</u>
443	Venture	Cargo, Passenger, Plus, LS, LT, Value, Value Plus, Extended, W. B. Edition, Entertainer	1997-2005, 9999	<u>20</u>
444	Uplander	Base, LS, LT, LT(AWD), LT Entertainer	2005-08,9999	20
445	City Express	LS, LT	2015- <b>18</b> ,9999	<u>20</u>
461	G-series van	Beauville, Chevy Van, Sport Van, G10-G30, Express, G1500/2500/3500, LT, LS	1957- <b>2018</b> , 9999	<u>21,22,28,29</u>
466	P-series van		1965-99, 9999	<u>22,28,29</u>
470	Van derivative	Parcel Van, Hi-cube	1965- <b>2018</b> , 9999	<u><b>22,</b>28,29</u>
471	S-10/T-10 Pickup	4 x 4, Fleetside, Extended, Crew, LS, S-10, Xtreme, ZR2, ZR5, electric pickup*	1982-2005, 9999	<u>32</u> , <b>34, 39</b> , <u>40</u> , <u>42</u> , <u><b>48</b></u>
472	LUV	Imported pickup	1972-91,9999	<u>32, <b>34, 39</b>, 40</u> , <u>42</u> , <u><b>48</b></u>
473	Colorado	Z71, Z85, Sport, LS, LT, Work, Value, Shoreline, Midnight (LT, Z71), Trail Boss	2004-12, 2015- <b>18</b> , 9999	<u>34</u>
481	C, K, R, V-Series pickup/ Silverado	C10-C30, K10-K30, R10-R30, V10-V30, Silverado: 1500 (C- K, HD), 2500 (C-K, HD), 3500 (CK), ST, LS, LT, Z71, Fleetside, Sportside, CrewCab, SS, Hybrid, LTZ, WT, High Country, Rally ½, Midnight (HD, Base), Realtree, Custom Sport <i>HD</i> , Blackout, Special Ops, <i>High</i> <i>Country</i>	1940- <b>2018</b> , 9999	<u>32,<b>34</b>,39</u> , <u>40</u> , <u>42</u>
482	Avalanche	1500/2500 Premium, North Face Edition, Z71, Z66, LS, LT, LTZ, Black Diamond	2002-13,9999	<u>34</u>
498	Other (light truck)		1940- <b>2018</b> , 9999	<u>14-16,19</u> , <u>20-22,</u> <u>28,29, 32,<b>34</b>, 39,</u> <u>40, 42, 45,48</u>
499	Unknown (light truck)		1932- <b>2018</b> , 9999	<u>14-16,19, 20-22,</u> <u>28,29, 32,<b>34</b>, 39,</u> <u>40, 42, 45,48,49</u>

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck-based	1949- <b>2018</b> ,	<u>65,73</u>
			9999	

# MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
870	Medium/Heavy Van-Based Vehicle	Express 3500/4500	1957- <b>2018</b> , 9999	<u>55, 61-64</u>
880	Medium/Heavy Pickup (pickup-style only – over 10,000 lbs.)		1953- <b>2018</b> , 9999	<u>67</u>
881	Medium/Heavy – CBE	C50/60/65; M60/65; H70/80/90; J70/80/90; Bison 90; Kodiak (C4500) all other CBE	1955- <b>2018</b> , 9999	<u>60-64, 66, 71,</u> <u>72, 78</u>
882	Medium/Heavy – COE low entry	T60/65, all other COE low entry	1960- <b>2018</b> , 9999	<u>60-64, 66, 71,</u> <u>72, 78</u>
883	Medium/Heavy – COE high entry	Titan 90, all other COE high entry	1971-80,9999	<u>60-64, 66, 71,</u> <u>72, 78</u>
884	Medium/Heavy – Unknown engine location		1951- <b>2018</b> , 9999	<u>60-64, 66, 71,</u> <u>72, 78</u>
890	Medium/Heavy – COE entry position unknown		1965- <b>2018</b> , 9999	<u>60-64, 66, 71,</u> <u>72, 78</u>
898	Other (medium/heavy truck)		1949- <b>2018</b> , 9999	<u>60-64, 66, 71,</u> <u>72, 78</u>

### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine	S-60 series	1967- <b>2018</b> ,	<u>50-52, 58, 59</u>
	out front)		9999	
988	Other (bus)		1965- <b>2018</b> ,	<u>50-52, 58, 59</u>
			9999	
989	Unknown (bus)		1965- <b>2018</b> ,	<u>50-52, 58, 59</u>
			9999	

\*\* Use code "989" (bus) if the frontal plane or the engine location is unknown.

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1934- <b>2018</b> ,	<u>92, 93, 97</u>
			9999	
999	Unknown (CHEVROLET)		1933- <b>2018</b> ,	<u>49, 79, 99</u>
			9999	

### AUTOMOBILES

# MAKE: Chrysler/Daimler Chrysler (06) (CHRY)

Codes	Models	Includes	Model Years	Body Types
009	Cordoba	Crown, 300, LS	1975-83,9999	02
010	New Yorker (thru 78)/ Newport/5 <sup>th</sup> Avenue/ Imperial (1979-83) (excludes all FWD)	Town and Country, Brougham, Custom, Royal, 300 (thru 1971) Frank Sinatra editions (FS), Royal Limo, Windsor Wagon/ Ambulance	1946-89,9999	01,02,04,06, 08,09, 11,12
014	New Yorker/E-Class/ Imperial (1990-93)/ Fifth Avenue	FWD vehicles, Turbo, Salon	1980-93,9999	02,04,08,09
015	Laser	Turbo, XE, XT	1984-86,9999	<u>03</u>
016	LeBaron	Premium, Salon (RWD), Landau, LX, Town and Country cars and wagon, Medallion, FWD except GTS or GTC Sport Coupe	1977-94,9999	01-09
017	LeBaron GTS/GTC	GT, GTS-Turbo, GTC- Sport Coupe	1982-95,9999	<u>01-09</u>
018	200	Limited (Base, Platinum), LX, Touring, S, Super S, C (Base, Platinum)	2011- <b>17</b> ,9999	01,04,09
021	SRT Viper	Standard, GTS, TA, GT3-R, GTS-R	2013-14,9999	<u>02</u>
031	TC (Maserati Sport)	Turbo Convertible	1988-91,9999	01-03,09
035	Conquest	TSI, Turbo	1987-89,9999	<u>03</u>
041	Concorde	LX, Lxi, Limited	1993-2004, 9999	<u>04</u>
042	LHS	New Yorker (1994-on)	1994-97; 1999- 2001, 9999	<u>04</u>
043	Sebring	JX, Jxi, LX, Lxi, GTC, Tsi, Limited, Plus, Platinum, Touring, Signature Series	1995-2011 <i>,</i> 9999	01,02,04,08,09
044	Cirrus	LX, Lxi	1995-2000, 9999	<u>04</u>
050	Executive	Sedan and Limo	1983-87,9999	<u>04,09</u> , <u>11,12</u>
051	300M/300/300C/300S	Special, Platinum, Touring, Limited, SRT, Signature Series, SRT8, LX, SRT, Heritage, Great American, Walter P. Chrysler, Glacier, Executive Series, Luxury, Motown Edition, John Varvatos Edition	1999- <b>2018</b> , 9999	<u>04</u>

Codes	Models	Includes	Model Years	Body Types
052	PT Cruiser	Base, Touring, Limited, GT, Turbo, Dream Cruiser, Platinum, Series 4, Signature Series, Street Cruiser, Pacific Coast Highway, LX, Sunset Blvd.	2001-10,9999	01,06,09
053	Prowler (for 2002) ( <u>1997,1999-01 see</u> <u>Plymouth</u> )	Roadster, Black Tie Edition	2002	01
054	Pacifica	Premium, Luxury, Touring, Signature Series, LX, <i>Hybrid</i>	2004-08,9999	<u>06</u>
055	Crossfire	Limited, SRT6, Standard	2004-08,9999	01,02,09
398	Other (automobile)		1946- <b>2018</b> , 9999	<u>01-09, 11,12</u>
399	Unknown (automobile)		1946- <b>2018</b> , 9999	<u>01-09, 11,12</u>

Codes	Models	Includes	Model Years	Body Types
421	Aspen	Limited, Signature, Hybrid	2007-09,9999	<u>15</u>
441	Town and Country	Minivan, SX, L, LX, Lxi, Ltd., SWB, LWB, AWD, FWD, eL, eX, Touring, Platinum, Signature Series, Limited, 30th Anniversary, S	1990-2016, 9999	<u>20</u>
442	Voyager (2000 on; <u>1984-</u> <u>00 see Plymouth</u> )	Base, Popular, Value, LX, eC	2000-03,9999	<u>20</u>
443	Pacifica	LX, Touring (Base, L, L Plus) Limited, <i>Hybrid</i>	2017 <b>-18, 9999</b>	<u>20</u>
499	Unknown (light truck)		1990- <b>2018</b> , 9999	<u>15, 20,29</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (CHRYSLER)		1946- <b>2018</b> ,	<u>49</u>
			9999	

# MAKE: Coda (26)

# AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
001	Coda		2012-13,9999	<u>04,05,09</u>
398	Other (automobile)		2012-13,9999	<u>04,05,09</u>
399	Unknown (automobile)		2012-13,9999	<u>04,05,09</u>

# MAKE: Daewoo (64) (DAEW)

Codes	Models	Includes	Model Years	Body Types
031	Lanos	S, SE, SX, Sport	1999-2002, 9999	<u>03,04,09</u>
032	Nubira	SX, CDX, SE	1999-2002 <i>,</i> 9999	04,06,09
033	Leganza	SE, SX, CDX	1999-2002, 9999	<u>04</u>
398	Other (automobile)		1999-2002, 9999	03, 04, 05, 06, 07,09
399	Unknown (automobile)		1999-2002, 9999	03-07,09

# MAKE: Daihatsu (60) (DAIH)

AUTOMOB	ILES			
Codes	Models	Includes	Model Years	Body Types
031	Charade		1988-94,9999	<u>03,04,09</u>

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Rocky		1990-92,9999	<u>14</u>

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (DAIHATSU)		1988-94,9999	<u>03,04,09</u> , <u>14</u>

# MAKE: Dodge (07) (DODG)

Codes	Models	Includes	Model Years	Body Types
001	Dart (1960-76 only. For 2013 on; see model 029.)	170, 270, Custom, GT, Swinger, Demon, 340, 360, Special, Sport, Special Edition	1960-76,9999	<u>01,02,04,06,</u> <u>08,09</u>
002	Coronet/Magnum/ Charger (thru 1978)	Brougham, Custom, Superbee, 500, Crestwood, Deluxe, XE, R/T, 440, SE, Police	1964-79,9999	01,02,04,06, 08,09
003	Polara/Monaco/ Royal Monaco	Custom, Special, Police, Taxi, Crestwood, Brougham	1964-78,9999	<u>01,02,04,06,</u> <u>08,09</u>
004	Viper	RT/10, GTS, ACR, SRT-10, GT, SRT	1992-2010, <b>2015-17</b> , 9999	<u>01,02,09</u>
005	Challenger (1970-74 only; see model 028 for 2008 on)	R/T, T/A, Rallye	1970-74,9999	01,02,09
006	Aspen	Custom, Special Edition, Police, R/T, Sport	1976-80,9999	02,04,06,08,09
007	Diplomat	Medallion, S, Salon, SE	1977-89,9999	02,04,06,08,09

Codes	Models	Includes	Model Years	Body Types
008	Omni/Charger (1983-87; for 2006 on see vehicle model 024)	024, DeTomaso, Miser, Charger 2.2, GLH, Custom, Shelby, GLHS, America, Expo, SE	1978-90,9999	03,05,07,09
009	Mirada		1980-83,9999	<u>02</u>
010	St Regis	Police, Taxi	1979-81,9999	04
011	Aries (K)	Custom, SE, LE	1981-89,9999	02,04,06,08,09
012	400	LS	1982-83,9999	01,02,04,08,09
013	Rampage (car-based pickup)	2.2, GT, Sport	1982-84,9999	<u>10</u>
014	600	ES, Turbo, SE	1983-88,9999	01,02,04,08,09
015	Daytona	Turbo Z, C/S Competition, Shelby Z/CSX, Pacifica, IROC R/T	1984-93,9999	<u>03</u>
016	Lancer	Pacifica, Turbo, ES, Shelby	1985-89,9999	<u>02-09</u>
017	Shadow	ES, Turbo, America	1987-94,9999	01-03,05,07,09
018	Dynasty		1988-93,9999	02,04,08,09
019	Spirit	ES, Shelby, R/T	1989-95,9999	01,02,04,08,09
020	Neon	Competition, Highline, SE, ES, ACR R/T, SRT-4, SXT	1995-2005, 9999	<u>02,04,08,09</u>
021	Magnum	SE, SXT, R/T, SRT8	2005-08,9999	<u>06</u>
024	Charger (2006 on; see model 008 for 1983-87)	Daytona <b>(Base, 392)</b> , SRT8, R/T, SE, SXT, Super Bee, 3.5L, Rallye, Plus, Max, Road and Track, Blacktop, 100th Anniversary, Red Line, Road & Track, Scat Pack, SRT 392, SRT, Hellcat, <b>Blacktop</b>	2006- <b>18</b> ,9999	<u>04</u>
025	Caliber	SE, SXT, R/T, SRT4, Sport, Heat, Mainstreet, Rush, Uptown, Express	2007-12,9999	<u>05</u>
026	Avenger	SE, SXT, R/T, Heat, Express, Blacktop	2008-15,9999	<u>04</u>
027	Journey	SE, SXT, R/T, Heat, Hero, Uptown, Express, Crew, Mainstreet, Lux, American Value Package, Blacktop, AVP, SXT Plus, Limited, Crossroad <b>(Base, Plus), GT</b>	2009- <b>18</b> ,9999	<u>06</u>

Codes	Models	Includes	Model Years	Body Types
028	Challenger (2008 on; for 1970-74 see model 005)	SRT (392, Hellcat), SE, R/T (Plus, Classic, Scat Pack, Road & Track), <i>Shaker, Plus</i> <i>Shaker),</i> Plum Crazy Edition, Classic, SXT, SXT Plus, Rallye Redline, Blacktop, Shaker, 100th Anniversary, <i>T/A</i> ( <i>Base, Plus, 392), 392 Hemi</i> <i>Scat Pack Shaker, SRT (392,</i> <i>HellCat), GT, Demon</i>	2008- <b>18</b> ,9999	02
029	Dart (2013 on. See model 001 for 1960-1976 model years.)	Limited, Rallye, SE, SXT, Special Edition, Mopar '13, Aero, GT, Blacktop	2013-16,9999	<u>04</u>
033	Challenger	all import	1978-83,9999	02
034	Colt (includes 2WD Vista)	GT, Custom, Carousel, Premier, Deluxe, E, DL, GTS, Turbo, RS	1974-94,9999	<u>02-09</u>
035	Conquest	Turbo	1984-89,9999	03
039	Stealth	RT, ES	1991-96,9999	02,03,09
040	Monaco		1990-92,9999	02,04,08,09
041	Intrepid	ES, R/T, S, SE, SXT	1993-2004, 9999	<u>04</u>
042	Avenger (see model 026 for 2008 on)	ES	1995-2000, 9999	02
043	Stratus	ES, SE, R/T, Plus, SXT	1995-2007, 9999	02,04,08,09
398	Other (automobile)		1946- <b>2018</b> , 9999	<u>01-09</u> , <u>10,12</u>
399	Unknown (automobile)		1946- <b>2018</b> , 9999	<u>01-09, 10,12</u>

Codes	Models	Includes	Model Years	Body Types
401	RaiderSport	Sport	1986-94,9999	<u>14</u>
402	Durango (1998-2003 only; see model 422 for 2004 on)	Sport, R/T, SLT, SXT, Plus, Blacktop	1998-2003, 9999	<u>14</u>
403	Nitro	SLT, SXT, R/T, SE, Heat, Detonator, Shock	2007-11,9999	<u>14</u>
421	Ramcharger		1974-93,9999	<u>15</u>
422	Durango (2004 on; see 402 for 1998-2003 models)	ST, SLT, Limited, SXT <b>(Base,</b> <b>Plus)</b> , Adventurer, Hybrid, Express, Crew, LUX, Citadel, R/T, Blacktop, Plus, Rallye <b>,</b> <b>GT</b>	2004- <b>18</b> ,9999	<u>15</u>
441	Vista Van	4x4 (Only)	1984-91,9999	<u>20</u>

Codes	Models	Includes	Model Years	Body Types
442	Caravan/Grand Caravan	Mini Ram Van, 112 & 19 WB, SE, ES, LE, Sport, EX, eC, eL, AWD, Sport, EPIC-elec* SXT, C/V, Special Edition, Cargo, Hero, American Value Package, R/T, Crew, Blacktop, AVP, 30th Anniversary, SE Plus, SXT Plus	1984- <b>2018</b> , 9999	<u>20</u>
443	Ram C/V	Tradesman	<b>2013-17</b> , 9999	<u>20</u>
444	Promaster City	Cargo, Passenger, Tradesman (Base, SLT), <i>Wagon (Base,</i> <i>SLT)</i>	2015- <b>18</b> , 9999	<u>20</u>
461	B-Series Van/fRam Van/ Ram Wagon	Sportsman, Royal,           Maxiwagon, Ram, B1500-           B3500, Tradesman, Ram           Maxivan (1500, 2500, 3500),           Ram Wagon (1500, 2500, 3500)           3500) Conversion, Cargo Van           (1500: van, non-maxi van,           maxi van; 2500: non-maxi,           maxi van; 3500: non-maxi),           Dodge Wagon (1500, 2500,           3500)	1963-2003, 9999	<u>21,28, 40,41, 42, 48</u>
462	Sprinter	Cargo, Passenger	2003-09,9999	21,28
463	Ram Promaster	Cargo, Chassis, Cutaway, 1500 (Low Roof, High Roof), 2500 (Low Roof, High Roof), 3500 (Low Roof, High Roof)	2014- <b>18</b> ,9999	21,28
470	Van Derivative	Kary Van, Parcel Van	1971- <b>2018</b> , 9999	<u>28,29</u>
471	D50, Colt pickup, Ram 50/Ram 100		1979-93,9999	<u>32, <b>34, 39</b></u>
472	Dakota	R/T, Limited Edition, Quad Cab, Club Cab, Plus, SLT, ST, SXT, Sport, Laramie, TRX, SE, Big Horn, Lone Star, TRX4	1987-2012, 9999	<u>32, 33, <b>34</b>, 39</u> , <u>40</u>
481	D, W-Series pickup	Custom, Royal, Ram, Miser, D100-D350, W100-W350	1955-93,9999	<u>32, <b>34, 39</b>, 40,</u> <u>42</u>

Codes	Models	Includes	Model Years	Body Types
482	Ram Pickup	1500 (Limited, Longhorn,	1994- <b>2019</b> ,	<u>32, <b>34, 39</b>, 40</u> ,
		Rebel, Laramie, Sport, Big	9999	<u>42</u>
		Horn, SLT, Express, ST, Black,		
		Tradesman, EcoDiesel,		
		Outdoorsman, Stinger		
		Yellow) 2500 (Limited,		
		Laramie, Longhorn, Power		
		Wagon, Big Horn, ST, SLT,		
		Outdoorsman, Tradesman),		
		3500 (Limited, Laramie,		
		Longhorn, Power Wagon, Big		
		Horn, ST, SLT, Outdoorsman,		
		Tradesman), Quad Cab, SLT,		
		SLT+, ST, SRT-10, Laramie,		
		Rumble Bee, Power Wagon,		
		Daytona, TRX Off-Road,		
		Sport, Black Ram, Red Wings		
		Edition, Lone Star, Limited		
		Tungsten, Hydro Blue,		
		Harvest, Sublime Green		
498	Other (light truck)		1979- <b>2018</b> ,	<u>14,15,19</u> , <u>20-22,</u>
			9999	<u>28,29</u> , <u>32, 33,</u>
				<u><b>34</b>, 39</u> , <u>40, 41</u> ,
				<u>42, 45, 48</u>
499	Unknown (light truck)		1949- <b>2018</b> ,	<u>14,15,19</u> , <u>20-22,</u>
			9999	<u>28,29</u> , <u>32, 33,</u>
				<u><b>34</b>, 39</u> , <u>40, 41</u> ,
				<u>42, 45, 48,49</u>

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck-based	1952- <b>2018</b> ,	<u>65,73</u>
			9999	

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
870	Medium/Heavy Van-	Sprinter, Promaster	1971-2009,	<u>55, 61-64</u>
	Based Vehicle		2014- <b>18</b> ,9999	
880	Medium/Heavy Pickup		1953- <b>2018</b> ,	<u>67</u>
	(pickup-style only – over		9999	
	10,000 lbs.)			
881	Medium/Heavy – CBE		1966- <b>2018</b> ,	<u>60-64,66,</u>
			9999	<u>71,72,78</u>
882	Medium/Heavy – COE low		1967-77,9999	<u>60-64,66,</u>
	entry			<u>71,72,78</u>
883	Medium/Heavy – COE		1967-77,9999	<u>60-64,66,</u>
	high entry			<u>71,72,78</u>

Codes	Models	Includes	Model Years	Body Types
884	Medium/Heavy –		1962- <b>2018</b> ,	<u>60-64,66,</u>
	Unknown engine Location		9999	<u>71,72,78</u>
890	Medium/Heavy – COE		1965-77,9999	<u>60-64,66,</u>
	entry position unknown			<u>71,72,78</u>
898	Other (medium/heavy		1930- <b>2018</b> ,	<u>60-64,66,</u>
	truck)		9999	<u>71,72,78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional	(not van based)	1966-77,9999	<u>50-52, 58, 59</u>
	(Engine out front)			
988	Other (bus)		1965-77,9999	<u>50-52, 58, 59</u>
989	Unknown (bus)		1965-77,9999	<u>50-52, 58, 59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2018</b> ,	92,93,97
			9999	
999	Unknown (DODGE)		1952- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
			9999	

# MAKE: Eagle\* (10) (EGIL)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
034	Summit (excludes wagon)	DL, LX, ES, ESi	1989-96,9999	02-04,08,09
037	Talon	FWD, Tsi, Tsi-FWD, Esi	1990-98,9999	<u>02,03,09</u>
040	Premier	LX, ES, ES Limited	1988-92,9999	<u>02,04,08,09</u>
041	Vision	Esi, Tsi	1993-97,9999	<u>04</u>
044	Medallion	DL, LX	1988-89,9999	<u>04,06,09</u>
045	Summit Wagon	FWD, AWD, DX, LX (Mitsubishi)	1992-96,9999	<u>06</u>
398	Other (automobile)		1988-98,9999	02-04,06,08,09
399	Unknown (automobile)		1988-98,9999	<u>02-04,06,08,09</u>

\*Note: Eagle model listed under <u>American Motors</u>.

# MAKE: Fiat (36) (FIAT)

AUT	омо	BILES	

Codes	Models	Includes	Model Years	Body Types
031	124 (Coupe/Sedan)	Sport	1967-75,9999	<u>01,02,04,06,</u>
				<u>08,09</u>
032	124 Spider/Racer	Spider 2000/1500	1968-83,9999	01,02,09
033	Brava/131		1975-82,9999	02,04,06,08,09
034	850 (Coupe/Spider)		1967-73,9999	01,02,09
035	128		1972-79,9999	<u>01,02,04,06,</u>
				<u>08,09</u>

Codes	Models	Includes	Model Years	Body Types
036	X-1/9		1975-83,9999	<u>01,02,09</u>
037	Strada		1979-83,9999	<u>03,05,07,09</u>
038	500/500c	Abarth, Pop, Sport, Lounge, e, Cabrio, Turbo, Cattiva, Gucci, eSport, GQ Edition, 1957 Edition	2012- <b>18</b> ,9999	<u>02,03,09</u>
039	124 Spider	Classica, Abarth	2017 <b>-18, 9999</b>	<u>01</u>
398	Other (automobile)	600, 1100	1967-83, 2011- <b>18</b> ,9999	<u>01-09</u>
399	Unknown (automobile)		1967-83, 2011- <b>18</b> , 9999	<u>01-09</u>

Codes	Models	Includes	Model Years	Body Types
401	500L	Pop, Easy, Trekking, Lounge, Urbana	2014- <b>18</b> ,9999	<u>14</u>
402	500X	Pop, Easy, Trekking, Lounge, Trekking Plus	2016 <b>-18,9999</b>	<u>14</u>
499	Unknown (light truck)		2014- <b>18</b> ,9999	<u>14, 19</u>

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
882	Medium/Heavy – COE low		1967-83,9999	<u>60-64, 66, 71,</u>
	entry			<u>72, 78</u>
883	Medium/Heavy – COE		1967-83,9999	<u>60-64, 66, 71,</u>
	high entry			<u>72, 78</u>
890	Medium/Heavy – COE		1967-83,9999	<u>60-64, 66, 71,</u>
	entry position unknown			<u>72, 78</u>
898	Other (medium/heavy		1967-83,9999	<u>60-64, 66, 71,</u>
	truck)			<u>72, 78</u>

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1967-83,9999	<u>92,93,97</u>
999	Unknown (FIAT)		1967-83; 2011-	<u>99</u>
			<b>18</b> , 9999	

# MAKE: Ford (12) (FORD)

Codes	Models	Includes	Model Years	Body Types
001	Falcon	FuturaSprint, GT, Futura	1960-70,9999	02,04,06,08,09
002	Fairlane	Torino (1968-70), 500,	1955-70,9999	<u>01,02,04,06,</u>
		Brougham		<u>08,09</u>

Codes	Models	Includes	Model Years	Body Types
003	Mustang/Mustang II	Mach(I), Boss (302), Grande, Cobra (SVT), Ghia, SVO, GT (Premium, Base, Cal Spec. Pkg.), LX, Shelby (GT350, GT350R, GT500, GT500KR), Deluxe, Premium, Bullitt, V6 (Base, Premium, Pony), Fastback (V6, GT, Premium, Ecoboost)	1964- <b>2018</b> , 9999	<u>01-03,09</u>
004	Thunderbird (all sizes)	Landau, Heritage, Turbo coupe, Elan, Fila, Sport, LX, SC, Deluxe, Premium, Pacific Coast Edition, 50 <sup>th</sup> Anniversary Edition	1955-98; 2002- 05,9999	<u>01,02,04,08,09</u>
005	LTD II	S, Squire, Brougham	1977-79,9999	<u>02,04,06,08,09</u>
006	LTD/Custom/Galaxy (all sizes)	XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT	1963-86,9999	<u>01,02,04,06,</u> <u>08,09</u>
007	Ranchero	Falcon/Fairlane based Torino/LTD II based	1960-79,9999	<u>10</u>
008	Maverick	Grabber	1969-78,9999	<u>02,04,08,09</u>
009	Pinto	Pony, MPG, ESS	1971-80,9999	<u>02,03,06,09</u>
010	Torino/Gran Torino/Elite	GT, Cobra, Sport, Squire, Brougham	1971-76,9999	<u>01,02,04,06,</u> <u>08,09</u>
011	Granada	ESS, Ghia	1975-82,9999	02,04,06,08,09
012	Fairmont	Futura, Sport Coupe	1978-83,9999	02,04,06,08,09
013	Escort/EXP/ZX2	L, GL, GLX, SS, GT, LX, LXE, SE, ZX2, Deluxe, Premium, Standard	1981-2003, 9999	<u>02-09</u>
015	Тетро	L, GL, GLX, Sport, 4X4	1984-94,9999	<u>02,04,08,09</u>
016	Crown Victoria (For 2011 on, code as vehicle model 398)	LX, LTD Crown Victoria, LX Sport	1981-2011, 9999	<u>02,04,06,08,09</u>
017	Taurus/Taurus X	MT-5, L, GL, LX, SHO, G, SE, SVG, SES, SEL, Limited, Eddie Bauer, Police Interceptor	1986- <b>2018</b> , 9999	<u>04,06,09</u>
018	Probe	GL, LX, GT	1988-97,9999	<u>03</u>
021	Five Hundred	SE, SEL, Limited	2005-07,9999	04
022	Freestyle	SE, SEL, Limited	2005-07,9999	06
023	Fusion	I4 S/SE/SEL, V6 SE/SEL, S, SE, Sport, Hybrid (S, SE, <i>Platinum, Titanium</i> ), Titanium (Hybrid, Energi) Energi (SE, <i>Platinum</i> , Titanium), <i>Platinum</i>	2006- <b>18</b> ,9999	<u>04</u>

Codes	Models	Includes	Model Years	Body Types
024	Edge	SE, SEL, SEL Plus, Limited,	2007- <b>18</b> ,9999	<u>06</u>
		Sport, Titanium		
025	Flex	SE, SEL, Limited, Titanium	2009- <b>18</b> ,9999	<u>06</u>
026	City		2000-02, 9999	<u>02,04,<b>08</b>,09</u> , <u>94</u>
027	C-Max	Hybrid <b>(SE, Titanium)</b> , Energi, SE, SEL	2013- <b>18</b> ,9999	<u>05</u>
031	English Ford	Cortina, Anglia, Zephyr/ Zodiac Mark III	1946-70,9999	02,04,06,08,09
032	Fiesta (For 2018 on, code	Sport, Ghia, S, SE, SES, SEL,	1978-80, 2011-	03-05,09
	as vehicle model 398)	Titanium, ST	<b>17</b> , 9999	
033	Festiva	L, GL	1988-93,9999	<u>03</u>
034	Laser		1993-94,9999	02,03,09
035	Contour	Sport, LX, SE, SVT	1994-2001,	<u>04</u>
			9999	
036	Aspire		1994-97,9999	<u>03,05,07,09</u>
037	Focus	ZX3, LX, SE, ZTS, SVT, ZX4,	2000- <b>18</b> ,9999	<u>02-06,<b>08</b>,09</u>
		ZX4, ST, ZX5, ZXW, S, SES,		
		SEL, SE, Titanium, Electric, ST,		
		RS		
038	GT		2004-08, <b>2018,</b> 9999	<u>01,02,09</u>
398	Other (automobile)	Deluxe, Ford Six, Mainline,	1923- <b>2018</b> ,	<u>01-09</u> , <u>10,11</u> , <u>94</u>
		Crestline, Futura, Galaxie,	9999	
		Model A, Fiesta (2018 on)		
399	Unknown (automobile)		1923- <b>2018</b> ,	<u>01-09, 10,11, 94</u>
			9999	

Codes	Models	Includes	Model Years	Body Types
401	Bronco (thru 1977)/	Eddie Bauer, XL, XLT,	1966-77; 1983-	<u>14</u>
	Bronco II/Explorer/	Explorer (1990 on) XLS,	<b>2018</b> , 9999	
	Explorer Sport	Explorer Sport (Value, Choice		
		Premium), NBX, Adrenalin,		
		Ironman, Police Interceptor,		
		Base, Limited, Platinum		
402	Escape	XLS (Value, Sport, V6	2001- <b>18</b> ,9999	<u>14</u>
		Choice/Premium), XLT		
		(Choice, Premium, Sport),		
		Hybrid (Base, Limited), No		
		Boundaries, Limited, S, SE,		
		SEL, Titanium		
403	EcoSport	S, SE, SES	2018	<u>14</u>
421	Bronco-full-size (1978-on)	Eddie Bauer, Custom, XL, XLT	1978-96,9999	<u>15</u>

Codes	Models	Includes	Model Years	Body Types
422	Expedition	EL, XLS, XLT (4x4,4x2), Eddie Bauer (4x4,4x2), NBX, Sport, NBX, Limited, King Ranch, Funk Master Flex Edition, XL, Platinum, <i>XLT MAX, Limited</i> <i>MAX, Platinum MAX</i>	1996- <b>2018</b> , 9999	<u>15</u>
423	Excursion	XLT, Limited (LTD), Ultimate, Premium, XLS, Eddie Bauer	2000-05,9999	<u>16</u>
441	Aerostar	XLT, Cargo Van	1985-97,9999	20
442	Windstar	GL, LX, XLT, Splash, Cargo Limited, SE, SEL	1995-2003, 9999	<u>20</u>
443	Freestar	Base, LX, SE, S, SEL, SES, Limited	2004-07,9999	<u>20</u>
444	Transit Connect	XL, (Van, Wagon), XLT (Van, Wagon), Premium, EV, Titanium	2010- <b>18</b> , 9999	<u>20</u>
461	E-Series Van/Econoline	Clubwagon (XL, XLT), Chateau, (XL, XLT), Parcel Van, Econoline Wagon E-150 (XL/ XLT/ Premium); E-350 XL/XLT/ Extended), E-250 (EXT)	1960- <b>2018</b> , 9999	<u>21,22,28,29</u>
462	Transit	Van, Wagon (XL, XLT)	2014- <b>18</b> ,9999	<u>21, 28, 29</u>
470	Van Derivative		1960- <b>2018</b> , 9999	<u>28, 29</u>
471	Ranger	Supercab, 4x4, STX, SL, SLT, Splash, XL (Standard/ Super Cab), XLT, Tremor (Standard/Super Cab/Off- Road/FX4), Edge (Regular/ Super Cab), EV* (electric), Level II, Sport	1982-2012, 9999	<u>32,<b>34,39</b>, 40, 42</u>
473	Explorer Sport Trac	2WD/4WD, Value, Choice, Premium, XLS, XLT, Adrenalin, Limited	2001-11,9999	<u>34</u>

Codes	Models	Includes	Model Years	Body Types
481	F-Series pickup	<ul> <li>F100, F150-F350, (XL, XLT,</li> <li>Crew Cab, Super Cab, Regular</li> <li>Cab, Lariat, Super Duty,</li> <li>Flareside, Styleside, SVT</li> <li>Lightning, Fireside, Harley-</li> <li>Davidson Edition, King Ranch,</li> <li>SuperCrew, STX, Heritage</li> <li>Edition, Sport Edition, FX4,</li> <li>FX2), F450 (10,000 GVWR</li> <li>and under) (see model 880</li> <li>for F450 &gt;10,000 GVWR),</li> <li>Amarillo Package, Platinum,</li> <li>Cabala's, STX, SVT Raptor,</li> <li>Limited</li> </ul>	1940- <b>2018</b> , 9999	<u>32,<b>34</b>,39</u> , <u>40</u> , <u>42</u>
498	Other (light truck)		1972- <b>2018</b> , 9999	<u>14-16</u> , <b>19</b> , 20,21,28, 29, <u>32,<b>34</b>,<b>39</b>, 40,41</u> , 42, 45,48
499	Unknown (light truck)		1928- <b>2018</b> , 9999	<u>14-16,19</u> , <u>20-22</u> , <u>28,29</u> , <u>32</u> , <b>34</b> ,39, <u>40,41</u> , <u>42</u> , <u>45,48-</u> <u>49</u>

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck-based, F-550	1956- <b>2018</b> ,	<u>65,73</u>
			9999	

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
870	Medium/Heavy Van-Based	Econoline E350, E450, Transit	1956- <b>2018</b> ,	<u>55, 61-64</u>
	Vehicle		9999	
880	Medium/Heavy Pickup	Super Duty 350, F450/550,	1953- <b>2018</b> ,	<u>67</u>
	(pickup-style only – over	Lariat, XL, XLT, King Ranch	9999	
	10,000 lbs.)			
881	Medium/Heavy – CBE	F-5 thru F-8, L-series, FT-	1953- <b>2018</b> ,	<u>60-64, 66, 71, 72,</u>
		series, Super Duty F-Series:	9999	<u>78</u>
		450/550/650/750/800 (does		
		not include pickup style)		
882	Medium/Heavy – COE low	C/CT series, LCF	1964- <b>2018</b> ,	<u>60-64, 66, 71, 72,</u>
	entry		9999	<u>78</u>
883	Medium/Heavy – COE high	C/CLT series, LCF	1967- <b>2018</b> ,	<u>60-64, 66, 71, 72,</u>
	entry		9999	<u>78</u>
884	Medium/Heavy –		1956- <b>2018</b> ,	<u>60-64, 66, 71, 72,</u>
	Unknown engine location		9999	<u>78</u>
890	Medium/Heavy – COE		1956- <b>2018</b> ,	<u>60-64, 66, 71, 72,</u>
	entry position unknown		9999	<u>78</u>

Codes	Models	Includes	Model Years	Body Types
898	Other (medium/heavy		1965- <b>2018</b> ,	<u>60-64, 66, 71, 72,</u>
	truck)		9999	<u>78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional	B-series (not van based), F-	1964- <b>2018</b> ,	<u>50, 52, 58, 59</u>
	(Engine out front)	Series	9999	
988	Other (bus)		1940- <b>2018</b> ,	<u>50, 52, 58, 59</u>
			9999	
989	Unknown (bus)		1940- <b>2018</b> ,	<u>50, 52, 58, 59</u>
			9999	

\*\* Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1940- <b>2018</b> ,	<u>92,93,97</u>
			9999	
999	Unknown (FORD)		1923- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
			9999	

# MAKE: GMC (23) (GMC)

### **AUTOMOBILES**

Codes	Models	Includes	Model Years	Body Types
007	Caballero		1965-87,9999	<u>10</u>
008	Acadia (2007-2012 only. For 2013 on see model 423.)	SLE, SLT, Denali, SL	2007-12,9999	<u>06</u>
399	Unknown (automobile)		1965-2012, 9999	<u>06, 10</u>

Codes	Models	Includes	Model Years	Body Types
401	Jimmy/Typhoon/Envoy	S-15 based, (100.5 WB), T15,	1983-2009,	<u>14</u>
		SLE, SL, SLS, SLT, XL, XUV,	9999	
		Denali		
402	Terrain	<b>SL,</b> SLE, SLT, Denali <b>, Diesel</b>	2010- <b>18</b> , 9999	<u>14</u>
421	Full-size Jimmy/Yukon	Fullsize pickup based, K5,	1969- <b>2018</b> ,	<u>15</u>
		K18, SL, SLE, SLT, SLS,	9999	
		Diamond Edition, Yukon		
		Denali, Denali, Hybrid,		
		Premium Edition		
422	Suburban/Yukon XL (2004	Yukon XL (Denali -1500-	2004- <b>18</b> ,9999	<u>15</u>
	on; see 431 for 1950-	2500), SLE, SLT, Hybrid		
	2003)			

Codes	Models	Includes	Model Years	Body Types
423	Acadia (2013 on. For 2007-2012 see model 008.)	FWD/AWD, Denali, <i>SL</i> , SLE, SLT <b>, All Terrain</b>	2013- <b>18</b> ,9999	<u>15</u>
431	Suburban/Yukon XL (1950- 2003 only; see 422 for 2004 on)	all models, SLE, C16, C26, K16, K26, C1500-2500, K1500-2500, Yukon XL (Denali -1500-2500)	1950-2003, 9999	<u>16</u>
441	Safari (Minivan)	SLT, SLX, SLE, M15, L15, SL	1985-2005, 9999	<u>20</u>
461	G-series van/Savana	Rally Van, Vandura, G15-G35, Savana (G1500-3500) SLT, Extended, SLE, LS, LT, Uplifter, WT, Cargo	1965- <b>2018</b> , 9999	<u>21,22,28,29</u>
466	P-series van		1965- <b>2018</b> , 9999	<u>22,28,29</u>
470	Van derivative	Hicube, Magna Van, Value Van, Parcel Van	1965- <b>2018</b> , 9999	<u>28,29</u>
471	S15/T15/Sonoma	4 X 4, Syclone, SL, SLS, SLE, Extended/Crew Cab, ZR2, ZRX, ZR5	1982-2004, 9999	<u>32,<b>34,39</b>, 40, 42</u>
472	Canyon	Base, SLE, SL, SLT, Z71, Z85, Work Truck, Crew Cab, Extended Cab <b>, Denali, All</b> <b>Terrain</b>	2004- <b>18</b> , 9999	<u>34</u>
481	C, K, R, V-series pickup/ Sierra	Excluding Yukon, C15-C35, K15-K35, R15-R35, V15-V35, Sierra, C/K1500, 2500, 3500, Sportside, X81, SL, Special, SLE, Classic, Extended Cab, Denali, 1500HD/2500HD, C3, Hybrid, SLT, Work Truck, SSA	1940- <b>2018</b> , 9999	<u>32,<b>34</b>,39</u> , <u>40</u> , <u>42</u>
498	Other (light truck)		1930- <b>2018</b> , 9999	<u>14-16,<b>19</b></u> , <u>20-</u> <u>22,28, 29</u> , <u><b>32,34</b></u> 40, 42, 45,48
499	Unknown (light truck)		1951- <b>2018</b> , 9999	<u>14-16,19, 20-22,</u> 28,29, <b>32,34</b> ,39, 40, 42, 45,48,49

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home		1950- <b>2018</b> ,	<u>65,73</u>
			9999	

### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
870	Medium/Heavy Van-	Savana 3500, 4500	1965- <b>2018</b> ,	<u>55, 61-64</u>
	Based Vehicle		9999	
880	Medium/Heavy Pickup		1953- <b>2018</b> ,	<u>67</u>
	(pickup-style only – over		9999	
	10,000 lbs.)			
881	Medium/Heavy – CBE	W5000/6000/7000 series,	1967- <b>2018</b> ,	<u>60-64,66,</u>
		Kodiak Brigadier/General	9999	<u>71,72,78</u>
		models, Top Kick		
882	Medium/Heavy – COE low	W6000/W7000, all other	1968- <b>2018</b> ,	<u>60-64,66,</u>
	entry	COE, low entry, W/WT Series	9999	<u>71,72,78</u>
883	Medium/Heavy – COE	Astro 95, all other COE, high	1969- <b>2018</b> ,	<u>60-64,66,</u>
	high entry	entry, T Series	9999	<u>71,72,78</u>
884	Medium/Heavy –		1948- <b>2018</b> ,	<u>60-64,66,</u>
	Unknown engine location		9999	<u>71,72,78</u>
890	Medium/Heavy – COE		1967- <b>2018</b> ,	<u>60-64,66,</u>
	entry position unknown		9999	<u>71,72,78</u>
898	Other (medium/heavy		1930- <b>2018</b> ,	<u>60-64,66,</u>
	truck)		9999	71,72,78

### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional	B6000	1950- <b>2018</b> ,	<u>50-52,58,59</u>
	(Engine out front)		9999	
988	Other (bus)		1965- <b>2018</b> ,	<u>50,58,59</u>
			9999	
989	Unknown (bus)		1950- <b>2018</b> ,	<u>50-52,58,59</u>
			9999	

\*\* Use code "989" (bus) if the frontal plane or the engine location is unknown.

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2018</b> ,	<u>92,93,97</u>
			9999	
999	Unknown (GMC)		1940- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
			9999	

# MAKE: Grumman/Grumman-Olson (25) (GRUM)

Codes	Models	Includes	Model Years	Body Types
401	LLV	Postal vehicle	1987-2004,	22
			9999	
441	Step-in van	Multi-stop, step van	1987-2004,	<u>22</u>
			9999	
498	Other (light truck)		1987-2004,	22
			9999	

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1987-2004,	<u>22</u>
			9999	

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1987-2004,	<u>60-64,66,</u>
			9999	<u>71,72,78</u>
882	Medium/Heavy – COE low		1987-2004,	<u>60-64,66,</u>
	entry		9999	<u>71,72,78</u>
883	Medium/Heavy - COE high		1987-2004,	<u>60-64,66,</u>
	entry		9999	<u>71,72,78</u>
884	Medium/Heavy - engine		1987-2004,	<u>60-64,66,</u>
	location unknown		9999	<u>71,72,78</u>
890	Medium/Heavy - entry		1987-2004,	<u>60-64,66,</u>
	position unknown		9999	<u>71,72,78</u>
898	Other (medium/heavy		1987-2004,	<u>60-64,66,</u>
	truck)		9999	<u>71,72,78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
983	Bus**: Flat front, rear	Transit	1950-2004,	<u>50-52,58,59</u>
	engine		9999	
988	Other (bus)		1950-2004,	<u>50-52,58,59</u>
			9999	
989	Unknown (bus)		1950-2004,	<u>50-52,58,59</u>
			9999	

\*\* Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (GRUMMAN/GRUMMAN-		1950-2004,	<u>79</u> , <u>99</u>
	OLSON)		9999	

# MAKE: Honda (37) (HOND)

(Acura: See "54")

Codes	Models	Includes	Model Years	Body Types
031	Civic/CRX, del Sol	1300, 1500, CVCC, DX, EX,	1973- <b>2018</b> ,	<u>02-09</u>
		VX, CX, FE, CRX, CRX Si, S, Si,	9999	
		HF, LX, 4WD Wagon, GX		
		(NGV), HX, VTEC, VP, Si, Civic,		
		Hybrid, Special Edition, EX-L,		
		DX-VP, LX-S, Natural Gas,		
		Sport, Sport Touring, <i>EX-T</i> ,		
		LX-P, Touring, Type R		

Codes	Models	Includes	Model Years	Body Types
<b>Codes</b> 032	Models Accord	IncludesLX (V-6, ULEV), LXI, DX, CVCC,SE-I, LX-I, V-6, SJE, SME, SMH,SMK, EX (Wagon, ULEV, V-6),SE (ULEV), Special Edition,Hybrid (Base, EX-L, Touring),Value Package, LX-S, LX-P,EX-L, Crosstour (EX, EX-L,EX(V6), EX-L (V6)), Premium,Plug-In Hybrid, Sport, Hybrid	Model Years 1976- <b>2018</b> , 9999	Body Types 02-09
		(EX-L, Touring), Touring, Sport Special Edition, EX-T		
033	Prelude	S, Si, VTEC, SNF, SH, SE	1979-2001, 9999	<u>02</u>
034	600	Coupe, Sedan	1968-72, 9999	<u>02</u>
035	S2000	Roadster, CR	2000-09, 9999	<u>01</u>
036	EV Plus*	*Electric vehicle (EV+)	1997-2000, 9999	<u>03</u>
037	Insight	*(Gasoline-Electric), MT/CVT, LX, EX	2000-06, 2010- 14, 9999	<u>03,05,09</u>
038	FCX <b>/Clarity</b>	Hydrogen Vehicle, Clarity, <i>Electric, Fuel Cell</i>	2004-14, <b>2017-</b> <b>18,</b> 9999	<u>03,05,09</u>
039	Fit	Base, DX, LX, Sport, EV, EX, EX-L	2006- <b>18</b> , 9999	<u>05</u>
041	CR-Z	EX, Hybrid, Sport <b>, LX, EX-L</b>	2010-16, 9999	<u>03</u>
398	Other (automobile)		1968- <b>2018</b> , 9999	01-09
399	Unknown (automobile)		1968- <b>2018</b> , 9999	<u>01-09</u>

Codes	Models	Includes	Model Years	Body Types
401	Passport	LX, EX, DX, EX-L	1994-2002,	<u>14</u>
			9999	
402	CR-V	LX, EX, Special Edition (SE),	1997- <b>2018</b> ,	<u>14</u>
		SC, EX-L, Touring	9999	
403	Element	DX, EX, EX-P, LX, SC, Dog	2003-11, 9999	<u>14</u>
		Friendly		
404	HR-V	EX, EX-L, LX	2016- <b>18</b> , 9999	<u>14</u>
421	Pilot	EX, EX-L, LX, SE, Value	2003- <b>18</b> ,9999	<u>15</u>
		Package, Touring, Elite		
441	Odyssey	LX, EX, EX-L (Res, NAVI),	1995- <b>2018</b> ,	<u>20</u>
		Touring, Touring Elite, SE,	9999	
		Special Edition		
471	Ridgeline	RT, RTL, RTL-T, RTL-E, RTS,	2006-14, 2017 <b>-</b>	<u>34</u>
		RTX, Sport, Black Edition	<b>18</b> , 9999	

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1994- <b>2018</b> ,	<u>14,15,19</u> , <u>20</u> , <u><b>34</b>, </u>
			9999	<u>49</u>

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50 cc		1978- <b>2018</b> ,	<u>80, 81,83,<b>84</b>,88,</u>
			9999	<u>89</u>
702	51-124 сс		1965- <b>2018</b> ,	<u>80, 81,83,<b>84,</b>88,</u>
			9999	<u>89</u>
703	125-349 сс		1965- <b>2018</b> ,	<u>80, 83, <b>84</b>, 88,</u>
			9999	<u>89</u>
704	350-449 сс		1965- <b>2018</b> ,	<u>80, 83, <b>84</b>, 88,</u>
			9999	<u>89</u>
705	450-749 сс		1970- <b>2018</b> ,	<u>80, 83, <b>84</b>, 88,</u>
			9999	<u>89</u>
706	750 cc or greater		1970- <b>2018</b> ,	<u>80,82, 83,<b>84,87,</b></u>
			9999	<u>88, 89</u>
709	Unknown cc		1965- <b>2018</b> ,	<u>80, 81, 83, <b>84,</b></u>
			9999	<u>88, 89</u>

#### ALL TERRAIN VEHICLES

Codes	Models	Includes	Model Years	Body Types
732	51-124cc		1972- <b>2018</b> ,	<u>90</u> , <u><b>96</b></u>
			9999	
733	125-349cc		1972- <b>2018</b> ,	<u>90</u> , <u><b>96</b></u>
			9999	
734	350cc or greater		1996- <b>2018</b> ,	<u>90</u> , <u><b>96</b></u>
			9999	
739	Unknown cc		1972- <b>2018</b> ,	<u>90</u> , <u><b>96</b></u>
			9999	

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)	Go Carts	1968- <b>2018</b> ,	<u>95, 97*</u>
			9999	
999	Unknown (HONDA)		1965- <b>2018</b> ,	<u>49, 99</u>
			9999	

# MAKE: Hyundai (55) (HYUN)

Codes	Models	Includes	Model Years	Body Types
031	Pony	Pony Excel (Foreign)	1979-88,9999	02,03,09
032	Excel	GL, GLS, GS	1984-94,9999	<u>03-05,07,09</u>
033	Sonata	GL, GLS, LX, SE, Limited, Hybrid (SE, Limited), 2.0T (Sport, Limited), Sport, Eco, Plug-in	1989- <b>2018</b> , 9999	<u>04</u>
034	Scoupe	LS, Turbo	1991-95,9999	<u>02</u>
035	Elantra	GLS, GL, GT, Limited, SE, Touring (GLS, SE), GS, Sport, Value Edition, ECO	1992- <b>2018</b> , 9999	<u>02, 04-06,<b>08,</b>09</u>
036	Accent	L, GL, GS, Gsi, GT, GLS, SE, Blue, Sport <b>, Limited, Value</b> <i>Edition, SEL</i>	1995- <b>2018</b> , 9999	03-05,07,09
037	Tiburon	FX, GT, GS, SE, Limited	1997-2008, 9999	02,03,09
038	XG300(2001)/ XG350 (2002 on)	L	2001-05,9999	<u>04</u>
039	Azera (For 2018 on, code as vehicle model 398)	SE, Limited, GLS	2006- <b>17</b> ,9999	<u>04</u>
040	Equus	Signature, Ultimate	2011-16,9999	<u>04</u>
041	Genesis (For 2017 on, see models 043 and 044)	3.8, 4.6, 2.0T, R-Spec, Grand Touring, Premium, Track, 5.0 R-Spec, Ultimate	2009-16,9999	<u>02,04,<b>08,</b>09</u>
042	Veloster	Base, Turbo, Re-Mix, R-Spec, RE-FLEX Edition, Rally Edition	2012- <b>17</b> , <b>2019,</b> 9999	<u>03, <b>09</b></u>
043	Genesis (G80)	Standard, Premium, Sport, Ultimate (RWD/AWD)	2017-18, 9999	<u>04</u>
044	Genesis (G90)	Premium, Ultimate (RWD/AWD)	2017-18, 9999	<u>04</u>
045	Ioniq	Electric, Hybrid, Plug-In Hybrid	2017-18, 9999	<u>05</u>
398	Other (automobile)	Azera (2018 on)	1984- <b>2018</b> , 9999	<u>02-09</u>
399	Unknown (automobile)		1984- <b>2018</b> , 9999	<u>02-09</u>

Codes	Models	Includes	Model Years	Body Types
401	Santa Fe	GL, GLS, LX, Limited <b>(Base,</b> <b>Ultimate)</b> , SE <b>(Base,</b> <b>Ultimate)</b> , Sport (Base, 2.0T Ultimate), 2.0T	2001- <b>18</b> ,9999	<u>14</u>
402	Tucson	GL, GLS, LX, Limited, SE, Fuel Cell, ECO, Sport	2005- <b>18</b> ,9999	<u>14</u>

#### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
403	Veracruz (2007 only)	GLS, Limited, SE	2007	<u>14</u>
404	Копа		2018	<u>14</u>
421	Veracruz (2008 on; see 403 for 2007 only)	GLS, Limited, SE	2008-12,9999	<u>15</u>
441	Entourage	GLS, Limited, SE	2007-09,9999	<u>20</u>
499	Unknown (light truck)		2001- <b>18</b> ,9999	<u>14,15,19</u> , <u>20</u>

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (HYUNDAI)		1979- <b>2018</b> ,	<u>49</u> , <u>99</u>
			9999	

### MAKE: Imperial (08) (CHRY)

#### **AUTOMOBILES** Codes Models Includes **Model Years Body Types** 010 LeBaron, Mark Cross, Crown 01,02,04,08,09 Imperial 1954-75,9999 Imperial 398 Other (automobile) 1965-75,9999 01-09 ---Unknown (automobile) 399 ---1965-75,9999 01-09

# MAKE: Infiniti (58) (INFI)

Codes	Models	Includes	Model Years	Body Types
031	M30		1990-92,9999	01,02,09
032	Q45	Standard Touring, Q45t,	1990-2006,	<u>04</u>
		Luxury , Sport, Premium	9999	
033	G20	G20t, Touring, Standard,	1991-96; 1999-	<u>04</u>
		Luxury	2002, 9999	
034	J30		1993-97,9999	<u>04</u>
035	130	Standard, Touring, Luxury	1996-2001, 9999	<u>04</u>
036	135	Touring, Luxury	2002-04,9999	<u>04</u>
037	G25/G35/G37	x, 6MT, Journey, Sport, Special Edition, IPL	2003-13,9999	<u>01,02,04</u> , <b>08,</b> 09
038	M35/M37/M45/M56	Sport, x, Hybrid	2003-13,9999	04
039	FX35/FX37/FX45/FX50		2003-13,9999	<u>06</u>
040	EX35	Journey	2008-13,9999	<u>06</u>
041	Q50	Base (3.7 Premium/AWD/ Hybrid) S (3.7 Premium/ AWD/Hybrid), Eau Rogue,	2014- <b>18</b> ,9999	<u>04</u>
		2.0t (AWD, Premium, Sport, Pure, Luxe), 3.0t (Premium,		
		Sport, Luxe, AWD), Red		
		Sport 400, Hybrid (Base,		
		Premium, Luxe)		

Codes	Models	Includes	Model Years	Body Types
042	Q60	Journey, AWD, 6MT, IPL	2014- <b>18</b> ,9999	<u>01, 02, 09</u>
		(Base and 6MT), S <b>, Neiman</b>		
		Marcus, 2.0t (Base, AWD,		
		Premium, Pure, Luxe), 3.0t		
		(Premium, AWD, Luxe,		
		Sport), Sport (Base, AWD),		
		Red Sport 400 (Base, AWD)		
043	Q70	Hybrid, 3.7 (Base, Luxe,	2014- <b>18</b> ,9999	<u>04</u>
		AWD), 5.6 (Base, Luxe,		
		<i>AWD</i> ) <i>∟</i> 3.7 (Base, Luxe,		
		AWD), 5.6 (Base, Luxe, AWD)		
044	QX50	Base, AWD, Journey	2014- <b>19</b> ,9999	<u>06</u>
045	Q40		2015-16,9999	<u>04</u>
047	QX30	Luxury, Premium, Sport	2017-18,9999	<u>05</u>
398	Other (automobile)		1990- <b>2018</b> ,	<u>01,02,04,06,</u>
			9999	<u>08,09</u>
399	Unknown (automobile)		1990- <b>2018</b> ,	01,02,04,06,
			9999	<u>08,09</u>

Codes	Models	Includes	Model Years	Body Types
401	QX4	Luxury	1997-2003,	<u>14</u>
			9999	
402	JX35	Luxury, AWD	2013	<u>14</u>
403	QX60	3.5, AWD, Hybrid	2014- <b>18</b> ,9999	<u>14</u>
404	QX70	3.7, 5.0, AWD	2014-17,9999	<u>14</u>
421	QX56		2004-13,9999	<u>15</u>
422	QX80	Base, AWD, 4WD, Limited	2014- <b>18</b> ,9999	<u>15</u>
499	Unknown (light truck)		1997- <b>2018</b> ,	<u>14,15,19</u>
			9999	

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (INFINITI)		1990- <b>2018</b> ,	<u>49</u> , <u>99</u>
			9999	

# MAKE: Isuzu (38) (ISU)

Codes	Models	Includes	Model Years	Body Types
031	I-Mark	S, RS, Turbo, DOHC	1981-90,9999	02-04,08,09
032	Impulse	Turbo, RS	1983-92,9999	<u>02,03,09</u>
033	Stylus		1991-94,9999	<u>04</u>
398	Other (automobile)		1981-94,9999	<u>02-04,08,09</u>
399	Unknown (automobile)		1981-94,9999	<u>02-04,08,09</u>

Codes	Models	Includes	Model Years	Body Types
401	Trooper/Trooper II	Deluxe, LS, S, LTD	1984-2002, 9999	<u>14</u>
402	Rodeo/ Rodeo Sport	S, LS, LSE	1991-2004, 9999	<u>14</u>
403	Amigo		1989-94; 1998- 2000, 9999	<u>14</u>
404	VehiCROSS	VXO	1999-2001, 9999	<u>14</u>
405	Axiom	XS	2002-04,9999	<u>14</u>
421	Ascender	LS, S, Limited, Luxury	2003-08,9999	<u>15</u>
441	Oasis	S, LS	1996-99,9999	<u>20</u>
471	P'up (pickup)	4 X 4	1976-95,9999	<u>32,<b>34,39</b></u>
472	Hombre	S, XS, XS Space Cab	1996-2000, 9999	<u>32,<b>34,39</b>, 40, 42</u>
473	i-280/i-290	S, LS, Luxury	2006-2008, 9999	<u>34</u>
474	i-350/i-370	LS, Limited, S	2006-2008, 9999	<u>34</u>
498	Other (light truck)		1981-2008, 9999	<u>14,15, 20,</u> 32, <b>34,39</b> , <u>40, 42</u>
499	Unknown (light truck)		1981-2008, 9999	14,15,19, 20,           32, <b>34</b> ,39, 40, 42,           48,49

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1981-2004,	<u>60-64,66,</u>
			9999	<u>71,72,78</u>
882	Medium/Heavy – COE low	NOR, NPR, NQR, N Series	1981- <b>2018</b> ,	<u>60-64,66,</u>
	entry		9999	<u>71,72,78</u>
883	Medium/Heavy – COE,	FRR, FRRI, FSR, FTR, FVR, F	1981- <b>2018</b> ,	<u>60-64,66,</u>
	high entry	Series	9999	<u>71,72,78</u>
884	Medium/Heavy –		1981- <b>2018</b> ,	<u>60-64,66,</u>
	Unknown engine location		9999	<u>71,72,78</u>
890	Medium/Heavy – COE		1981- <b>2018</b> ,	<u>60-64,66,</u>
	entry position unknown		9999	<u>71,72,78</u>
898	Other (medium/heavy		1981- <b>2018</b> ,	<u>60-64,66,</u>
	truck)		9999	<u>71,72,78, 97</u>

### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional		1981- <b>2018</b> ,	<u>50-52,58,59</u>
	(Engine out front)		9999	
982	Bus: Front engine, Flat		1981- <b>2018</b> ,	<u>50-52,58,59</u>
	front		9999	

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
983	Bus: Rear engine Flat		1981- <b>2018</b> ,	<u>50-52,58,59</u>
	front		9999	
988	Other (bus)		1981- <b>2018</b> ,	<u>50-52,58,59</u>
			9999	
989	Unknown (bus)		1981- <b>2018</b> ,	50-52,58,59
			9999	

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (ISUZU)		1981- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
			9999	

# MAKE: Jaguar (39) (JAGU)

Codes	Models	Includes	Model Years	Body Types
031	XJ-S, XK8 Coupe	S, SC, GT, H.E.	1976-2008, 9999	01,02,09
032	XJ/ XJL/ XJ6/ 12/ XJR/ XJ8/ XJ8L Sedan/ Coupe	Mk II, Mk X, XJ,3.85, 3.8, 340/420 Sedan; XJ8(LWB, L, Vanden Plas, Sport); XJ6(L), C, L, Vanden Plas, III, GT, Super 8, Limited, Portfolio, Supersport, Supercharged, Ultimate, Standard Wheelbase, Long Wheelbase, <i>R-Sport</i>	1949- <b>2018</b> , 9999	02,04,08,09
033	ХК-Е	V12, Roadster, 120,140, 150, 2+2	1946-74,9999	01-03,09
034	S-Туре	3.0, 4.0, 4.2, Base, Sport, L, R, VDP Edition	2000-08,9999	04
035	XKR/XK	Victory Edition, Portfolio, 175 Limited Edition, Black Pack, XKR-S, Touring, GT, Final Fifty	2000-15, 9999	<u>01-03,09</u>
036	Х-Туре	2.5, 3.0, Sport, VDP Edition	2002-08, 9999	04,06,09
037	XF/XF-R	<ul> <li>4.2 Luxury, S, Premium</li> <li>Luxury, Supercharged, 3.0,</li> <li>2.0T, Portfolio, Sport,</li> <li>Prestige, <i>R-Sport, S,</i></li> <li><i>Sportbrake (First Edition, S)</i></li> </ul>	2008- <b>18</b> , 9999	<u>04,<b>06,09</b></u>
038	F-Туре	S, V8, Project 7, Premium, SVR, Type R, British Design Edition, R-Dynamic, 400 Sport	2014- <b>18</b> , 9999	01, 03, 09
039	XE	Premium, Prestige, R-Sport	2016- <b>18</b> , 9999	04

Codes	Models	Includes	Model Years	Body Types
398	Other (automobile)		1949- <b>2018</b> ,	01-04,06,08,09
			9999	
399	Unknown (automobile)		1949- <b>2018</b> ,	01-04,06,08,09
			9999	

Codes	Models	Includes	Model Years	Body Types
401	F-Pace	20d/35t (Premium, Prestige, First Edition, Sport, R-Sport)	2017 <b>-18,9999</b>	14
402	E-Pace	Base, S, SE, R-Dynamic, First Edition	2018	<u>14</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (JAGUAR)		1946- <b>2018</b> ,	<u>49</u> , <u>99</u>
			9999	

# MAKE: Jeep\* (Includes Willys\*\*/Kaiser-Jeep) (02) (AMER)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
001	Compass	Base, Sport, Limited, Latitude, Altitude, High Altitude, <i>SE, 75th</i> <i>Anniversary Edition</i>	2007- <b>18</b> ,9999	<u>06</u>

Codes	Models	Includes	Model Years	Body Types
401	CJ-2/CJ-3/CJ-4	Military	1940-66,9999	<u>14</u>
402	CJ-5/CJ-6/CJ-7/CJ-8	Scrambler, Renegade, Golden	1967-93,9999	<u>14</u>
		Eagle, Laredo, Wrangler,		
403	YJ series/Wrangler	SE, Sport (Base, S), Sahara, X,	1986-95; 1997-	<u>14</u>
		Rubicon (Base, Hard Rock),	<b>2018</b> , 9999	
		Unlimited (Altitude, Dragon,		
		Freedom, Polar, Rubicon X.		
		Willys Wheeler, Sport, S,		
		Sahara), Islander, Call of		
		Duty: Black Ops Edition,		
		Moab, Altitude, Freedom, Rio		
		Grande, 60th/65th		
		Anniversary Edition, Apex,		
		Columbia, Golden Eagle,		
		Rocky Mountain, Willys,		
		Willys Wheeler (Base, W),		
		Black Bear, 75th Anniversary		
		Edition, Winter, Rubicon		
		Recon		

Codes	Models	Includes	Model Years	Body Types
404	Cherokee (1984-on) (For Grand Cherokee for 2014 on use 02-422.)	Limited, Laredo, Pioneer, Sport, Grand Cherokee, TSi, Briarwood, Country, RHD, SE, Classic, Overland, Special Edition, SRT8, Summit, Laredo X, Overland Summit, Altitude, Trail Hawk, Sport, Latitude (Base, Plus), Limited, 75 <sup>th</sup> Anniversary, Sport Altitude, High Altitude	1984- <b>2018</b> , 9999	14
405	Liberty	Sport, Limited Edition, Renegade, Columbia Edition, Rocky Mountain Edition, CRD, Special Edition, Latitude, Jet	2002-13,9999	<u>14</u>
406	Commander	Base, Limited, Overland, Sport, Rocky Mountain	2006-10,9999	<u>14</u>
407	Patriot	Sport <b>(Base, SE)</b> , Limited, Latitude, X, Altitude, High Altitude, Freedom Edition, <b>75th Anniversary Edition</b>	2007- <b>17</b> ,9999	<u>14</u>
408	Renegade	Trail Hawk, Latitude, Sport, Altitude, Limited, Desert Hawk, 75th Anniversary Edition	2015- <b>18</b> ,9999	<u>14</u>
421	Cherokee (thru 1983)	Wide Track, Chief, Commando, Jeepster	1969-83,9999	<u>15</u>
422	Grand Cherokee (For 2014 on. Use model 404 for model years prior to 2013.)	Laredo (Base/E), Limited, Overland, Summit, SRT (Laredo [Base, E] 75th Anniversary Edition [Base, E], Altitude, Limited, Overland, Summit), Trailhawk, 75th Anniversary Edition (Base, Limited), Altitude, Latitude (Base, Plus)	2014- <b>19</b> ,9999	<u>15</u>
431	Grand Wagoneer	Custom, Brougham Limited, Wagoneer	1971-91; 1993,9999	<u>15</u>
481	Pickup	J-10, J-20, Honcho	1940-93,9999	<u>32,<b>34,39</b>, 40, 42</u>
482	Comanche	Chief	1986-92,9999	<u>32</u> , <b>34</b> , <b>39</b> , 40, 42
498	Other (light truck)		1940- <b>2018</b> , 9999	<u>14,15,19</u> , <u>32,<b>34,39</b>, 40,41</u> , <u>42, 45,48,49</u>

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1940- <b>2018</b> ,	<u>14,15,19</u> ,
			9999	<u>32,<b>34,</b>39</u> , <u>40,41</u> ,
				<u>42, 45,48,49</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (JEEP)		1940- <b>2018</b> ,	<u>49</u>
			9999	

\*Note that Jeep DJ-series are coded under MAKE 03, MODEL 466

\*\*Willys Jeep can be coded 401 or 999.

# **MAKE: KIA (63) (KIA)**

Codes	Models	Includes	Model Years	<b>Body Types</b>
031	Sephia	RS, LS, GS	1994-01,9999	<u>04</u>
032	Rio/Rio5	Cinco (Wagon), LX, SX, EX, S	2001- <b>18</b> ,9999	04-06,09
033	Spectra/Spectra5	GS, GSX, GX, LS, LX, EX, SX	2000-09,9999	04,05,09
034	Optima	LX, SE, V6, EX, SX, SX Turbo, Hybrid, Limited, SXL <b>, Plug In,</b> <b>S</b>	2001- <b>18</b> ,9999	04
035	Amanti		2004-10,9999	04
036	Rondo	EX, LX	2007-10,9999	<u>06</u>
037	Soul	Base, sport, +, !, White Tiger, EV, <i>Tarmac</i>	2009- <b>18</b> ,9999	<u>06</u>
038	Forte	2.0 (EX, LX, SX) 2.4 (SX), Koup (EX, LX, SX) 5 (EX, LX, SX), <i>S</i>	2010- <b>18</b> ,9999	02,04,05, <b>08,</b> 0
039	Cadenza	Premium, Limited, Technology	2012- <b>18</b> , 9999	<u>04</u>
040	К900	V6 (Premium, Luxury), V8 (Luxury)	2014- <b>18</b> ,9999	<u>04</u>
041	Stinger		2018	<u>05</u>
398	Other (automobile)		1994- <b>2018</b> , 9999	02,04-06,08,0
399	Unknown (automobile)		1994- <b>2018</b> , 9999	02,04-06,08, 0
		1		1

Codes	Models	Includes	Model Years	<b>Body Types</b>
401	Sportage	EX, LX, 4WD, Limited, SX,	1995-2003, 2005- <b>18</b> , 9999	14
402	Sorento	Base, Turbo EX, EX-V6, L, LX, LX-V6, SX,	2003- <b>18</b> , 9999	14
		SX-V6, Limited, Limited-V6, SXL		_
403	Niro	FE, EX, LX, Touring (Base, Launch Edition, Graphite Edition), Plug-In	2017-18,9999	<u>14</u>

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
421	Borrego	EX, LX, LTD	2008-10,9999	<u>15</u>
441	Sedona	EX, L, LX, L, SX, Limited, SXL	2002-12, 2014-	<u>20</u>
			<b>18</b> , 9999	
498	Other (light truck)		1995- <b>2018</b>	14,15,19, 20
			9999	
499	Unknown (light truck)		1995- <b>2018</b> ,	<u>14,15,19, 20</u>
			9999	

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (KIA)		1994- <b>2018</b> ,	<u>49</u>
			9999	

# MAKE: Lancia (40) (LNCI)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
031	Beta Sedan – HPE	Zagato	1976-82,9999	02,04,06,08,09
032	Zagato		1976-82,9999	<u>01,02,09</u>
033	Scorpion	(Mote Carlo- Europe Only)	1977	<u>02</u>
398	Other (automobile)	Stratos, Fulvia, Flavia, Appia, Aurelia, Aprilia	1946-82,9999	<u>01-09</u>
399	Unknown (automobile)		1946-82,9999	<u>01,02,04,06,</u> <u>08,09</u>

\*NOTE: Lancia did not import in 1980. 1982 - last year imported

### LIGHT TRUCKS

# MAKE: Land Rover (62) (LNDR)

Codes	Models	Includes	Model Years	Body Types
401	Discovery (For 2017 on, see model 425)	SD, SE, SE7, LE, LSE, Series II, Kalahari Edition, S, HSE, G-4 Edition	1994-2004, 9999	<u>14</u>
402	Defender	90	1993-95; 1997, 9999	<u>14</u>
403	Freelander (2004 on; see 422 for 2002-03.)	HSE, SE, S, SE3, G4 Edition	2004-05,9999	<u>14</u>
404	Range Rover Evoque	Pure (Premium, Plus), Prestige, Dynamic, SE ( <b>Base</b> , Premium), HSE ( <b>Base</b> , Dynamic), <b>Autobiography,</b> Landmark Edition, Convertible	2012- <b>18</b> ,9999	14
405	Discovery Sport	HSE (Base, Luxury), SE	2015- <b>18</b> ,9999	<u>14</u>

Codes	Models	Includes	Model Years	Body Types
421	Range Rover	County, County SE, Great Divide, Hunter, LSE, County LWB, 4.0SE, 4.6HSE, S, SE, HSE, Westminster, Limited Edition, Supercharged, Sport (HST, SE, SVR, HSE (Base, Dynamic), Supercharged, Autobiography), Supercharged, HSE-LUX, Autobiography (Base, Black), Standard Wheelbase (Base, HSE, Supercharged, Autobiography, SV Autobiography DYNAMIC), Long Wheelbase (Supercharged, Autobiography, SV Autobiography, SV Autobiography, SV	1987- <b>2018</b> , 9999	<u>15</u>
422	Freelander (2002-03 only; see 403 for 2004 on)	HSE, SE, S, SE3	2002-03,9999	<u>15</u>
423	LR3/LR4	HSE, SE, LUX, Plus, V8, Limited Edition, <i>HSE Silver</i> <i>Edition, Landmark Edition</i>	2005- <b>16</b> ,9999	<u>15</u>
424	LR2	i6, TD4, HSE, LUX, Plus	2007-16,9999	<u>15</u>
425	Discovery (For model years 1994-2004, see model 401)	SE, HSE, HSE Luxury, First Edition, Sport (HSE, HSE Luxury, SE)	2017-18,9999	<u>15</u>
426	Velar	Base, B-Dynamic, First Edition	2018	<u>15</u>
498	Other (light truck)	Land Rover (1948-1990), Range Rover (before 1987)	1948- <b>2018</b> , 9999	<u>14,15<b>,19</b></u>
499	Unknown (light truck)	/	1948- <b>2018</b> , 9999	<u>14,15,19</u>

# MAKE: Lexus (59) (LEXS)

Codes	Models	Includes	Model Years	Body Types
031	ES-250/300/300h/330/	Black Diamond Edition,	1990- <b>2018</b> ,	<u>04</u>
	350	Premium Plus, Ultra Luxury,	9999	
		Hybrid		
032	LS-400/430/460/L/600h/L	LS-F Sport, Hybrid, Nightfall	1990- <b>2018</b> ,	<u>04</u>
		Edition	9999	
033	SC-400/300	2-Door Coupe	1992-2000,	<u>02</u>
			9999	
034	GS-300/350/400/430/	Hybrid, F Sport, <i>Turbo, F</i>	1993- <b>2018</b> ,	<u>04</u>
	450h/460		9999	

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
035	IS-250/300/350/500/200t	SportCross, Sport, F, C, F	2001- <b>18</b> ,9999	01,04,05,09
		Sport, Turbo		
036	SC-430	Special Edition, Pebble Beach	2002-10,9999	<u>01</u>
037	HS 250h	Premium	2010-12,9999	<u>04</u>
038	CT 200h	F Sport	2011-17,9999	<u>05</u>
039	LFA	Standard, Special	2012- <b>17</b> ,9999	01,02,09
040	RC	300, 350, 350h, F Sport,	2015- <b>18</b> ,9999	01,02,09
		Turbo, F		
042	LC Series	500, 500h	2018	<u>02</u>
398	Other (automobile)		1990- <b>2018</b> ,	<u>01,02,04,05,<b>08</b>,</u>
			9999	<u>09</u>
399	Unknown (automobile)		1990- <b>2018</b> ,	<u>01,02,04,05,</u>
			9999	<u>08,09</u>

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	RX300/350	2WD, 4WD	1999-03,9999	<u>14</u>
402	GX470	Sport, Premium	2003-09,9999	<u>14</u>
403	RX330/350/400h/450h	Hybrid, Thundercloud, Mark Levinson Package, F Sport	2004- <b>18</b> ,9999	<u>14</u>
404	GX460	Sport, Premium, Luxury	2010- <b>18</b> , 9999	14
405	NX	200t, <b>300,</b> 300h, F Sport, Hybrid <b>, Turbo</b>	2015- <b>18</b> ,9999	<u>14</u>
421	LX450/470/570		1996- <b>2018</b> , 9999	<u>15</u>
499	Unknown (light truck)		1996- <b>2018</b> , 9999	<u>14,15,19</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (LEXUS)		1990- <b>2018</b> ,	<u>49</u>
			9999	

# MAKE: Lincoln (13) (LINC)

Codes	Models	Includes	Model Years	Body Types
001	Continental (thru '81)/	Continental, (thru '81),	1940-2011,	01,02,04,08,09,
	Town Car	Signature/Designer Series,	9999	<u>11,12</u>
		Town Car ('81 on, body 04		
		only), Cartier, Executive, L,		
		Premium, Ballistic Protection		
		Edition, Ultimate, Designer		
		Series, Limited		
002	Mark	I, II, III, IV, V, VI, VII, VIII LSC,	1956-98,9999	01,02,04,08,09
		Signature/Designer Series		

Codes	Models	Includes	Model Years	Body Types
005	Continental ('82 on)	Signature/Designer Series, Luxury	1982-2002, 9999	<u>02,04,08,09</u> , <u>12</u>
011	Versailles		1977-80,9999	04
012	LS	Convenience, Premium, Sport, Luxury, Ultimate	2000-06,9999	<u>04</u>
013	Zephyr/MKZ	FWD, AWD, Hybrid (Premier 400A, Select 500A, Reserve 600A), 2.0L, 3.7L, EcoBoost, Premiere (100A), Select (200A), Reserve (300A), Black Label (Vineyard, Chalet, Thoroughbred), <b>3.0L</b>	2006- <b>18</b> ,9999	<u>04</u>
014	МКХ	FWD, AWD, Black Label (Modern Heritage, Indulgence, Thoroughbred, The Muse), <i>Premiere, Select,</i> <i>Reserve</i>	2007- <b>18</b> ,9999	<u>06</u>
015	MKS	EcoBoost, 3.7L FWD/AWD	2008-16,9999	04
016	МКТ	EcoBoost, TownCar, 3.5L, 3.7L, <i>Premiere, Reserve</i>	2010- <b>18</b> ,9999	<u>06,09</u> , <u>11,12</u>
017	Continental	Black Label Edition (Rhapsody, Chalet, Thoroughbred), <i>Select,</i> <i>Premiere, Reserve</i>	2017 <b>-18,9999</b>	<u>04</u>
398	Other (automobile)	Cosmopolitan, Capri, Premiere	1940- <b>2018</b> , 9999	<u>01-09, 10-12</u>
399	Unknown (automobile)		1940- <b>2018</b> , 9999	<u>01-09, 10-12</u>

Codes	Models	Includes	Model Years	Body Types
401	Aviator	Premium, Luxury, Ultimate,	2003-06,9999	14
		Kitty Hawk Edition		
402	МКС	FWD, AWD, Black Label	2015- <b>18</b> ,9999	<u>14</u>
		(Modern Heritage, Center		
		Stage, Indulgence),		
		Premiere, Select, Reserve		
421	Navigator	2WD, 4WD, Premium,	1997- <b>2018</b> ,	<u>15</u>
		Luxury, Ultimate, L, 5.4L,	9999	
		Premiere, Select, Reserve		
		(Base, L), Black Label		
481	Blackwood		2002	<u>34</u>
482	Mark LT	2WD, 4WD	2006-08,9999	<u>34</u>
498	Other (light truck)		1997- <b>2018</b> ,	<u>14,15,<b>19</b></u> , <u><b>34</b></u>
			9999	

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1997- <b>2018</b> ,	<u>14,15,<b>19</b>, 49</u>
			9999	

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (LINCOLN)		1990- <b>2018</b> ,	<u>49</u>
			9999	

# MAKE: Mazda (41) (MAZD)

Codes	Models	Includes	Model Years	Body Types
031	RX2		1970-74,9999	02,04,06,08,09
032	RX3		1970-78,9999	02,04,06,08,09
033	RX4		1974-78,9999	02,04,06,08,09
034	RX7	S, GS, GSL, SE	1979-96,9999	<u>01-03,09</u>
035	323/GLC/Protégé/	DX, Protégé (1990-on), DX, LX,	1977-2003,	<u>03-07,09</u>
	Protégé 5	ES, Mazdaspeed	9999	
036	Cosmo		1976-78,9999	<u>02</u>
037	626	GT, GS, GSL, SE, DX, LX, ES	1979-2002,	02,04,05,08,09
			9999	
038	808		1972-77,9999	02,04,06,08,09
039	Mizer		1976	02,04,06,08,09
040	R-100		1950-72,9999	<u>02</u>
041	616/618		1968-72,9999	02,04,08,09
042	1800		1968-72,9999	<u>04,06,09</u>
043	929		1988-95,9999	<u>04</u>
044	MX-6	Turbo, LS, M-Edition	1988-97,9999	<u>02</u>
045	Miata/MX-5	Miata (LS), SE, SV,	1990-97; 1999-	<u>01</u>
		Mazdaspeed, Sport, Touring,	<b>2018</b> , 9999	
		Grand Touring, Club, Special,		
		Special Edition, PRHT, RF		
		(Club, Grand Touring)		
046	MX-3	GS	1992-95,9999	<u>02</u>
047	Millenia	L, S, P, Millennium Edition	1995-02,9999	<u>04</u>
048	MP3	Limited Edition	2001	<u>04</u>
049	RX-8	Sport AT, Shinka, Touring,	2003-14,9999	<u>04</u>
		Grand Touring, R3, Plus		
050	Mazda6	Grand Touring, Sport,	2003- <b>18</b> ,9999	<u>04-06,09</u>
		Mazdaspeed6, Grand Sport,		
		SV, Plus, Touring		
051	Mazda3	i, (Sport, Touring, Grand	2004- <b>18</b> , 9999	<u>04-06,09</u>
		Touring, SV) s (Touring, Grand		
		Touring), SP23, Value,		
		Mazdaspeed3, Touring 2.5		
052	Mazda5	Sport, Touring, Grand Touring	2006-10, 2012-	<u>06</u>
			15, 9999	

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
053	CX-7	i, s, Sport, Touring, Grand	2007-12, 9999	<u>05</u>
		Touring, SV		
054	CX-9 (2007-12 only. For	Sport, Touring, Grand Touring	2007-12, 9999	<u>06</u>
	2013 on see model			
	421.)			
055	Mazda2	Sport, Touring	2011-15, 9999	<u>05</u>
056	CX-3	Sport, Touring, Grand Touring	2016- <b>18</b> , 9999	<u>05</u>
398	Other (automobile)	1200, 616	1950- <b>2018</b> ,	<u>02,03,09</u>
			9999	
399	Unknown (automobile)		1950- <b>2018</b> ,	<u>01-09</u>
			9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Navajo		1991-94,9999	<u>14</u>
402	Tribute	DX, DX-V6, LX-V6, ES-V6, ES, LX, i, s, Hybrid, Sport, Grand Touring, Touring	2001-12,9999	<u>14</u>
403	CX-5	Sport, Touring, Grand Touring, <i>Diesel</i>	2013- <b>18</b> ,9999	<u>14</u>
421	CX-9 (2013 on. See model 054 for 2007-12 model years.)	Sport, Touring, Grand Touring, <i>Signature</i>	2013- <b>18</b> ,9999	<u>15</u>
441	MPV	LX, ES, DX, All Sport, LX-SV	1989-98; 2000- 06, 9999	<u>20</u>
471	Pickup/ B-Series Pickup	B2000, B2200, B2300, SE-5, LX, SE (2WD, 4WD), SX, DS, Cab Plus, B2500/B2600/ B3000/B4000, Dual Sport Cab	1972-2009, 9999	<u>32,<b>34,39</b>, 40, 42</u> , <u>48</u>
498	Other (light truck)		1965- <b>2018</b> , 9999	<u>14,15,<b>19</b>, 20,</u> <u>32,<b>34,39</b>, 40, 42</u>
499	Unknown (light truck)		1965- <b>2018</b> , 9999	<u>14,15,<b>19</b>, 20,</u> <u>32,<b>34</b>,39,40, 42,</u> <u>48,49</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (MAZDA)		1950- <b>2018</b> ,	<u>49</u>
			9999	

### AUTOMOBILES

# MAKE: Mercedes Benz (42) (MERZ)

Codes	Models	Includes	Model Years	Body Types
031	200/220/230/240/ 250/260/280/300/	Sedan and 5-passenger "C" only; SE, CD, D, SD, TD, TE,	1950-97,9999	01,02,04,06, 08,09, 12
	320/420	CE, E; DOES NOT include 280 SE (1975 on) or 300 SD-		
		see code 037; C-Class up to 1993, E-Class up to 1997		
032	230/280 SL	2-seater only	1964-71,9999	01,02,09
033	300/350/380/450/500/ 560 SL	2-seater only; 300/500 SL (1990 on)	1972-94,9999	<u>01,02,09</u>
034	350/380/420/450/560 SLC		1973-94,9999	<u>02</u>
035	280/300 SEL		1967-72,9999	02,04,08, <b>09</b>
036	300/380/420/450/500/ 560/SEL & 500/560, 600 SEC & 300/350 SDL		1973-94,9999	02,04,06,08,09
037	300/380/450 SE	280 S, 280 SE (1975 on), 300 SD Sedan/350 SD	1968-94,9999	01,02,04,08,09
038	600, 6.9 Sedan	Pullman	1978-87,9999	<u>04, 12</u>
039	190	D, E, 2.3, 2.5	1984-93,9999	<u>04,06,09</u>
040	300	CE Cabriolet	1993-94,9999	<u>01</u>
041	400/500E		1992-94,9999	01,02,04,06,08,09
042	C Class (94 on)	C220/C230 (Kompressor)/ C240/250/280/300/320/35 0/ 400 (W)/C32/ 36/43/55/63/63S AMG, Sport, Luxury, 450 (AMG), <b>350e Plug-In Hybrid</b>	1994- <b>2018</b> , 9999	<u>02,04,06,<b>08</b>,09</u>
043	S Class (95 on)	S320/350/400(V)/420/430/ 450/500/550 <b>/560</b> (V/e <b>/</b> <i>Maybach</i> )/600(V), 55/ 63/65 (AMG), Hybrid, 4-M, S600 (Maybach)	1995- <b>2018</b> , 9999	<u>01,02,04,08,09</u>
044	SL Class (95 on)	SL320/400/ <b>450/</b> 500/550(R) / 600(R), Silver Arrow Edition, SL55/63/65 AMG	1995- <b>2018</b> , 9999	<u>01,02,09</u>
045	SLK	SLK230/250/280/300/320/ 350 (Sport), Kompressor, SLK 32/55 (AMG), Special Edition	1998-2016, 9999	<u>01</u>
046	CL Class	CL500/550/600, CL55/63/ 65 AMG	1998-2014, 9999	<u>02</u>
047	CLK	CLK 320/350/430/500/550, Cabriolet, CLK 55/63/65 AMG	1998-2009, 9999	01,02,09

Codes	Models	Includes	Model Years	Body Types
048	E Class ('97 on)	250/300/TD, 320/350 (4-M,	1996- <b>2018</b> ,	<u>01,02,04,06,<b>08</b>,09</u>
		A, C, S, W)/400/420/430/	9999	
		500/550 (4-M, A, C, W),		
		<b>43/</b> 55/63/63S AMG,		
		320CDI, Hybrid		
049	SLR	McLaren, 722 Edition	2005-10,9999	<u>01,02,09</u>
050	R Class	R320/350/500, R63 AMG	2006-12,9999	<u>06</u>
051	CLS Class	CLS400/500/550, CLS55/63/	2006- <b>18</b> ,9999	<u>04</u>
		63S AMG		
052	SLS Class	AMG (C/GT) Final Edition	2011-15,9999	<u>01,02,09</u>
053	B Class	250e	2014- <b>17</b> ,9999	<u>05</u>
054	CLA Class	250, 45 (AMG)	2014- <b>18</b> ,9999	<u>04</u>
055	GLA Class	250, 45 (AMG)	2015- <b>18</b> ,9999	<u>05</u>
056	AMG GT S	450	2016 <b>-18,9999</b>	<u>02</u>
057	SLC Series	300, 43 (AMG)	2017-18,9999	<u>01</u>
398	Other (automobile)		1946- <b>2018</b> ,	<u>01-09, 10-12</u>
			9999	
399	Unknown (automobile)		1946- <b>2018</b> ,	<u>01-09</u> , <u>10-12</u>
			9999	

Codes	Models	Includes	Model Years	Body Types
401	M/ML Class	ML250/320/350/400/430/ 450/500/550, 55/63 AMG Special Edition, Hybrid, 4-M	1998-2015, 9999	<u>14</u>
402	G Class	G500/550, G55/63 <b>/65</b> (AMG)	2002- <b>18</b> ,9999	<u>14</u>
403	GLK Class	220/250/280/320/350	2010-15,9999	<u>14</u>
404	GLE Class	300d, 350 <b>/550e</b> , <b>43/</b> 63 <b>/63S</b> AMG, Coupe (450 <b>, AMG –</b> <b>43</b> /63S)	2016 <b>-18, 9999</b>	<u>14</u>
405	GLC Class	300, 43 (AMG), Coupe (300, AMG43)	2016 <b>-17, 9999</b>	<u>14</u>
421	GL Class	GL320/350/450/550, GL63 (AMG)	2007-16,9999	<u>15</u>
422	GLS Class	450, 550, 63 (AMG)	2017-18,9999	<u>15</u>
461	Sprinter	(for 2004-2010 see " <u>Freightliner</u> " and " <u>Dodge</u> ")	2002-03, 2010- <b>18</b> , 9999	<u>21,22,28,29</u>
462	Metris	Cargo, Passenger	2016 <b>-18, 9999</b>	<u>20</u>
470	Van derivative	Kurbstar	1982- <b>2018</b> , 9999	<u>28,29</u>
498	Other (light truck)		1946- <b>2018</b> , 9999	<u>14-16,19</u> , <u>21,22</u> , <u>40,41</u> , <u>42</u> , <u>45,48</u>
499	Unknown (light truck)		1946- <b>2018</b> , 9999	<u>14-16,19, 21,22,</u> 28,29, 40,41, 42, <u>45,48,49</u>

### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
870	Medium/Heavy Van-	Sprinter	2002-03, 2010-	<u>55, 61-64</u>
	Based Vehicle		<b>18</b> , 9999	
881	Medium/Heavy – CBE		1965-91,9999	<u>60-64,78</u>
882	Medium/Heavy – COE low entry		1965-91,9999	<u>60-64,78</u>
883	Medium/Heavy – COE high entry		1965-91,9999	<u>60-64,78</u>
884	Medium/Heavy – Unknown engine location		1965-91,9999	<u>60-64,78</u>
890	Medium/Heavy – COE entry position unknown		1965-91,9999	<u>60-64,78</u>
898	Other (medium/heavy truck)		1965-91,9999	<u>60-64,78</u>

### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional		1965-91,9999	<u>50-52,58,59</u>
	(Engine out front)			
988	Other (bus)		1965-91,9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965-91,9999	<u><b>92</b>-93,97</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### **OTHER AND UNKNOWN VEHICLE**

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
			9999	
999	Unknown (MERCEDES		1950- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
	BENZ)		9999	

### MAKE: Mercury (14) (MERC) (Merkur: See "56")

Codes	Models	Includes	Model Years	Body Types
002	Cyclone	GT, CJ, Spoiler	1964-70,9999	<u>01,02,09</u>
003	Capri-domestic (for 1967	RS, Turbo, GS, Black Magic,	1979-86; 1989-	<u>01,03,09</u>
	see 008)	5.0	94, 9999	
004	Cougar (For 1967-1997.	Villager, Brougham, RS, LS,	1967-97,9999	<u>01,02,04,06,08,09</u>
	See 038 for 1999-2002)	GS, Eliminator, XR-7		
	/XR7 (1967-1997)			

006         Marquis/Monterey (car version; for van version 2004 on see code 444) /Grand Marquis         Marauder (prior to 2003, 2003 on see code 039), Montclair, X-100, 5-55, Parklane, S-55, Custom, Brougham Grand Marquis (GS, LS), Medalist, Turnpike, Colony Park, GS, LS, LSE, Limited Edition, Palm Beach Edition         1952-2011, 9999         01,02,04, 9999           008         Comet         Caliente, Capri (1967), GT, Voyager, 202, 404, Villager Wagon         1960-79,9999         01,02,04, 999           009         Bobcat         Runabout, Villager Wagon         1975-80,9999         03,06,09           011         Monrego (prior to 1976); for 2005 on see code 020)         GT, MX, Villager, Brougham, Comet (1968-1970)         1968-76,9999         02,04,08, 02,04,08, Comet           012         Zephyr         GS, Z-7         1978-83,9999         02,04,08, Sport           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         02,04,08, Sport           017         Sable         L, SG (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, Platinum Edition, Premier, Base         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         1970-77,9999         03           031         Capri-foreign         Capri-foreign         Capri I, 2+2         1970-7	es
2004 on see code 444) /Grand Marquis         Montclair, X-100, 5-55, Parklane, S-55, Custom, Brougham Grand Marquis (GS, LS), Medalist, Turnpike, Colony Park, GS, LS, LSE, Limited Edition, Palm Beach Edition         Instance         01,02,04, Parklane, Parklane, Par	6,08,09
/Grand Marquis       Parklane, S-55, Custom, Brougham Grand Marquis (GS, LS), Medalist, Turnpike, Colony Park, GS, LS, LSE, Limited Edition, Palm Beach Edition       960-79,9999       01,02,04, Voyager, 202, 404, Villager Wagon         008       Comet       Caliente, Capri (1967), GT, Voyager, 202, 404, Villager Wagon       1960-79,9999       03,06,09         010       Montego (prior to 1976; for 2005 on see code 020)       GT, MX, Villager, Brougham, for 2005 on see code 020)       1975-80,9999       02,04,08, 02,04,08, 012         011       Monarch       Ghia       1975-80,9999       02,04,08, 02,04,08, 02,04,08, 013       02,04,08, 02,04,08, 02,04,08, 013       030,05-07, 1978-83,9999       02,04,08, 02,04,08, 02,04,08, 02,04,08, 02,04,08, 013       030,05-07, 1981-87,9999       02,04,08, 02,04,08, 02,04,08, 03,05-07, 015       1981-87,9999       02,04,08, 02,04,0	
Brougham Grand Marquis (GS, LS), Medalist, Turnpike, Colony Park, GS, LS, LSE, Limited Edition, Palm Beach Edition         Image: Second S	
Image: Series of the	
Colony Park, GS, LS, LSE, Limited Edition, Palm Beach Edition         Second Secon	
Limited Edition, Palm Beach Edition         Limited Edition, Palm Beach Edition         Limited Edition, Palm Beach Edition           008         Comet         Caliente, Capri (1967), GT, Voyager, 202, 404, Villager Wagon         1960-79,9999         01,02,04,           009         Bobcat         Runabout, Villager Wagon         1975-80,9999         03,06,09           010         Montego (prior to 1976; for 2005 on see code 020)         GT, MX, Villager, Brougham, for 2005 on see code 020)         1975-80,9999         02,04,08,           011         Monarch         Ghia         1975-80,9999         02,04,08,           012         Zephyr         GS, Z-7         1978-83,9999         03,06,09           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,06,09           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, Sport         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         1-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           033         Pantera-foreign         Capri I, 2+2         1970-77,9999         03           033         Pantera-foreign         GeTomaso         1972-74,9999         03-06,09 </td <td></td>	
Image: constraint of the sector of the sec	
008         Comet         Caliente, Capri (1967), GT, Voyager, 202, 404, Villager Wagon         1960-79,9999         01,02,04, Olion           009         Bobcat         Runabout, Villager Wagon         1975-80,9999         03,06,09           010         Montego (prior to 1976; for 2005 on see code 020)         GT, MX, Villager, Brougham, Comet (1968-1970)         1968-76,9999         01,02,04, 01,02,04, 01,02,04, Comet (1968-1970)           011         Monarch         Ghia         1975-80,9999         02,04,08, 02,04,06,           012         Zephyr         GS, Z-7         1978-83,9999         02,04,06, 03,05-07,           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,05-07, 03,05-07,           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         <	
Voyager, 202, 404, Villager Wagon         Image: Comparison of the com	
Image: mark state in the state in	) <u>6,08,09</u>
009         Bobcat         Runabout, Villager Wagon         1975-80,9999         03,06,09           010         Montego (prior to 1976; for 2005 on see code 020)         GT, MX, Villager, Brougham, Comet (1968-1970)         1968-76,9999         01,02,04,           011         Monarch         Ghia         1975-80,9999         02,04,08,           012         Zephyr         GS, Z-7         1978-83,9999         02,04,08,           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,05-07,           015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08,           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-01,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mysti	
010         Montego (prior to 1976; for 2005 on see code 020)         GT, MX, Villager, Brougham, Comet (1968-1970)         1968-76,9999         01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 01,02,04, 02,04,08, 02,04,06, 01,02,04,08, 02,04,06,09           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         02,04,08, 03,05-07,           015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08, 02,04,06,09           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
for 2005 on see code 020)         Comet (1968-1970)         Image: Comparison of Comet (1968-1970)           011         Monarch         Ghia         1975-80,9999         02,04,08,           012         Zephyr         GS, Z-7         1978-83,9999         02,04,06,           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,05-07,           015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08,           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         03-06,09           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
011         Monarch         Ghia         1975-80,9999         02,04,08,           012         Zephyr         GS, Z-7         1978-83,9999         02,04,06,           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,05-07,           015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08,           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,99999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	) <u>6,08,09</u>
012         Zephyr         GS, Z-7         1978-83,9999         02,04,06,           013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,05-07,           015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08,           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         03           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
013         Lynx/LN7         L, LS, GS, RS, XR-3         1981-87,9999         03,05-07,           015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08,           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	<u>)9</u>
015         Topaz         L, LS, GS, 4x4, XR5, LTS, Sport         1984-94,9999         02,04,08, Sport           017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	<u>)8,09</u>
SubscriptionSportSubscription017SableLS, GS (Premium), GS Plus, Platinum Edition, Premier, Base1986-2005, 2008-09,999904,06,09 2008-09,9999020Montego (2005 on)Luxury, Premier2005-07,999904021MilanI-4, V6 (Base/Premier), Hybrid2006-11,999904031Capri-foreignCapri II, 2+21970-77,999903033Pantera-foreigndeTomaso1972-74,999901-09, 10036TracerL, GL, LTS, GS, LS1988-99,999903-06,09037MystiqueGS, LS1995-2000,04	<u>)9</u>
017         Sable         LS, GS (Premium), GS Plus, Platinum Edition, Premier, Base         1986-2005, 2008-09,9999         04,06,09           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	<u>)9</u>
Platinum Edition, Premier, Base         2008-09,9999           020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
Image: series of the	
020         Montego (2005 on)         Luxury, Premier         2005-07,9999         04           021         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
O21         Milan         I-4, V6 (Base/Premier), Hybrid         2006-11,9999         04           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
Hybrid         Hybrid         Image: Marcial state           031         Capri-foreign         Capri II, 2+2         1970-77,9999         03           033         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
O31         Capri-foreign         Capri II, 2+2         1970-77,9999         03           O33         Pantera-foreign         deTomaso         1972-74,9999         01-09, 10           O36         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           O37         Mystique         GS, LS         1995-2000,         04	
033         Pantera-foreign         deTomaso         1972-74,9999         01-09,10           036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
036         Tracer         L, GL, LTS, GS, LS         1988-99,9999         03-06,09           037         Mystique         GS, LS         1995-2000,         04	
037 Mystique GS, LS 1995-2000, 04	
9999	
038 Cougar (1999-2002) V-6, I-4, S, Sport, CR, XR 1999-2002, <u>02,03,09</u>	
9999	
039 Marauder M75, 300A 2003-04,9999 <u>04</u>	
398         Other (automobile)          1962-2011,         01-09, 10	
9999	
399         Unknown (automobile)          1952-2011,         01-09, 10	
9999	

Codes	Models	Includes	Model Years	Body Types
401	Mountaineer	Convenience, Luxury,	1996-2010,	<u>14</u>
		Premier (4.0/4.6L)	9999	
402	Mariner	Convenience, Luxury,	2005-11,9999	<u>14</u>
		Premier, Hybrid		

Codes	Models	Includes	Model Years	Body Types
443	Villager	LS, GS, Nautica, Estate,	1993-2002,	<u>20</u>
		Sport, Sport Plus, Popular	9999	
444	Monterey (van version;	Convenience, Luxury,	2004-07,9999	<u>20</u>
	for car version prior to	Premier		
	2004 see code 006)			
498	Other (light truck)		1993-2011,	<u>14</u> , <u>20</u>
			9999	
499	Unknown (light truck)		1993-2011,	<u>49</u>
			9999	

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (MERCURY)		1950-2011,	<u>49</u>
			9999	

# MAKE: Merkur (56) (MERK)

### **AUTOMOBILES**

Codes	Models	Includes	Model Years	Body Types
031	XR4Ti	Turbo	1985-89,9999	<u>03</u>
032	Scorpio	Turbo	1988-90,9999	<u>05</u>
398	Other (automobile)		1985-90,9999	<u>03-05,07,09</u>
399	Unknown (automobile)		1985-90,9999	<u>03-05,07,09</u>

### MAKE: MG (43) (MG)

AUTOMOBILES					
Codes	Models	Includes	Model Years	Body Types	
031	Midget	GAN I/II/III/4/5, MK I, MK II, MKIII	1962-80,9999	<u>01</u>	
032	MGB	MK I/II/IV, 600 Limited, V-8	1955-80,9999	<u>01,02,09</u>	
033	MGB	GT, MK III	1967-74,9999	<u>02,03,09</u>	
034	MGA	1500, 1600, YT, TC, TD/II, MK	1945-62,9999	<u>01,02,09</u>	
		I/II, A			
035	TA/TC/TD/TF	Y-Type, 430, TDC	1945-62,9999	<u>01,02,09</u>	
036	MGC	GT	1968-69,9999	<u>01,02,09</u>	
037	Magnette/Sports Sedans	ZB, ZA/YA/YB, MK III, MK IV,	1945-66,9999	02,04,08,09	
		1100, 1300			
398	Other (automobile)		1945-80,9999	01-04,08,09	
399	Unknown (automobile)		1945-80,9999	01-04,08,09	

# MAKE: Mitsubishi (52) (MITS)

Codes	Models	Includes	Model Years	Body Types
031	Starion	2+2, LE, Turbo, ESI	1982-89,9999	<u>03</u>
032	Tredia	L, LS, Turbo	1982-88,9999	<u>04</u>
033	Cordia	L, Turbo	1982-88,9999	<u>03</u>

Codes	Models	Includes	Model Years	Body Types
034	Galant	ECS, Sigma (through '88), ES, LS, DE, GTS-V6, I-4, Special Edition, Ralliart, Sport Edition, SE, FE	1985-2012, 9999	<u>04</u>
035	Mirage (For 1985-2002. For 2014 on use model 048.)	L, Turbo, GS, LS, DS, DE, ES	1985-2002, 9999	<u>02-04, 08, 09</u>
036	Precis		1987-94,9999	<u>03,05,07,09</u>
037	Eclipse	GS, DOHL, Turbo, GS-T, GSX, Spyder, RS, GT, GTS, Remix Edition, SE, Sport. Special Edition	1990-2012, 9999	<u>01-03, 09</u>
038	Sigma	(Prior '89 see 034)	1989-90,9999	<u>04</u>
039	3000 GT	SL, VR-4, Spyder	1991-99,9999	<u>01-03, 09</u>
040	Diamante	LS, ES, LE, VR-X	1992-2004, 9999	<u>04, 06, 09</u>
041	iMEV (For 2018 on, code as vehicle model 398)	ES, SE	2012-17,9999	<u>05</u>
045	Expo Wagon	LRV, Sport	1992-95,9999	<u>06</u>
046	Lancer/Lancer Sportback/Lancer Evolution	ES <b>(2.0, 2.4)</b> , LS, O-Z, Rally, Evolution VII/VIII/IX/X, Sport, Ralliart LS, MR Edition, DE, GSR, GTS, Touring, SE, GT, SEL <b>, FE</b>	2002-17,9999	<u>04-06, 09</u>
047	Outlander	ES, LS, SE, XLS, Limited, GT, Sport, SE-S, GT-S, SEL, GT 3.0 S-AWC, Plug-In Hybrid, PHEV	2003- <b>18</b> ,9999	<u>05</u> , <u>06</u> , <u>09</u>
048	Mirage (2014 on. For 1985-2002 use 52-035.)	DE, ES, SE, GT, G4 (ES, SE)	2014- <b>18</b> ,9999	<u>04, 05, 09</u>
398	Other (automobile)	500, 1000, Debonair, Galant (1969) <b>, iMEV (2018 on)</b>	1960- <b>2018</b> , 9999	<u>01-09</u>
399	Unknown (automobile)		1960- <b>2018</b> , 9999	<u>01-09</u>

Codes	Models	Includes	Model Years	Body Types
401	Montero/Montero Sport	Sport, LS, SR, XLS, ES, LTD,	1983-2006,	<u>14</u>
		20 <sup>th</sup> Anniversary Edition, SE	9999	
402	Endeavor	LS, SE, XLS, Limited	2004-12,9999	<u>14</u>
403	Eclipse Cross	ES, LE, SE, SEL	2018	<u>14</u>
441	Mini-Van	LS	1987-90,9999	<u>20</u>
471	Pickup	Mighty Max, SPX, 4x4	1983-96,9999	<u>32,<b>34,39</b>, 40</u> , <u>42</u> ,
				<u>48</u>
472	Raider	LS, Durocross, XLS	2006-10,9999	<u>34</u>

Codes	Models	Includes	Model Years	Body Types
498	Other (light truck)		1983-2012,	<u>14, 20, 32,<b>34,39</b></u> ,
			9999	<u>40, 42</u>
499	Unknown (light truck)		1983-2012,	<u>14, 20, 32,<b>34,39</b>,</u>
			9999	<u>40, 42, 48,49</u>

### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
882	Medium/Heavy – COE low entry	FUSO FE/FG/FH/FK/FM	1983- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>
898	Other (medium/heavy truck)		1983- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>

### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional		1981-2004,	<u>50-52,58,59</u>
	(Engine out front)		9999	
982	Bus: Front engine, Flat		1981-2004,	<u>50-52,58,59</u>
	Front		9999	
983	Bus: Rear engine, Flat		1981-2004,	<u>50-52,58,59</u>
	front		9999	
988	Other (bus)		1981-2004,	50-52,58,59
			9999	
989	Unknown (bus)		1981-2004,	50-52,58,59
			9999	

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (MITSUBISHI)		1983- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
			9999	

# MAKE: Nissan/Datsun (35) (NISS) - (DATS)

Codes	Models	Includes	Model Years	Body Types
031	F-10		1977-78,9999	<u>03,05-07,09</u>
032	200SX/240SX	SE, SE-R, LE	1977-98,9999	<u>01-03,09</u>
033	210/1200/B210	110 series, Honeybee	1971-82,9999	<u>02-04,06,08,09</u>
034	Z-car, ZX	240/260/280Z&ZX, 300 ZX,	1970-96,9999	<u>01-03,09</u>
		2+2, Turbo		
035	310	SPL	1979-82,9999	<u>02,03,05,07,09</u>
036	510	PL, WPL	1968-73;	<u>02-09</u>
			1978-81,9999	
037	610	PL, HL	1973-76,9999	<u>02-04,06,08,09</u>
038	710	PL	1974-77,9999	<u>02-04,06,08,09</u>

Codes	Models	Includes	Model Years	Body Types
039	810/Maxima	SE (Titanium Special), GXE, GLE, <b>2.5 (S/SR/SL/SV),</b> 3.5SE/SL/SEL /S/SV/SR, Platinum Edition <b>, Midnight</b> <i>Edition</i>	1977- <b>2018</b> , 9999	04,06,09
040	Roadster	SPL311, SRL311, 1500, 1600, 2000, convertible, Fairlady	1950-70,9999	<u>01</u>
041	311/411	1000, Bluebird, PL311/ PL312/PL410/PL411/RL411	1959-67,9999	<u>04,06,09</u>
042	Stanza	XE	1982-93,9999	<u>03-07,09</u>
043	Sentra	E, XE, GXE, S, SE, SE-R (Spec V), GLE, CA, 2.5LE, 1.8, 1.8S, 2.0/S/SL/SR, Special Edition, Platinum Edition, Spec-V, FE, SV, FE+S, Nismo, <i>SR Turbo</i>	1982- <b>2018</b> , 9999	<u>02,04,06,08,09</u>
044	Pulsar	NX, EXA (1986 on)	1983-90,9999	02,03,05,07,09
045	Micra		1987-94,9999	<u>01-05,07-09</u>
046	NX 1600/2000	T-bar coupe	1991-94,9999	<u>02,03,09</u>
047	Altima	XE, GXE, SE, GLE, 2.5 S/SL/SR/SV, 3.5 S/SE/SL/SR/ SV, SE-R, Hybrid, SR (Base, Midnight), Platinum, <i>Special</i> <i>Edition</i>	1993- <b>2018</b> , 9999	<u>02,04,<b>08,</b>09</u>
048	350Z/370Z	Enthusiast, Performance, Touring, Track, Base, 35 <sup>th</sup> Anniversary, Grand Touring, Nismo, 40 <sup>th</sup> Anniversary, Sport, Sport Tech, Nismo Tech, Touring Sport, <i>Heritage Edition (Magnetic</i> <i>Black and Chicane Yellow)</i>	2003- <b>18</b> ,9999	<u>01,02,09</u>
049	Murano	SE, SL, S, LE, SV, CrossCabriolet, Platinum, S Plus	2003- <b>18</b> ,9999	01,06,09
050	Versa	1.8S/SL, 1.6 S/SV/SL, Plus, Note (S, S Plus, SV, SR, SL), S Plus, SR <b>, SV Special Edition</b>	2007- <b>18</b> ,9999	04,05,09
051	Rogue	S, SL, SV, Krom/Special Edition, Select (S) <b>, Sport</b>	2008- <b>18</b> ,9999	<u>06</u>
052	Cube	1.8 S/SL, Krom Edition, Indigo Edition	2009-14,9999	<u>06</u>
053	GT-R	Base, Premium, Black Edition, Track Edition, Nismo, 45 <sup>th</sup> Anniversary	2009- <b>18</b> ,9999	<u>02</u>
055	Leaf	S, SL, SV	2011- <b>18</b> ,9999	05

Codes	Models	Includes	Model Years	Body Types
398	Other (automobile)	110 sedan, K110	1955- <b>2018</b> ,	<u>01-09, 10</u>
			9999	
399	Unknown (automobile)		1955- <b>2018</b> ,	<u>01-09, 10</u>
			9999	

Codes	Models	Includes	Model Years	Body Types
401	Pathfinder	MPV, 4X4, XE, LE, SE, S, Off- Road, FE+, SV, Silver Edition, Hybrid, SL (Tech, Premium), Platinum, <i>SL</i>	1986- <b>2018</b> , 9999	<u>14</u>
402	Xterra	XE (I-4), SE, (S/C), SE-R, Spec V, X, S, Off-Road, Pro-4X	2000-15,9999	<u>14</u>
403	Juke	S, SL, SV, Nismo, Nismo RS	2011- <b>18</b> ,9999	<u>14</u>
421	Pathfinder Armada	LE, SE, SE Off-Road, Titanium, Platinum <b>(Base/Reserve)</b> , SV, SL	2004- <b>18</b> ,9999	<u>15</u>
441	Van	XE, GXE	1987-91,9999	20
442	Axxess		1989-90,9999	20
443	Quest	XE, GXE, SE, GLE, 3.5 S/SE/SL, Special Edition, SV, LE, Platinum	1993-2002; 2004-09, 2011- <b>17</b> , 9999	<u>20</u>
444	Altra EV*	(electric vehicle*)	1998-2005, 9999	<u>20</u>
446	NV200/eNV200	S, SV, Taxi, Compact Cargo, Passenger <b>(S, SL, SV)</b> , HD Cargo	2013- <b>18</b> ,9999	<u>20</u>
461	NV	1500 (S, SV), 2500 HD (S, SV), 3500 (S, SV, SL)	2011- <b>18</b> ,9999	21,22,28,29
471	Datsun/Nissan Pickup (1955-1997)	120,620 series, King Cab, Hardbody, XE, SE	1955-97,9999	<u>32,<b>34,39</b>, 40</u> , <u>42</u>
472	Frontier (1998 on)	XE, SE, S/C (Regular Cab, King Cab, Desert Runner, Crew Cab), Open-Sky, SVE, Nismo, Pro-4X, LE, SV, SL, S, Diesel Runner	1998- <b>2018</b> , 9999	<u>32,<b>34,39</b>, 40, 42</u>
473	Titan (from 2004-06; see 481 for 2007 on)	E, LE, SE, XE	2004-06,9999	<u>34</u>
481	Titan (from 2007 on; see 473 for 2004-06)	LE, SE, XE, PRO-4X, S, SV, SL, XD (S, SV, SL, Platinum Reserve), Platinum, <i>Platinum Reserve</i>	2007- <b>18</b> ,9999	<u>34</u>
498	Other (light truck)	Patrol (1960)	1955- <b>2018</b> , 9999	<u>14,15</u> , <u>20,21,22</u> , <u>32</u> , <b>34,39</b>

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1955- <b>2018</b> ,	<u>14,15,19</u> , <u>20,29</u> ,
			9999	<u>32,<b>34,</b>39</u> , <u>40</u> , <u>42</u> ,
				<u>48,49</u>

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
870	Medium/Heavy Van-Based Vehicle	NV	2011- <b>18</b> ,9999	<u>55, 61-64</u>
883	Medium/Heavy – COE high entry		1986- <b>2018</b> , 9999	<u>60-64,66,</u> 71,72,78
898	Other (medium/heavy		1986- <b>2018</b> ,	<u>60-64,66,</u>
	truck)		9999	<u>71,72,78</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown		1950- <b>2018</b> ,	<u>49</u> , <u>79</u> , <u>99</u>
	(NISSAN/DATSUN)		9999	

### AUTOMOBILES

# MAKE: Oldsmobile (21) (OLDS)

Codes	Models	Includes	Model Years	Body Types
001	Cutlass (RWD-only)	Supreme, S, LS, Salon, Brougham Vista Cruiser, F85 (thru 1972), Rallye 350, Hurst Olds, 442, Calais (thru 1985), Classic (88)	1960-88,9999	01,02,04,06, 08,09
002	Delta 88/LSS	Royale, Custom, Delta, Jetstar 88, Delmont 88, Starfire (Thru 1966), Custom Cruiser, Jetfire, Eighty-Eight (LS, 50 <sup>th</sup> Anniv. Edition)	1949-99,9999	01-04,06,08,09
003	Ninety-Eight/Regency	Luxury, Futuramic, Brougham	1949-99,9999	01,02,04,08,09
005	Toronado	XS, XSR, Trofeo, Brougham Custom	1966-92,9999	<u>02</u>
006	Commercial Series	Ambulance/Hearse	1940-2003, 9999	<u>09</u> , <u>10-12</u>
012	Starfire	SX, GT, ST	1975-80,9999	01-03,09
015	Omega	X-body type, Brougham	1973-85,9999	02-04,08,09
016	Firenza	S, LS, SX, Cruiser, GT	1982-88,9999	03-06,07,09
017	Ciera	Cutlass Ciera, Cutlass Cruiser, Brougham, ES (International)	1982-96,9999	01,02,04,06, 08,09
018	Calais	GT, ES, 500	1985-91,9999	02,04,08,09
020	Cutlass (FWD)	Supreme (Excludes Ciera), GLS, GL	1988-99,9999	01,02,04,08,09
021	Achieva/Alero	SC, SL, GX, GL (1,2,4), GLS	1992-2004 <i>,</i> 9999	02,04,08,09

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
022	Aurora	3.5L, 4.0L, Collector's Series	1995-99;	<u>04</u>
			2001-03,9999	
023	Intrigue	GL, GX, GLS	1997-2002,	<u>02,04,08,09</u>
			9999	
398	Other (automobile)	66/68/70/90, Dynamic 70	1930-2004,	<u>01-09</u> , <u>10-12</u>
			9999	
399	Unknown (automobile)		1930-2004,	<u>01-09</u> , <u>10-12</u>
			9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Bravada	2WD, 4WD, Collector's	1991-94;	<u>14</u>
		Series	1996-2004,	
			9999	
441	Silhouette	GL, GLS, Series I, Series II, GS	1990-2004,	<u>20</u>
		Premier Edition, Collector's	9999	
		Series		
499	Unknown (light truck)		1932-2004,	<u>14, 20, 49</u>
			9999	

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (OLDSMOBILE)		1932-2004,	<u>49</u>
			9999	

# MAKE: Peugeot (44) (PEUG)

AUTOMOBILES					
Codes	Models	Includes	Model Years	Body Types	
031	304		1971-72,9999	<u>04-06,09</u>	
032	403	Station Wagon	1955-67,9999	<u>01,04,06,09</u>	
033	404	Station Wagon	1961-70,9999	01,04,06,09	
034	504/505	STI, STX, Turbo, S, STI, STX,	1970-91,9999	<u>04-06,09</u>	
		GL, GLS Liberte, Station			
		Wagon, DSL, DL, GLX			
035	604	SL, D	1977-84,9999	<u>04</u>	
036	405	Mi-16, DL, S	1989-91,9999	<u>04,06,09</u>	
398	Other (automobile)	202, 203	1945-91,9999	<u>01-09</u>	
399	Unknown (automobile)		1945-91,9999	<u>01-09</u>	

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50 сс		1965-83,9999	<u>81</u>
702	51-124cc		1965-83,9999	<u>81</u>
709	Unknown cc		1965-83,9999	<u>81</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (PEUGEOT)		1960-91,9999	<u>99</u>

# MAKE: Plymouth (09) (PLYM)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
001	Valiant/Scamp/Duster (thru 1976)	100, 200, Brougham, Signet, Custom, Special, 340, 360, Twister	1960-76,9999	01,02,04,06, 08,09
002	Satellite/Belvedere	Belvedere I/II, GTX, Roadrunner (through 1974), Brougham, Sebring, Sebring Plus, Superbird	1951-74,9999	<u>01,02,04,06,</u> <u>08,09</u> , <u>10-12</u>
003	Fury (Fury Gran thru '78)	I, II, III, Roadrunner (1975), Suburban, Salon, VIP, Sport	1957-78,9999	<u>01,02,04,06,</u> 08,09
004	Gran Fury ('80 on)	Sedan, Coupe, Salon	1980-89,9999	02,04,06,08,09
005	Barracuda	Formula, S, 340, Gran Coupe, AAR, Cuda	1964-74,9999	01,02,09
006	Volare'	Custom, Premier, Roadrunner (1976 on), Police	1976-80,9999	02,04,06,08,09
007	Caravelle	Turbo, SE	1985-88,9999	<u>04</u>
008	Horizon/Turismo	TC-3, Turismo 2.2, Miser, America, Custom, SE, Duster (1985 on), Expo	1978-90,9999	03,05,07,09
011	Reliant (K)	SE, LE, Reliant America, Limited	1981-89,9999	02,04,06,08,09
013	Scamp- (car-based p/u)	GT, 2.2	1982-84,9999	<u>10</u>
017	Sundance	RS, Turbo, Sundance Duster, America	1987-94,9999	<u>03,05,07,09</u>
019	Acclaim	LX, LE	1989-95,9999	04
020	Neon (2002 and on, see Dodge)	Sport, Competition, Highline	1995-2001, 9999	02,04,08,09
031	Cricket		1971-72,9999	04,06,09
032	Arrow	GS, GT, Fire Arrow	1976-80,9999	03
033	Sapporo	all imported	1978-83,9999	02,03,09
034	Champ/Colt import (includes 2WD Vista)	Turbo, Custom, GL, SE, DL, E Station wagon (1984 on)	1979-94,9999	02-09
035	Conquest	TSI	1984-87,9999	<u>03</u>
037	Laser	RS, Turbo	1989-94,9999	02,03,09
038	Breeze		1996-2000, 9999	04
039	Prowler (1997, 1999-2001 only. <u>For 2002 on, see</u> <u>Chrysler</u> )	Roadster, Black Tie Edition	1997; 1999- 2001, 9999	01
398	Other (automobile)	Regant, Fleet, Savoy, Concord, Cambridge	1930-95,9999	<u>01-09</u> , <u>10-12</u>

Codes	Models	Includes	Model Years	Body Types
399	Unknown (automobile)		1965-2001,	<u>01-09</u> , <u>10-12</u>
			9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
421	Trailduster		1974-93,9999	<u>15</u>
441	Vista Van	4X4 (only)	1987-94,9999	<u>20</u>
442	Voyager (minivan) (2000 and on, see Chrysler)	SE, LX, Grand Voyager, SE Expresso, EPIC-electric*	1984-2001, 9999	<u>20</u>
461	Van-fullsize (B-series)	Voyager (thru 1983), Sport, Premier	1965-95,9999	<u>21</u>
471	Arrow pickup (foreign)		1975-91,9999	<u>32,<b>34,39</b></u>
498	Other (light truck)		1965-2001, 9999	<u>15, 20,21,28,29,</u> <u>32,<b>34,39</b></u> , 42, 45,48
499	Unknown (light truck)		1974-2001, 9999	<u>15</u> , <u>20,21,29</u> , <u>32,<b>34,39</b>, 48,49</u>

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965-2001,	<u>92,93,97</u>
			9999	
999	Unknown (PLYMOUTH)		1957-2001,	<u>49</u>
			9999	

# MAKE: Pontiac (22) (PONT)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
001	Lemans (See model 031	Safari, T-37, Luxury, Grand	1961-81,9999	<u>01,02,04,06,</u>
	for 1988 on)/Tempest	Sport, GTO (thru 1973), GT-		<u>08,09</u>
	(thru 1970)	37, Sprint, Judge, Grand AM		
		(73-75), Grand Lemans		
002	Bonneville/Catalina/	Brougham, Grand Safari,	1954-2005,	<u>01,02,04,06,</u>
	Parisienne	Safari, Grandville, 2+2,	9999	<u>08,09</u>
		Executive, Starchief, SE, SSE,		
		SSEi, G, SLE, GXP		
005	Fiero	2M4, 2M6, GT, SE	1984-89,9999	<u>02</u>
008	Ventura/GTO	II, SJ, Sprint, GTO (74-77),	1971-77;	<u>02-04,<b>08,</b>09</u>
		Custom, Base, LS2	2004-06,9999	
009	Firebird/Trans AM	Esprit, Formula, GTA,	1967-2002,	<u>01-03,09</u>
		Redbird, Yellowbird, Skybird,	9999	
		SE, Bandit, TransAm		
010	Grand Prix (RWD)	J, LJ, SJ, Brougham, 2+2, GT,	1962-87,9999	<u>01,02,09</u>
		STE, SE		
011	Astre	Safari, SJ, Custom	1975-77,9999	02,03,06,09

Codes	Models	Includes	Model Years	Body Types
012	Sunbird (thru 1980;1985	Safari, Sport, Formula	1976-80,9999	<u>01-09</u>
	on see model 016)			
013	T-1000/1000	2T	1981-87,9999	<u>03,05,07,09</u>
015	Phoenix	LJ, SJ	1977-84,9999	02-05,07-09
016	Sunbird (1985-1994 only)	LE, SE, GT, 2000 Convertible,	1982-2005,	<u>01-09</u>
	/J-2000/Sunfire (1995 on)	2J, S, SE, GT, 1SA, 1SB, 1SC, 1SV	9999	
017	6000	STE, SE, LE	1982-91,9999	02,04,06,08,09
018	Grand AM	SE, LE, GT, GT1, SE1, SE2,	1973-2005,	02,04,08,09
		SC/T Package	9999	
019	G5	Base, GT	2007-10,9999	02
020	Grand Prix (FWD)	LE, SE, STE, GT, McLaren	1988-2008,	01,02,04,08,09
		Turbo, GTP, Limited Edition,	9999	
		40 <sup>th</sup> Anniversary Edition, GXP		
022	G6	Base, GT, GTP, Value Leader,	2005-10,9999	<u>01,02,04,<b>08,</b>09</u>
		GXP		
023	Solstice	GXP	2006-10,9999	<u>01,02, 09</u>
024	G8	GT, GXP	2008-10,9999	<u>04</u>
025	G3		2009-10,9999	<u>04,05,09</u>
031	Lemans (1988 on)	LE, SE, Tempest Canadian	1988-93,9999	<u>01-09</u>
032	Vibe	GT, AWD, HB	2003-10,9999	<u>06</u>
398	Other (automobile)	Torpedo, Streamliner,	1946-2010,	<u>01-09, 10</u>
		Chieftain Star Chief, Super	9999	
		Chief		
399	Unknown (automobile)		1926-2010,	<u>01-09</u> , <u>10</u>
			9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Aztek	GT, SE, 1SA, 1SB, 1SC, Rally Edition	2001-05,9999	<u>14</u>
403	Torrent	GXP	2006-09,9999	<u>14</u>
441	Trans Sport/ Montana/SV6	SE, Montana, Extended, Versatrak, 1SV, 1SA, 1SX, 1SY, 1SE, Chrome Sport,	1990-2009, 9999	20
499	Unknown (light truck)		1990-2009, 9999	<u>14, 20, 49</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (PONTIAC)		1951-2010,	<u>49</u>
			9999	

### AUTOMOBILES

# MAKE: Porsche (45) (PORS)

Codes	Models	Includes	Model Years	Body Types
031	911/996	L, S, E, T, SC, Carrera (2, 4, Cabriolet, Targa, <i>T</i> ), GT, Slopenose, 4S, Targa, Speedster, Turbo ( <i>Base, S, S</i> <i>Exclusive, Cabriolet</i> ), B series, S-Coupe, Cabriolet (S), GT2, GT3 (RS), GT, GTS, <i>4</i> <i>GTS (Carrera/Targa)</i>	1965- <b>2018</b> , 9999	<u>01,02,09</u>
032	912	1600, E, T	1966-69; 1976,9999	01,02,09
033	914	1.7, 1.8, 2.0, S, 914/4/6	1970-76,9999	<u>01</u>
034	924	Turbo, S	1977-88,9999	01-03,09
035	928	S, S4, GT, GTS	1978-95,9999	02,03,09
036	930	Turbo	1979	02
037	944	Turbo, S, S2	1983-91,9999	<u>01-03,09</u>
038	959	Not Imported to U.S.	1989-94,9999	<u>01-03,09</u>
039	968		1992-95,9999	<u>01,02,09</u>
040	986/Boxster	Boxster, Boxster Cabriolet, S Roadster, S Anniversary, Limited Edition, Spyder, Black Edition, GTS	1997-2016, 9999	<u>01</u>
041	Cayman	S, Hybrid, Black Edition, R, GTS, GT4	2006-16,9999	02
042	Panamera	S, 4, 4S, Turbo, Turbo S, Hybrid, GTS, S, Platinum Edition, Executive, Edition, Exclusive, <i>Sport Turismo</i> (Base/4S/E-Hybrid/S E- Hybrid/Turbo	2010- <b>18</b> ,9999	<u>05</u> , <b><u>06, 09</u></b>
043	918	Spyder, Weissach Pkg	2013- <b>17</b> ,9999	<u>01,02,09</u>
044	718	Cayman (Base, S, GTS), Boxster (Base, S, GTS)	2017-18,9999	<u>01,02,09</u>
398	Other (automobile)	Spyder, Speedster (prior to '65), 356 (A, B, C) Grund, America, Super, 1500	1948- <b>2018</b> , 9999	01-03,05,09
399	Unknown (automobile)		1948- <b>2018</b> , 9999	01-03,05,09

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Macan	S, S Diesel, Turbo <b>, GTS</b>	2014- <b>18</b> ,9999	<u>14</u>
421	Cayenne	Turbo, S, Titanium, GTS (PD Edition), Transsyberia,	2003- <b>18</b> ,9999	<u>15</u>
		Hybrid, Diesel		

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		2003- <b>18</b> ,9999	<u>14, 15,<b>19</b></u>

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (PORSCHE)		1965- <b>2018</b> ,	<u>99</u>
			9999	

## MAKE: Renault (46) (RENA)

Codes	Models	Includes	Model Years	Body Types
031	LeCar	R-5, R5TL, GTL, TL, DLX	1976-83,9999	02-05,07-09
032	Dauphine/10/R-8 Caravelle	all models, R-1190, R8 -1100	1955-71,9999	01,02,04,08,09
033	12	R-12L, R-12TL/GTL	1972-77,9999	04,06,09
034	15	R-15TL	1973-76,9999	02,03,09
035	16	R-16, R-1152	1969-72,9999	<u>06</u>
036	17	R17, Gordini Coupe, R17TL	1972-80,9999	01,02,09
037	18i/Sportwagon	R18i, Deluxe, DLX	1981-86,9999	<u>04,06,09</u>
038	Fuego	TL, TS, GTL, GTS, Turbo	1982-85,9999	<u>02,03,09</u>
039	Alliance/Encore GTA, Convertible	L, DL, Limited, X-37	1983-87,9999	01-05,07-09
041	Alpine	GT, GTA Coupe, Not imported to U.S.	1971-90,9999	02,03,09
044	Medallion **	DL, LX	1987	04,06,09
045	Premier**		1987	<u>04</u>
398	Other (automobile)	Juvaquatre, 4CV, Fregate, Domaine	1946-90,9999	<u>01-09</u> , <u>10,11</u>
399	Unknown (automobile)		1946-90,9999	<u>01-09, 10,11</u>

\*\* Note: Medallion and Premier listed under Eagle after 1987.

# MAKE: Saab (47) (SAA)

#### **AUTOMOBILES**

Codes	Models	Includes	Model Years	Body Types
031	99/99E/900	S, GL, GLE, L, LE, 2CM, 4CM	1969-98,9999	<u>01-05,07-09</u>
		Turbo, Cabriolet, 2EM, 4EM,		
		CM, SE		
032	Sonnett	II, III, 97	1967-74,9999	<u>02</u>
033	95/96	V-4, M, S, M-S, Special	1959-73,9999	<u>02,06,09</u>
034	9000	S, Turbo, CS, CD, CDE, E,	1985-98,9999	04,05,09
		AERO, CSE		
035	9-3/9-3x	SE (Hot), Viggen, Linear Arc,	1999-2012,	01,03-07,09
		Vector, Aero, 2.0T,	9999	
		SportCombi, Combi, Estate		
036	9-5	SE, Aero, 2.3T, Set, Arc,	1999-2012,	02,04,06,08,09
		Linear, Aero, SportCombi,	9999	
		2.5T, Turbo X, Vector		

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
037	9-2x	Linear, Aero	2005-06,9999	<u>05</u>
038	9-4x		2009-12,9999	<u>06</u>
398	Other (automobile)	Monte Carlo 850, GT850,	1950-2012,	<u>01-09</u>
		GT750, 92/93	9999	
399	Unknown (automobile)		1950-2012,	01-09
			9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	9-7x	Arc, Linear, 4.2i, 5.3i, Altitude	2005-11,9999	<u>14</u>
		Edition, Aero		

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (SAAB)		1950-2012,	<u>49</u>
			9999	

## MAKE: Saturn (24) (STRN)

Codes	Models	Includes	Model Years	Body Types
001	SL	SL, SL1, SL2	1991-2002, 9999	<u>04</u>
002	SC	SC1, SC2	1991-2002, 9999	<u>02, 09, 17</u>
003	SW	SW1, SW2	1993-2001, 9999	<u>06</u>
004	EV1/EGV1*	Electric Vehicle (Gen II)	1997-2003, 9999	<u>02</u>
005	LS	LS, LS1, LS2, L100/L200/ L300, L300-1/2/3	2000-05,9999	<u>04</u>
006	LW	LW1, LW2, LW200/ LW300-1/2/3	2000-04,9999	<u>06</u>
007	lon	Quad-coupe, I3, Red Line	2003-07,9999	<u>04, 09, 17</u>
008	Sky	Red Line	2007-10,9999	<u>01</u>
009	Aura	XE, XR, Hybrid	2007-10,9999	<u>04</u>
010	Outlook	XE, XR	2007-10,9999	<u>06</u>
011	Astra	XE, XR, Sport	2008-10,9999	<u>03,05,09</u>
398	Other (automobile)		1991-2010, 9999	02-06,08,09, 17
399	Unknown (automobile)		1991-2010, 9999	02-06,08,09, 17

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Vue	Red Line, 4, V6, Green Line, XE, XR-4, XR-V6	2002-10,9999	<u>14</u>
441	Relay	2, 3	2005-07,9999	<u>20</u>
499	Unknown (light truck)		2002-10,9999	<u>14</u> , <u>20</u>

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (SATURN)		1991-2010, 9999	<u>49</u>

# MAKE: Scion (67) (SCIO)

Codes	Models	Includes	Model Years	Body Types
031	xB (2012 on. See Toyota	1.0, 2.0 Series, Limited	2012-15,9999	<u>06</u>
	for 2004-2011)	Edition, 10th Anniversary		
032	tC (2012 on. See Toyota	1.0 Series, Limited Edition,	2012-16,9999	<u>03</u>
	for 2005-2011)	8.0 Series, 10th		
		Anniversary		
033	xD (2012 on. See Toyota	Limited Edition, 10th	2012-14,9999	<u>05</u>
	<u>for 2007-2011</u> )	Anniversary		
034	iQ (2012 on. See Toyota	10th Anniversary	2012-14,9999	<u>03</u>
	<u>for 2010-2011</u> )			
035	FR-S	10th Anniversary	2013-16,9999	<u>02</u>
036	iA		2016	<u>04</u>
037	iM		2016	<u>05</u>
398	Other (automobile)		2012-16,9999	<b>02-06,08</b> ,09
399	Unknown (automobile)		2012-16,9999	<b>02-06,08</b> ,09

### **AUTOMOBILES**

### MAKE: Smart (65) (SMRT)

Codes	Models	Includes	Model Years	Body Types
031	Fortwo	Pure, Prime, Passion,	2008- <b>18</b> ,9999	<u>01,02,09</u>
		Proxy, Electric <b>, Brabus</b>		
398	Other (automobile)		2008- <b>18</b> ,9999	01,02,09
399	Unknown (automobile)		2008- <b>18</b> ,9999	01,02,09

## MAKE: Sterling (61) (STLG)

AUTOMO	AUTOMOBILES					
Codes	Models	Includes	Model Years	Body Types		
031	827	Li, SL, S, SLI	1987-91,9999	<u>04,05,09</u>		
398	Other (automobile)	825, S, SL, Oxford Edition	1987-91,9999	<u>04,05,09</u>		
399	Unknown (automobile)		1987-91,9999	<u>04,05,09</u>		

# MAKE: Subaru (48) (SUBA)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
031	Loyale (1990 on)/DL/ FE/G/GF/GL/GLF/ STD	4-wheel drive, S, 1300, 1400, 1600, 1800, A15L, A44L, Touring Wagon, Turbo	1972-94,9999	<u>02-09</u>
032	Star	FF -1 Star, 1100	1971	<u>02,04,06,08,09</u>
033	360		1958-70,9999	<u>02</u>

Codes	Models	Includes	Model Years	Body Types
034	Legacy/Outback (prior to 2003 only; see 045 for 2003 on)	L, LS, LSI, 4WD, Outback (Limited, Ltd, Sport, VDC, L.L. Bean Edition), GT, Brighton, Sport Utility Sedan (Ltd.), 30 <sup>th</sup> Anniv. Outback, H-6, 35 <sup>th</sup> Anniv., 2.5, 2.5i <i>(Base, Premium, Sport, Limited)</i> GT, spec. B, 3.0R, Limited, Premium, Sport, 3.6R (Base, Limited)	1990- <b>2018</b> , 9999	<u>04-06,09</u>
035	XT/XT6	4WD Turbo, convertible, DL, GL	1985-91,9999	<u>01,02,09</u>
036	Justy	DL, GL, 4WD	1987-94,9999	<u>03,05,07,09</u>
037	SVX	LS, LSL, XR, Lsi	1992-97,9999	<u>02</u>
038	Impreza	L, LS, Brighton, Outback Sport, RS, L-Sport, LX, 2.5i/RS/S/TS/ GT, WRX, WRX Sport/STI/SS/ TR, Limited Edition, Premium, SE, STI, STI-S, 2.0i (Premium, Limited, Sport, Sport Limited)	1993- <b>2018</b> , 9999	02,04-06,08,09
039	RX		1986-89,9999	<u>03,04,09</u>
043	Brat	DL, GL	1978-87,9999	<u>10</u>
044	Baja	Sport, Turbo	2003-07,9999	<u>10</u>
045	Outback (2003 on; see 034 for prior to 2003)	H6-VDC, 35 <sup>th</sup> Anniversary Edition, 2.5, 2.5i (Premium, Limited), 2.5XT, 3.0R, Special Edition, VDC Limited, Sport, L.L. Bean Edition, 3.0R. Premium, 3.6R (Limited)	2003- <b>18</b> ,9999	<u>04-06,09</u>
046	BRZ	Premium, Limited <b>, tS</b>	2013- <b>18</b> ,9999	<u>03</u>
047	WRX (2015 on; see 038 for prior to 2015)	Premium, Limited, STi <b>(Base,</b> Limited, <b>Type RA)</b>	2015- <b>18</b> ,9999	04
398	Other (automobile)		1968- <b>2018</b> , 9999	<u>01-09, 10</u>
399	Unknown (automobile)		1968- <b>2018</b> , 9999	<u>01-09</u> , <u>10</u>

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Forester	L, S, 2.5i, 2.0XT, 2.5X,	1997- <b>2018</b> , 9999	<u>14</u>
		2.5XS, 2.5XT, L.L. Bean		
		Edition, Limited (Plus),		
		Sport, Premium, Touring		

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
402	B9 Tribeca	Base, Limited, Special	2006-14,9999	<u>14</u>
		Edition, Premium,		
		Touring, 3.6R		
403	XV Crosstrek	2.0i Premium/Limited,	2013- <b>18</b> ,9999	<u>14</u>
		Hybrid (Premium, Touring)		
499	Unknown (light truck)		1997- <b>2018</b> , 9999	<u>14</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (SUBARU)		1958- <b>2018</b> , 9999	<u>49</u>

# MAKE: Suzuki (53) (SUZI)

Codes	Models	Includes	Model Years	Body Types
031	Swift/SA310	Gti, GTX, GLX, GA, GT, GL	1989-2001,	03-05,07,09
			2010,9999	
032	Esteem	GL, GLX, GLX+	1995-2002, 9999	<u>04,06,09</u>
033	Aerio	S, G, LX, SX (Wagon),	2002-07,9999	<u>04,06,09</u>
		Luxury		
034	Forenza	S, LX, EX, Premium,	2004-08,9999	<u>04,06,09</u>
		Convenience, Popular		
035	Verona	S, LX, EX, Luxury	2004-06,9999	<u>04</u>
036	Reno	S, LX, EX, Premium,	2005-08,9999	<u>05</u>
		Convenience		
040	SX4/SX4 Crossover	Base, Sport, Convenience,	2007-13,9999	<u>04,05,09</u>
		Touring, L, S, SD, SE, GTS,		
		LE, SportBack, JX,		
		Premium, Tech Value		
		Package		
041	Kizashi	GTS, S, SE, SLS, Sport	2010-13,9999	<u>04</u>
398	Other (automobile)	800 Fronte, Alto	1981-2013, 9999	<u>03-07,09</u>
399	Unknown (automobile)		1981-2013, 9999	03-07,09

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	Samurai	Standard, Deluxe, JL	1986-96,9999	<u>14</u>
402	Sidekick/Vitara/ Vitara V6	JS, JX, JLX, JLS, Sport, Grand Vitara (1999-2002 only; see model 404 for 2003 on) (JS, JLX, JLS, Ltd.) XL-7 (2002 only; see model 405 for 2003 on) LX	1989-2004, 9999	<u>14</u>
403	X-90		1996-98,9999	<u>14</u>

Codes	Models	Includes	Model Years	Body Types
404	Grand Vitara (2003 on; see	JS, JLX, JLS, Limited, GX,	2003-13,9999	<u>14</u>
	model 402 for models	LX, XV6, Premium, Xsport,		
	prior to 2003)	Luxury, Special Edition,		
		Ultra Adventure Edition		
405	XL-7 (2003 on; see 402 for	Standard, Touring,	2003-09,9999	<u>14</u>
	2002 model year)	Limited, GX, LX, Premium,		
		Luxury		
481	Equator	Comfort, Premium, Sport,	2009-13,9999	<u>34</u>
		RMZ-4		
498	Other (light truck)	Jimmy	1981-2013, 9999	<u>14</u> , <u><b>34</b></u>
499	Unknown (light truck)		1981-2013, 9999	<u>14</u> , <u><b>34</b></u>

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50cc		1970-2013, 9999	<u>80, 81, 83, <b>84</b>, 88,</u>
				<u>89</u>
702	51-124cc		1970- <b>2018</b> , 9999	<u>80, 81, 83, <b>84</b>, 88,</u>
				<u>89</u>
703	125-349cc		1969- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
704	350-449cc		1970-93; 2000-	<u>80,83,<b>84,</b>88,89</u>
			<b>18</b> , 9999	
705	450-749cc		1969- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
706	750cc-over		1970- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
709	Unknown cc		1969- <b>2018</b> , 9999	<u>80-<b>84</b>,<b>87</b>-89</u>

### ALL TERRAIN VEHICLES

Codes	Models	Includes	Model Years	Body Types
731	0-50cc		1969-87; 2002-	<u>90</u> , <u><b>96</b></u>
			04, 2009- <b>18</b> ,	
			9999	
732	51-124cc		1969-2004, 2009-	<u>90</u> , <u><b>96</b></u>
			<b>18</b> , 9999	
733	125-349cc		1969- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
734	350cc or greater		1969-93; 1998-	<u>90</u> , <u><b>96</b></u>
			<b>2018</b> , 9999	
739	Unknown cc		1969- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (SUZUKI)		1969- <b>2018</b> , 9999	<u>49</u> , <u>99</u>

# MAKE: Toyota (49) (TOYT)

### AUTOMOBILES

Codes	Models	Includes	Model Years	Body Types
031	Corona	Mark II, Custom, 1900, 2000,	1966-83,9999	02,04,06,08,09
		Deluxe		

Codes	Models	Includes	Model Years	Body Types
032	Corolla	1100, 1200, 1600, SR-5, LE, DX, CE, Deluxe, Custom, FX, FX16, Sport, GTS, VE, S, XRS, XLE, CE, L, Special Edition, LE Eco, 50th Anniversary, XSE, iM	1969- <b>2018</b> , 9999	<u>02-09</u>
033	Celica	1900, 2000, GT, ST, GTS, VE, GT-S	1971-2006, 9999	<u>01-03,09</u>
034	Supra	Celica Supra, Soarer, Turbo	1979-98,9999	<u>03</u>
035	Cressida		1978-92,9999	04-06,09
036	Crown	2300, 2600, Toyopets	1958-71,9999	02,04,06,08,09
037	Carina	2000	1972-73,9999	02
038	Tercel	Corolla Tercel, 4WD, EZ, DX, LE, DLX, CE	1980-99,9999	02-09
039	Starlet		1981-84,9999	<u>03</u>
040	Camry	LE, Deluxe, XLE, DLX, SE, All- Trac, CE, SE, Limited Edition, L, Hybrid (CVT/LE/XLE/SE), XSE, Special Edition	1983- <b>2018</b> , 9999	02,04-06,08,09
041	MR-2/MR Spyder	Super Charged	1984-95; 2000- 07,9999	<u>01,02,09</u>
042	Paseo	Turbo, T-bar	1992-97,9999	<u>01,02,09</u>
043	Avalon	XL, XLS, Limited, Touring, XLE, Hybrid, Premium, Sport, <i>Plus</i>	1995- <b>2018</b> , 9999	<u>04</u>
044	Solara	Camry Solara (SE, SLE, Sport)	1999-2009, 9999	<u>01,02,09</u>
045	ECHO		2000-05,9999	<u>02,04,<b>08,</b>09</u>
046	Prius *	*Electric hybrid, Touring, II, III, IV, V (2/3/4/5), (CVT), 3 <sup>rd</sup> Generation (2/3/4/5), Plug-In (Base/Advanced), c (1/2/3/4), Persona Series, <i>Two, Two</i> <i>Eco, Three, Three Touring,</i> <i>Four, Four Touring, Prime</i> ( <i>Plus, Premium, Advanced</i> )	2001- <b>18</b> ,9999	<u>03-06,<b>07,</b>09</u>
047	Matrix	Base, XR, XRS, STD, S, SD, L	2003-13,9999	<u>06</u>
048	Scion xA	RS 1.0	2004-06,9999	<u>05</u>
049	Scion xB (2004-2011 only. <u>See 67-031 for</u> <u>2012 on</u> .)	1.0, 2.0 Series	2004-11,9999	<u>06</u>
050	Scion tC (2005-2011 only. <u>See 67-032 for</u> <u>2012 on</u> .)	1.0 Series	2005-11,9999	<u>03</u>
051	Yaris	Liftback, S, CE, HB, LB, LE, RS, SE, L, iA	2007- <b>18</b> ,9999	<u>03-05, 09</u>

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
052	Scion xD (2007-2011		2007-11,9999	<u>05</u>
	only. <u>See 67-033 for</u>			
	<u>2012 on</u> .)			
053	Venza	LE, XLE, Limited	2009-15,9999	<u>05</u>
054	Scion iQ (2010-2011		2010-11,9999	<u>04</u>
	only. <u>See 67-034 for</u>			
	<u>2012 on</u> .)			
055	Mirai		2016- <b>18</b> , 9999	<u>04</u>
056	86		2017-18, 9999	<u>03</u>
398	Other (automobile)	2000 GT Coupe (1960s),	1960- <b>2018</b> , 9999	<u>01-09</u> , <u>10</u>
		Sports 800, Vipor, Tiara		
399	Unknown (automobile)		1960- <b>2018</b> , 9999	<u>01-09</u> , <u>10</u>

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	4-Runner	SR5 (Base, Limited), Limited, Sport, Trail, TRD Pro, TRD Off- Road (Base, Premium)	1984- <b>2018</b> , 9999	<u>14</u>
402	RAV4*	L, LE, EVs-electric*, Sport, Limited, Hybrid <i>(Limited, SE, XLE)</i> , XLE, <i>Platinum,</i> <i>Adventure, SE</i>	1996- <b>2018</b> , 9999	<u>14</u>
403	Highlander	Limited, Hybrid, Sport, SE, Plus, LE, LE Plus, XLE, Platinum	2001- <b>18</b> ,9999	14
404	FJ Cruiser	Baja 1000, FJ, SE, TRD, AT, MT	2007-14,9999	<u>14</u>
405	C-HR	XLE, XLE Premium	2018	<u>14</u>
421	Land Cruiser	4WD	1964- <b>2018</b> , 9999	<u>15</u>
422	Sequoia	SR5, Limited, Platinum	2001- <b>18</b> ,9999	<u>15</u>
441	Minivan (1984-90)/ Previa (1991 on)	LE, Cargo, DX, XLE	1984-97,9999	<u>20</u>
442	Sienna	CE, LE, XLE, Symphony, Limited, SE, L	1998- <b>2018</b> , 9999	20
471	Pickup	SR-5, Extra Cab, Sport, LN44, Chinook, Wonder Wagon	1974-95,9999	<u>32,<b>34,39</b>, 40, 42</u>
472	Tacoma	SR5, Xtracab, Limited, PreRunner, Side Step, Double Cab, S-Runner, 2.7L, 4.0L X- Runner, T/X, T/X Pro, Access Cab, TRD (Sport, Pro, Off- Road), SR	1995- <b>2018</b> , 9999	<u>32,<b>34,39</b>, 40, 42</u>
481	T-100	DX, SR5, Limited, Xtracab	1993-98,9999	<u>32</u> , <b>34</b> , <b>39</b> , 40, <u>42</u>

Codes	Models	Includes	Model Years	Body Types
482	Tundra	SR5 (Access Cab), LTD, (Access Cab), Double Cab, Darrell Waltrip Special Edition, CrewMax, 4.0L, 4.6L, 5.7L, Limited, SR, 1794 Edition, Platinum, TRD Pro	1999- <b>2018</b> , 9999	<u>32,<b>34,39</b>,</u> 40, 42
498	Other (light truck)		1970- <b>2018</b> , 9999	<u>14,15,19, 20,29,</u> <u>32,<b>34,</b>39</u>
499	Unknown (light truck)		1973- <b>2018</b> , 9999	<u>14,15,19</u> , <u>20</u> , <u>32,<b>34</b>,39</u> , <u>40</u> , <u>42</u> , <u>48,49</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (TOYOTA)		1966- <b>2018</b> , 9999	<u>49</u>

# MAKE: Triumph (50) (TRIU)

AUTOMOBILES				
Codes	Models	Includes	Model Years	Body Types
031	Spitfire	I, II, III, IV, 1500	1962-81,9999	<u>01,02,09</u>
032	GT-6	MK3	1967-73,9999	<u>01,02,09</u>
033	TR4	TR2, TR3, TR4A	1958-68,9999	<u>01,02,09</u>
034	TR6		1969-76,9999	<u>01,02,09</u>
035	TR7/TR8		1975-81,9999	<u>01,02,09</u>
036	Herald	Vitesse	1960-74,9999	<u>01,02,06,09</u>
037	Stag		1971-73,9999	<u>01,02,09</u>
398	Other (automobile)	1800, 2000, Mayflower,	1946-81,9999	<u>01,02,04,08,09</u>
		Renown,1200		
399	Unknown (automobile)		1946-81,9999	<u>01,02,04,08,09</u>

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50cc		1965-83,9999	<u>80</u>
702	51-124cc		1965-83,9999	<u>80</u>
703	125-349cc		1950-74,9999	<u>80</u>
704	350-449cc		1950-71,9999	<u>80</u>
705	450-749cc		1950- <b>2018</b> , 9999	<u>80</u>
706	750cc or greater		1950- <b>2018</b> , 9999	<u>80</u>
709	Unknown cc		1950- <b>2018</b> , 9999	<u>80</u>
799	Unknown (motored cycle)		1950- <b>2018</b> , 9999	<u>80</u>

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (TRIUMPH)		1950- <b>2018</b> , 9999	<u>99</u>

### **AUTOMOBILES**

# MAKE: Volkswagen (30) (VOLK)

Codes	Models	Includes	Model Years	Body Types
031	Karmann Ghia		1954-75,9999	01,02,09
032	Beetle 1300/1500	Flat windshield, 94.5 WB	1948-77,9999	01,02,09
033	Super Beetle	Curved windshield 95.3 WB	1971-80,9999	01,02,09
034	411/412	Squareback/Fastback	1971-74,9999	03,04,09
035	Squareback/Fastback	Type 3, 1600	1965-74,9999	02
036	Rabbit	L, GTI, Sport, LS, Custom, DL,	1975-84, 2006-	01,03,05-07,09
		Deluxe, S	09,9999	
037	Dasher		1974-81,9999	03,05-07,09
038	Scirocco	16V	1975-88,9999	02
040	Jetta/Jetta SportsWagen	III, GL (TDI, 1.9L, 2.0L), GLI (2.0T, VR6), GLS (1.8T,1.8L/I.9L/ 2.0L/2.8L/ TDI/VR6), GT, Carat, TDI, GLX (VR6/ 2.8L), Turbo Diesel, 2.5L Wolfsburg Edition, S/SE/ SEL, Value Edition. 2.0T, 3.6, Autobahn, Hybrid (SE, SEL, SEL Premium), Premium, Edition 30, 1.4T, Sport	1981- <b>2018</b> , 9999	<u>02,04,06,08,09</u>
041	Quantum	Synco	1982-88,9999	02,04,06,08,09
042	Golf/Cabriolet/Cabrio/ GTI/ GLI	Golf II, GTI (GLS, GLX 1.8T/2.0T/2.8L), GT, GL(1.8T/ VR6/2.0L/1.9L/ TDI), Golf III, GLS (1.8T/1.8L/1.9L/ 2.0/TDI), Wolfsburg, Cabrio (GL, GLS, GLX), 20 <sup>th</sup> Anniversary, R32, MkV, Convenience, R, 2.5L, Driver's Edition, SE, SEL, Autobahn, Launch EditionSport Wagen (S, SE, SEL), eGolf (SE, SEL Premium), Alltrack (S,SE, SEL), Alltrack	1985- <b>2018</b> , 9999	01,03,05-09
043	Rabbit Pickup	car-based pickup	1980-83,9999	<u>10</u>
044	Fox	GL	1987-94,9999	02,04,06,08,09
045	Corrado		1989-94,9999	<u>02</u>
046	Passat (CC - 2008 thru 2011; see 052 for 2012 on)	GL, GLS (1.8T, Synchro, V6), TDI, GLX (1.8T, 2.0T, W8, Synchro, V6), 4MOTION, 3.6 GL, Value Edition, CC, Highline, Komfort, 2.5 (S/SE), Wolfsburg Edition, Sport, Premium, Clean Diesel, SEL, <b><i>R-Line</i></b>	1990- <b>2018</b> , 9999	<u>04,06,09</u>

Codes	Models	Includes	Model Years	Body Types
047	New Beetle	GL GLS TDI, 1.8T/1.8L/	1998-2010,	<u>01,03,09</u>
		1.9L/2.0L/2.5/2.5L Syncro/ V6,	2012- <b>18</b> , 9999	
		GLX (1.8T), Turbo, Turbo S,		
		Fender Edition, Sun and		
		Sound, R-Line, GSR, Clean		
		Diesel, Classic, SE, SEL, Dune,		
		#PinkBeetle, Coast		
048	Phaeton	3.2L, 4.2L, V6, V8, W12	2002-11,9999	<u>04</u>
051	Eos	2.0T, 3.2L, Executive, Komfort,	2006-16,9999	<u>01</u>
		Luxury, Turbo, VR6, Sport,		
		Final Edition		
052	CC (For 2012 on. See	Luxury, Sport, Sport Plus, VR6,	2012- <b>17</b> ,9999	<u>04</u>
	model 046 for 2008-	R-Line, 2.0T, 4MOTION,		
	2011.)	Executive, V6		
053	Arteon		2019	<u>05</u>
398	Other (automobile)		1965- <b>2019</b> ,	<u>01-09</u> , <u>10</u>
			9999	
399	Unknown (automobile)		1956- <b>2019</b> ,	<u>01-09, 10</u>
			9999	

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	The Thing (181)		1973-75,9999	<u>14</u>
402	Tiguan	S, SE, SEL, R-Line, 4MOTION, 2.0T, Wolfsburg <b>, Sport,</b> <b>Premium</b>	2008- <b>18</b> ,9999	<u>14</u>
403	Atlas	S, V6 (S, 4MOTION, Launch Edition, SE)	2018	<u>14</u>
421	Touareg/Touareg 2	V6, V8, V10, VR6 FSI, Lux, Executive, Hybrid, Sport, R- Line, X Special Edition, TDI <b>,</b> <i>Wolfsburg</i>	2003- <b>17</b> ,9999	<u>15</u>
441	Vanagon/Camper	Bus, Kombi, Van	1955-91,9999	20
442	Eurovan	GLS, MV, Camper, Weekender Package	1992-04,9999	<u>20</u>
443	Routan	S, SE, SEL Premium/RSE	2009-13,9999	<u>20</u>
498	Other (light truck)		1967- <b>2018</b> , 9999	<u>14,15,<b>19</b>, 20</u>
499	Unknown (light truck)		1965- <b>2018</b> , 9999	<u>14,15,<b>19</b>, 20, 49</u>

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2019</b> ,	<u>92,93,97</u>
			9999	

Codes	Models	Includes	Model Years	Body Types
999	Unknown		1956- <b>2019</b> ,	<u>49</u>
	(VOLKSWAGEN)		9999	

# MAKE: Volvo (51) (VOLV)

Codes	Models	Includes	Model Years	Body Types
031	122	S	1958-68,9999	02,04,06,08,09
032	140/142/144/145 *	S, E, GL, GLS, Deluxe	1968-74,9999	02,04,06,08,09
033	164	S, E	1970-75,9999	04
034	240 series*/DL/GL/GLT	242, 244, 245, DL, GL, GLT, Deluxe	1975-93,9999	02,04,06,08,09
035	260 series/GLE	264,265,262, c, Volvo Coupe, Volvo Diesel	1976-82,9999	02,04,06,08,09 12
036	1800	E, S, ES, P1800	1960-73,9999	<u>02,06,09</u>
037	PV544	PV444	1947-65,9999	<u>04,06,09</u>
038	760/780	GLE, Turbo, Bertone Coupe	1983-92,9999	02,04,06,08,09 12
039	740	GLE, GT, Turbo, GL, SE	1983-92,9999	04,06,09
040	940	GLE, Turbo, SE	1991-95,9999	<u>04,06,09, 12</u>
041	960		1992-97,9999	04,06,09, 12
042	850	GLT, Turbo, T-5, GTAS, GTMS Cross Country	1993-97,9999	04,06,09
043	70 Series (For XC70 for 2014 on, use model code 402)	C70 (LT, HT, T5), S70 (GLT, T5, AWD) V70 (R, SC Cross Country, GLT, T5, M, 2.4T, 2.4, 2.5T, T6, R, 3.2) LPT, HPT. XC70	1998-2013, 9999	01,02,04,06, <b>08</b> 09
044	90 Series	S90, V90	1998	04,06,09
045	80 Series	S80 (2.9, T6, Executive, Premier) 2.5, 2.5T, 3.2, V8	1999- <b>2017</b> , 9999	04
046	40 Series	S40, V40, LSE, 2.5i, T5, 2.4i, R- Design	2000-11,9999	04,06,09
047	60 Series	S60 (2.4T, 2.4, 2.5 AWD, T5, Polestar), 2.4M, 2.5T, R, T5, T6, R-Design, Drive-E Cross Country, <i>Dynamic,</i> <i>Inscription, Polestar</i>	2001- <b>18</b> ,9999	<u>04</u>
048	V50	2.4i, T5, R-Design	2005-11,9999	<u>06</u>
049	C30	1.0, 2.0, T5, R-Design	2008-13,9999	<u>03</u>
050	XC60	3.2, T5 (Dynamic, Inscription), T6 (Dynamic Inscription, R- Design), R-Design, Drive-E, <i>Momentum</i>	2008- <b>18</b> ,9999	<u>06</u>
051	V60	T5, T6, R-Design, Drive-E, Cross Country, Polestar, Dynamic	2014- <b>18</b> ,9999	<u>06</u>

### **Passenger Vehicles**

Codes	Models	Includes	Model Years	Body Types
052	V90	Cross Country (Volvo Ocean	2017-18, 9999	<u>06</u>
		Race, Inscription, R-Design)		
053	<i>S90</i>	T5 (Momentum, Inscription),	2017-18, 9999	<u>04</u>
		T6 (Momentum, Inscription)		
398	Other (automobile)		1958- <b>2018</b> , 9999	<u>01-09</u> , <u>10-12</u>
399	Unknown (automobile)		1958- <b>2018</b> , 9999	<u>01-09</u> , <u>10-12</u>

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
401	XC90	2.5T(AWD), T6(AWD), V8, 3.2, R-Design, SVR7, First Edition, T5, Plug-In, Excellence, T8, <i>Momentum, Inscription,</i> <i>Excellence</i>	2003- <b>18</b> ,9999	<u>14</u>
402	XC70 (For 2014 on. For prior to 2013, use model code 043)	3.2, T6, Drive-E	2014- <b>17</b> ,9999	14
403	XC40	Momentum, R-Design	2018	<u>14</u>
499	Unknown (light truck)		2003- <b>18</b> ,9999	14

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1981-93; 1996-	60-64,66,78
			<b>2018</b> , 9999	
882	Medium/Heavy – COE		1981-93; 1996-	<u>60-64,66,78</u>
	low entry		2004, 9999	
883	Medium/Heavy – COE		1981-93; 1996-	<u>60-64,66,78</u>
	high entry		2004, 9999	
884	Medium/Heavy –		1981-93; 1996-	<u>60-64,66,</u>
	Unknown engine		<b>2018</b> , 9999	<u>71,72,78</u>
	location			
890	Medium/Heavy – COE		1981-93; 1996-	<u>60-64,66,78</u>
	entry position unknown		<b>2018</b> , 9999	
898	Other (medium/heavy		1981-93; 1996-	<u>60-64,66,</u>
	truck)		<b>2018</b> , 9999	<u>71,72,78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out front)		1981-2005, 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		2014- <b>18</b> ,9999	<u>50-52,58,59</u>
988	Other (bus)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>

\*\*Use "981" (bus) if the frontal plane or the engine location is unknown.

### OTHER AND UNKNOWN

Codes	Models	Includes	Model Years	Body Types
998	Other (Vehicle)		1958- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (VOLVO)		1958- <b>2018</b> , 9999	<u>49, 79, 99</u>

## MAKE: Yugo (57) (YUGO)

AUTOMOBILES					
Codes	Models	Includes	Model Years	Body Types	
031	GV/GVL/GVX	All models, Cabriolet	1986-92,9999	<u>01-03,09</u>	

# MAKE: Other Domestic Manufacturers (29)

Codes	Models	Includes	Model Years	Body Types
001	Studebaker/Avanti	Lark, Gran Turismo, Hawk, Cruiser, all associated subseries, light pickup, Studebaker XUV/XUT, Lister	1940-91; 2001- 07,9999	01,02,04,06, 08,09, 16, <b>34,</b> 39
002	Checker	Marathon, Superba, Taxi, Aerobus	1965-82,9999	<u>04,06,09</u> , <u>12</u>
003	Panoz	Esperante (Magnussen Edition, <i>Spyder (Base, GT),</i> <i>Convertible, GTS</i> ), GT, GTS, GTLM, JRD, Abruzzi, Roadster, GTR1, 25th Anniversary, Spyder (GT), <i>Avezzano</i>	2000- <b>18</b> ,9999	<u>01,02,09</u>
004	Saleen	S7, S281, 435S, S302 (White Label, Yellow Label, Black Label), 570, 620, FOURSIXTEEN	2001-15,9999	01,02,04, <b>08</b> ,09
005	Tesla	Roadster (Base, Sport) Model S (Base, Signature, Performance), Model X, Super Charger, Model 3	2008- <b>18</b> ,9999	01,04,05,09, 14
398	Other (automobile)	Desoto, Excalibur, Stutz, FiberFab, Hudson, Packard, Consulier, Gatsby, Auburn, Phaeton, Citicar, Clenet	1930-91,9999	<u>01-09, 10-13</u>
399	Unknown Make		1940- <b>2018</b> , 9999	01-09, <u>10-13,</u> 14,16, <b>19</b> , <u>39</u>

### AUTOMOBILES

# MAKE: Other Import (69)

Codes	Models	Includes	Model Years	Body Types
031	Aston Martin	Lagonda, Vantage, Volante, Saloon, DB Mark III, DB4, DB4GT, DB5, DB6, DB7 (Heritage/Vantage/Volante), V12 (Vanquish S/Zagato/ Vantage, Vantage S), V8 (Vantage/ Vantage S), V8 (Vantage/ Vantage S), DB9 (Carbon Edition, GT), Rapide (S), Cygnet, Carbon Black, One-77, Virage (Coupe/ Volante), DBS (Coupe/ Volante), CC100, Vantage GT, Rapid S, Vulcan, GT12, DB11	1950- <b>2018</b> , 9999	<u>01-09</u>
032	Bricklin		1965-91,9999	<u>02</u>
033	Citroen		1965-91,9999	<u>02-09</u>
034	DeLorean		1981-83,9999	<u>02</u>
035	Ferrari	F355 (Berlinetta, GTS, Spider, F1), F430, F456 (GTA, M, GT, MGTA), F550 (Maranello, Barchetta Pininfarina), 360/430 (Spider, Modena, Challenge) Maranello, Berlinetta, MGT (Vintage), Enzo, Challenge Stradale, 575M, 612 Scaglietti, Superamerica, 599 GTB/GTO, California (T), 418 Italia, FF, SA Aperta, 458 (Spider/ Italia/ Challenge/ Speciale (A)), F12 Berlinetta, FF, LaFerrari, 488 GTB/Spider, GTC4Lusso, F12TDF, F60 America	1965- <b>2018</b> , 9999	01-05,07-09
036	Hillman		1965-91,9999	<u>01-09</u>
037	Jensen	Healy-Interceptor, 541R	1965-91,9999	01-05,07-09

Codes	Models	Includes	Model Years	Body Types
038	Lamborghini	Countach, 5000S, Jalpa, Diablo, Miura, Murciélago (LP640), Galladoro, LP 550- 2/560-4/570-4/670-4/700-4, CP, Aventador (J, SV, LP750- 4, Roadster), Sesto Elemento, Spyder, Superlegga, Aventador, Gallardo, Veneo, Huracan (Base, Spyder), 350GT, <b>Urus</b>	1965- <b>2018</b> , 9999	01, 02, 04, 08, 09, <b>14</b>
039	Lotus	Europe, Espirit (V8, GT-3, V8-GT) Elise, Exige, Evora (Range/GTE/400), California, Club Racer, Sport, 2-Eleven, Black, Bespoke	1967- <b>2018</b> , 9999	<u>01,02,03, 04,</u> <u>08,09</u>
040	Maserati	Biturbo, Ghibli, 3200 GT, Quattroporte, Spyder GT, Sports GT, Executive GT, 90 <sup>th</sup> Anniversary, MC12, GranSport, GranTurismo, GranCabrio, Stradale, Kubang, Sport, MC, S, GTS, S Q4, MC Centennial Edition, Levante, Alfier	1965-99; 2002- <b>18</b> , 9999	<u>01-05,07-09</u> , <u>14</u>
041	Morris	Minor	1965-91,9999	01-09, 10
042	Rolls Royce/Bentley	Rolls Royce: Cloud/ Shadow series, Silver Spur, Silver Dawn, Silver Spirit, Silver Seraph, Corniche, Park Ward), Phantom (Drophead), Ghost; Bently: (Arnaze, Azure, Continental (GT, Speed Black Edition), Mulliner), Brooklands, Goodwood, EWB, 4, Mulsanne, Flying Spur, Super Sports, Wrath, Dawn	1926- <b>2018</b> , 9999	01,02,04,08,09
044	Simca		1965-91,9999	01-09
045	Sunbeam		1965-91,9999	01,02,04,08,09
046	TVR		1965-91,9999	<u>01,02,09</u>
048	Desta		1985-99,9999	<u>14,15,19</u>
049	Reliant		1960-91,9999	<u>01-09</u>
052	Bertone	X/19	1989-91,9999	<u>01,02,09</u>
053	Lada		1965-91,9999	<u>01-09</u>

Codes	Models	Includes	Model Years	Body Types
054	Mini-Cooper	Mark I, II, III, S, SE, Sport, MC40, Traveller, John Cooper Works, Clubman, Countryman, Paceman, Coupe, All 4, Roadster, Convertible	1961-74; 2002- <b>18</b> , 9999	<u>01,03,06,09</u>
055	Morgan (2003 on; Prior to 2003 see 398)	Aero 8, Plus 8, V6, Classic Range, AeroMax, 4/4 Sport, Super Sports Junior, Plus 4, 4 Seater, Aero, Eva GT, 3 Seater, 4/4, Plus 8, SP1, AR Plus 4	2003- <b>18</b> , 9999	<u>01,02,09</u>
056	Maybach	57, 57S, 62, 62S, Laudualet, Zeppelin, Guard	2003-14,9999	<u>04</u>
057	Spyker	C8, Base, T, Laviolette, Aileron, Spyder, Double 12R, Double 12S, C12 Zagato, L2014 M85, D, B6 Venator	2005-15,9999	01,02,09,17
058	Koenigsegg	CC8S, CCR, CCX, CCXR, CCGT, Trevita, Agera, CC8S, Agera R/S, Special Edition, Regera, One:1	2007- <b>18</b> , 9999	<u>01</u>
061	Mahindra	Scorpio (Lx, Sle, Vls, Vlx)	2010- <b>18</b> , 9999	<u>14</u> , <u><b>34</b></u>
062	Caterham	Classic, Roadsport, Academy, Superlight (R300/R400/R500), CSR, Seven (280/360/480/620R), SP 300R, Aeroseven, Superflight Twenty, <b>60</b> <sup>th</sup> <b>Anniversary Edition</b>	2011- <b>18</b> , 9999	<u>01</u>
063	McLaren	MP4-12C, P15, 675LT, 540C, 12C GT Spirit, 650S, P1	2011- <b>18</b> , 9999	<u>01</u>
064	Bugatti	Veyron 164 (Grand Sport, Super Sport), Vitesse, Chiron	2005- <b>18</b> , 9999	<u>01,02,09</u>
398	Other (automotive)	Morgan (Prior to 2003; 2003 on see 055), Singer, Gazelle, Fisker	1928- <b>2018</b> , 9999	<u>01-09, 10-13, 17</u>
399	Unknown Make		1928- <b>2018</b> , 9999	<u>01-09, 10, 19, 39</u>

# **Motored Cycles**

# Note: Refer to <u>Passenger Vehicle section</u> for motored cycles produced by automobile manufacturers (<u>BMW</u>, <u>Honda</u>, <u>Peugeot</u>, <u>Suzuki</u>, <u>Triumph</u>)

### MAKE: BSA (70) (BSA )

MOTORC	MOTORCYCLES				
Codes	Models	Includes	Model Years	Body Types	
701	0-50cc		1950-72,9999	<u>80,81,83,<b>84</b>,</u> <u>88,89</u>	
702	51-124cc		1950-72,9999	<u>80,81,83,<b>84</b>,</u> <u>88,89</u>	
703	125-349cc		1950-72,9999	<u>80,83,<b>84</b>,88,89</u>	
704	350-449cc		1950-72,9999	<u>80,83,<b>84</b>,88,89</u>	
705	450-749cc		1950-72,9999	<u>80,83,<b>84</b>,88,89</u>	
706	750cc or greater		1950-72,9999	<u>80,83,<b>84</b>,88,89</u>	
709	Unknown cc		1950-72,9999	<u>80,83,<b>84</b>,88,89</u>	

#### MOTORCYCLES

### MAKE: Ducati (71) (DUCA)

Codes	Models	Includes	Model Years	Body Types
701	0-50cc		1958-65,9999	80,81, <b>84</b> ,88,89
702	51-124cc		1958-65,9999	<u>80,81,<b>84</b>,88,89</u>
703	125-349cc		1958-65,9999	<u>80,88,89</u>
704	350-449cc		1958-65,9999	<u>80,88,89</u>
705	450-749cc		1958-93; 1997-	<u>80,88,89</u>
			<b>2018</b> ; 9999	
706	750cc or greater		1958- <b>2018</b> , 9999	<u>80,88,89</u>
709	Unknown cc		1958- <b>2018</b> , 9999	<u>80-83</u> , <b>84, 87</b> , 88,
				<u>89</u>

## MAKE: Harley-Davidson (72) (HD)

MOTORC	MOTORCYCLES				
Codes	Models	Includes	Model Years	Body Types	
701	0-50cc		1965-66,9999	<u>80,81,88,89</u>	
702	51-124cc		1948-78,9999	<u>80,81,88,89</u>	
703	125-349cc		1948-88,9999	<u>80,<b>84,</b>88,89</u>	
704	350-449cc		1969-74,9999	<u>80,88,89</u>	
705	450-749cc		1971-78, 2014- <b>18</b> ,	<u>80,88,89</u>	
			9999		
706	750cc or greater		1932- <b>2018</b> ; 9999	<u>80,82,<b>87</b>,88,89</u>	
709	Unknown cc		1932- <b>2018</b> , 9999	<u>80-82,84,87,</u>	
				<u>88,89</u>	

### MAKE: Kawasaki (73) (KAWK)

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50cc		1965-82, 9999	<u>80,81,83,<b>84</b>,</u>
				<u>88,89</u>
702	51-124cc		1965- <b>2018</b> , 9999	<u>80,81,83,<b>84</b>,</u>
				<u>88,89</u>
703	125-349cc		1965- <b>2018</b> , 9999	80,83, <b>84</b> ,88,89
704	350-449cc		1975-98; 2003-04;	80,83, <b>84</b> ,88,89
			2006- <b>18</b> , 9999	
705	450-749cc		1972- <b>2018</b> , 9999	80,83, <b>84,</b> 88,89
706	750cc or greater		1972- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
709	Unknown cc		1965- <b>2018</b> , 9999	<u>80,83,<b>84,87</b>,</u>
				<u>88,89</u>

### ALL TERRAIN VEHICLES

Codes	Models	Includes	Model Years	Body Types
731	0-50cc		2003- <b>18</b> , 9999	<u>90</u> , <u><b>96</b></u>
732	51-124cc		1970-88; 2003- <b>18</b> ,	<u>90</u> , <u><b>96</b></u>
			9999	
733	125-349cc		1970- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
734	350cc or greater		1970- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
739	Unknown cc		1970- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
998	Other (Vehicle)		1965- <b>2018</b> , 9999	<u>91</u> , <u><b>96</b></u>

### MAKE: Moto-Guzzi (74) (MOGU)

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
704	350-449cc		1965-76, 9999	<u>80,88,89</u>
705	450-749cc		1965-87; 2004- <b>18</b> ,	<u>80,88,89</u>
			9999	
706	750cc or greater		1965- <b>2018</b> , 9999	<u>80,88,89</u>
709	Unknown cc		1965- <b>2018</b> , 9999	<u>80,88,89</u>

## MAKE: Norton (75) (NORT)

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
704	350-449cc		1950-76, 9999	<u>80,83,88,89</u>
705	450-749cc		1950-76, 9999	80,83,88,89
706	750cc or greater		1950-76, 9999	<u>80,83,88,89</u>
709	Unknown cc		1950-76, 9999	<u>80,83,88,89</u>

# MAKE: Victory (77) (VCTY)

### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
706	750cc or greater		1998-2017, 9999	<u>80,88,89</u>
707	Electric Motorcycle		2017	<u>80,88,89</u>
709	Unknown cc		1998-2017, 9999	<u>80,88,89</u>
998	Other (Vehicle)		1998-2017, 9999	<u>89</u>

### MOTORCYCLES

## MAKE: Yamaha (76) (YAMA)

Codes	Models	Includes	Model Years	Body Types
701	0-50cc		1979- <b>2018</b> , 9999	<u>80,81,83,<b>84</b>,</u>
				<u>88,89</u>
702	51-124cc		1972- <b>2018</b> , 9999	<u>80,81,83,<b>84</b>,</u>
				<u>88,89</u>
703	125-349cc		1969- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
704	350-449cc		1972- <b>2018</b> , 9999	<u>80,83,<b>84</b>,88,89</u>
705	450-749cc		1971- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
706	750cc or greater		1974- <b>2018</b> , 9999	<u>80,83,<b>84,</b>88,89</u>
709	Unknown cc		1969- <b>2018</b> , 9999	<u>80,83,<b>84,87</b>,</u>
				88,89

### ALL TERRAIN VEHICLES

Codes	Models	Includes	Model Years	Body Types
731	0-50cc		1965-91, 2005- <b>18</b> ,	<u>90</u> , <u><b>96</b></u>
			9999	
732	51-124cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
733	125-349cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
734	350cc or greater		1993- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
739	Unknown cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
998	Other (Vehicle)	Snowmobiles, Golf Carts	1965- <b>2018</b> , 9999	<u>91, 95, <b>96</b></u>

### MAKE: Brockway (80) (BROC)

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1965-77,9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy - COE low entry		1965-77,9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy - COE high entry		1965-77,9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine		1965-77,9999	<u>60-64, 66, 71, 72, 78</u>
	location			
890	Medium/Heavy – COE entry		1965-77,9999	<u>60-64, 66, 71, 72, 78</u>
	position unknown			
898	Other (medium/heavy truck)		1965-77,9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1965-77,9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1965-77,9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965-77,9999	<u>50-52,58,59</u>
988	Other (bus)		1965-77,9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965-77,9999	<u>50-52,58,59</u>

**\*\***Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965-77,9999	<u>65,73</u>

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965-77,9999	<u>92,93,97</u>
999	Unknown (BROCKWAY)		1965-77,9999	<u>99</u>

### MAKE: Diamond Reo or Reo (81) (DIAR)

#### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE	DC101, C116,	1950-88, 1993-	<u>60-64, 66, 71, 72, 78</u>
		M35 (A1, A2,	99, 9999	
		A3)		
882	Medium/Heavy – COE low entry		1954-75, 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry	C054-C088	1954-75, 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine		1954-75,9999	<u>60-64, 66, 71, 72, 78</u>
	location			
890	Medium/Heavy – COE entry		1950-88, 1993-	<u>60-64, 66, 71, 72, 78</u>
	position unknown		99, 9999	
898	Other (medium/heavy truck)		1950-88, 1993-	<u>60-64, 66, 71, 72, 78</u>
			99, 9999	

Codes	Models	Includes	Model Years	Body Types	
981	Bus**: Conventional (Engine out		1954-75, 9999	<u>50-52,58,59</u>	
	front)				
982	Bus: Front engine, Flat front		1954-75, 9999	<u>50-52,58,59</u>	
983	Bus: Rear engine, Flat front		1954-75, 9999	<u>50-52,58,59</u>	
988	Other (bus)		1954-75, 9999	<u>50-52,58,59</u>	
989	Unknown (bus)		1954-75, 9999	<u>50-52,58,59</u>	

BUSES

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1954-75, 9999	<u>65,73</u>

#### **OTHER AND UNKNOWN VEHICLE**

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1950-88, 1993-	<u>92,93,97</u>
			99, 9999	
999	Unknown (DIAMOND REO or REO)		1950-88, 1993-	<u>99</u>
			99, 9999	

## MAKE: Freightliner (82) (FRHT)

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
461	Sprinter/Advantage	2500 (HC/SHC), 3500 (HC/SHC)	2002- <b>18</b> , 9999	21,22,28,29
462	MT 35 Chassis		1985-2013, 9999	<u>22, 40, 42</u>
498	Other (light truck)		1985- <b>2018</b> , 9999	20-22,28,29
499	Unknown (light truck)		1985- <b>2018</b> , 9999	<u>20-22,28,29</u>

### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
870	Medium Heavy Van-Based Vehicle	Sprinter	2002- <b>18</b> , 9999	<u>55</u> , <u>61-64</u>
881	Medium/Heavy – CBE		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry		1968-2013, 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry		1965-2013, 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1963-2013, 9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1965-2013, 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
	front)			

Codes	Models	Includes	Model Years	Body Types
982	Bus: Front engine, Flat front		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>

**\*\***Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65,73</u>

#### **OTHER AND UNKNOWN VEHICLE**

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1963- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (FREIGHTLINER)		1963- <b>2018</b> , 9999	<u>99</u>

### MAKE: FWD (83) (FWD )

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1965-2001, 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry		1965-2001, 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry		1965-2001, 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1965-2001, 9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1965-2001, 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)		1965-2001, 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1965-2001, 9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1965-2001, 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965-2001, 9999	<u>50-52,58,59</u>
988	Other (bus)		1965-2001, 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965-2001, 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965-2001, 9999	<u>65,73</u>

#### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965-2001, 9999	<u>92,93,97</u>
999	Unknown (FWD)		1965-2001, 9999	<u>99</u>

## MAKE: International Harvester/Navistar (84) (INTL) - (NAVI)

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
421	Scout	Scout II, Utility pickup,	1962-80,9999	<u>15</u>
		SS-2, Roadster, 800		
		series, Traveler, Terra		
		Traveltop,		
431	Travelall	1010-1210, 100-200	1963-75,9999	<u>16</u>
466	Multistop Van	Metro RM, MS1510,	1960-84,9999	<u>22,28,29</u>
		120-160, MS1210		
481	Pickup	R-100-500, 900A-	1951-76,9999	<u>33</u> , <b>34</b>
		1500C/D, 1010-1510		
498	Other (light truck)		1960-84,9999	<u>15,16,<b>19</b></u> , <u>22,28,29</u>
499	Unknown (light truck)		1951-84,9999	<u>15,16,19</u> , <u>22,28,29</u>

### **MEDIUM/HEAVY TRUCK**

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE	Loadstar/Fleetstar, Paystar, CBE Transtar, 4200, S-series Mixer, 8100, 8500, 9100, 9200, 9300, 9400, 9900, CXT, RXT, MXT, Lonestar	1963- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry	CO, VCO, DCO, 190- 1950, Cargostar, LFM, 5370 (Garbage), CF500/600	1973- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry	DCO, DCOT, UCO, VCOT, 405-series, COE Transtar, Unistar, Conco 707B, 9600	1961- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1948- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1964- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)	Fire truck - R140-R306, CO 8190	1955- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out front)	R153-1853 Loadstar, 1603-1853	1953- <b>2018</b> , 9999	<u>50-52,58,59</u>
982	Bus: Front engine, Flat front	173FC, 183FC	1972- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus**: Rear engine, Flat front	183RE, 193RE-transit	1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)		1953- <b>2018</b> , 9999	<u>50-52,58,59</u>

Codes	Models	Includes	Model Years	Body Types
989	Unknown (bus)		1953- <b>2018</b> , 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65,73</u>

### **OTHER AND UNKNOWN VEHICLE**

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1954- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (INTL. HARVESTER/ NAVISTAR)		1951- <b>2018</b> , 9999	<u>79, 99</u>

### MAKE: Kenworth (85) (KW)

#### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE	520, 540, T400, T600, T800, C500-550, W900, T300	1947- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry	L700	1972- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry	K100, K100E, K270, K300, K350	1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1954- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1964- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional		1965-2004, 9999	<u>50-52,58,59</u>
	(Engine out front)			
982	Bus: Front engine, Flat		1965-2004, 9999	<u>50-52,58,59</u>
	front			
983	Bus: Rear engine, Flat front		1965-2004, 9999	<u>50-52,58,59</u>
988	Other (bus)		1965-2004, 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965-2004, 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65,73</u>

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (KENWORTH)		1965- <b>2018</b> , 9999	<u>99</u>

### **MEDIUM/HEAVY TRUCKS**

## MAKE: Mack (86) (MACK)

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1968- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry		1977- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1956- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1972- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)		1971- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1965-2004, 9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1976-2004, 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965-2004, 9999	<u>50-52,58,59</u>
988	Other (bus)		1965-2004, 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965-2004, 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65,73</u>

#### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (MACK)		1965- <b>2018</b> , 9999	<u>99</u>

### MAKE: Iveco/Magirus\* (88) (IVEC)

### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE	LCF	1980-91,9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry	FL, FS	1980-91,9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry		1980-91,9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1980-91,9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1980-91,9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)		1980-91,9999	60-64, 66, 71, 72, 78

BUSES					
Codes	Models	Includes	Model Years	Body Types	
981	Bus**: Conventional (Engine out front)		1980-91, 9999	<u>50-52,58,59</u>	
982	Bus: Front engine, Flat front		1980-91, 9999	<u>50-52,58,59</u>	
983	Bus: Rear engine, Flat front		1980-91, 9999	<u>50-52,58,59</u>	
988	Other (bus)		1980-91, 9999	<u>50-52,58,59</u>	
989	Unknown (bus)		1980-91, 9999	<u>50-52,58,59</u>	

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1980-91,9999	<u>65,73</u>

#### **OTHER AND UNKNOWN VEHICLE**

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1980-91,9999	<u>92,93,97</u>
999	Unknown (IVECO/MAGIRUS)		1980-91,9999	<u>99</u>

\* Magirus stopped production in 1985; Iveco stopped production in 1991.

### MAKE: Peterbilt (87) (PTRB)

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE	357-379, 387,	1974- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
		385		
882	Medium/Heavy – COE low entry	270	1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry	362, 320	1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine		1961- <b>2018</b> , 9999	60-64, 66, 71, 72, 78
	location			
890	Medium/Heavy – COE entry		1964- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
	position unknown			
898	Other (medium/heavy truck)		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1965-2004, 9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1965-2004, 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965-2004, 9999	<u>50-52,58,59</u>
988	Other (bus)		1965-2004, 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965-2004, 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65,73</u>

### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1965- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (PETERBILT)		1965- <b>2018</b> , 9999	<u>99</u>

# MAKE: White/Autocar-White/GMC (89) (WHIT) – (WHGM)

### MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
881	Medium/Heavy – CBE		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry		1968- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1963- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
890	Medium/Heavy – COE entry position unknown		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck)		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65,73</u>

#### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)		1963- <b>2018</b> , 9999	<u>92,93,97</u>
999	Unknown (WHITE/AUTOCAR- WHITE/GMC)		1963- <b>2018</b> , 9999	<u>99</u>

# **Buses**

### NOTES:

- Refer to the <u>PASSENGER VEHICLE</u> section for buses manufactured by <u>Chevy</u>, <u>Dodge</u>, <u>Ford</u>, <u>GMC</u>, <u>Grumman</u>, <u>Isuzu</u>, <u>Mercedes</u>, <u>Mitsubishi</u>, and <u>Volvo</u>.
- Refer to the <u>TRUCK</u> section for buses manufactured by <u>Brockway</u>, <u>Diamond Reo</u>, <u>Freightliner</u>, <u>FWD</u>, <u>International Harvester</u>, <u>Kenworth</u>, <u>Mack</u>, <u>Peterbilt</u>, and <u>White/Autocar-White/GMC</u>.
- Refer to the <u>OTHER MAKE</u> section for buses manufactured by <u>Neoplan, Carpenter Industries, DINA, Mid Bus,</u> <u>Orion, and Van Hool</u>.
- <u>Hino and Scania buses</u> are located under <u>OTHER MAKE (Medium/Heavy Trucks)</u> since those manufacturers also make trucks.

### MAKE: Bluebird (90) (BLUI)

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
461	Van Based	van-based school	1927- <b>2018</b> , 9999	<u>21</u>
		bus, shuttle bus		

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1927- <b>2018</b> , 9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1927- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1927- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)		1927- <b>2018</b> , 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1927- <b>2018</b> , 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (BLUEBIRD)		1927- <b>2018</b> , 9999	<u>99</u>

### MAKE: Eagle Coach (91)

USES					
Codes	Models	Includes	Model Years	Body Types	
981	Bus**: Conventional (Engine out front)		1948-2001, 9999	<u>50-52,58,59</u>	
982	Bus: Front engine, Flat front		1948-2001, 9999	<u>50-52,58,59</u>	
983	Bus: Rear engine, Flat front		1948-2001, 9999	<u>50-52,58,59</u>	
988	Other (bus)		1948-2001, 9999	<u>50-52,58,59</u>	
989	Unknown (bus)		1948-2001, 9999	<u>50-52,58,59</u>	

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MAKE: Gillig (92)

BUSES					
Codes	Models	Includes	Model Years	Body Types	
981	Bus**: Conventional (Engine out		1932- <b>2018</b> , 9999	<u>50-52,58,59</u>	
	front)				
982	Bus: Front engine, Flat front		1932- <b>2018</b> , 9999	<u>50-52,58,59</u>	
983	Bus: Rear engine, Flat front		1932- <b>2018</b> , 9999	<u>50-52,58,59</u>	
988	Other (bus)		1932- <b>2018</b> , 9999	<u>50-52,58,59</u>	
989	Unknown (bus)		1932- <b>2018</b> , 9999	<u>50-52,58,59</u>	

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### MAKE: MCI (93) (MCIN)

BUSES						
Codes	Models	Includes	Model Years	Body Types		
981	Bus**: Conventional (Engine out front)		1963- <b>2018</b> , 9999	<u>50-52,58,59</u>		
982	Bus: Front engine, Flat front		1963- <b>2018</b> , 9999	<u>50-52,58,59</u>		
983	Bus: Rear engine, Flat front		1963- <b>2018</b> , 9999	<u>50-52,58,59</u>		
988	Other (bus)		1963- <b>2018</b> , 9999	<u>50-52,58,59</u>		
989	Unknown (bus)		1963- <b>2018</b> , 9999	<u>50-52,58,59</u>		

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types		
461	Van Based	van-based school	1936- <b>2018</b> , 9999	<u>21</u>		
		bus, shuttle bus				

MAKE: Thomas Built (94) (THMS)

#### BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out		1936- <b>2018</b> , 9999	<u>50-52,58,59</u>
	front)			
982	Bus: Front engine, Flat front		1936- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1936- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)		1936- <b>2018</b> , 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1936- <b>2018</b> , 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

#### UNKNOWN

Codes	Models	Includes	Model Years	Body Types
999	Unknown (THOMAS BUILT)		1936- <b>2018</b> , 9999	<u>99</u>

## **Other Make**

## MAKE: Other Make \* (98)

#### **AUTOMOBILES**

#### (Unknown if DOMESTIC or FOREIGN) \*\*

Codes	Models	Includes	Model Years	Body Types
301	Think	City	2009-15, 9999	<u>03</u>
302	Meyers Motor	NmG	2008-15, 9999	<u>02</u>
398	Other (automobile)	Solectra (electric: Force)	1945- <b>2018</b> , 9999	<u>01-09</u> , <u>10-13</u>

\*\*Do not use Other Make (98) if <u>Other Domestic (29)</u> or <u>Other Import (69)</u> is applicable.

#### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
498	Other (light truck)	Solectra (electric: Citivan Flash)	1960- <b>2018</b> , 9999	<u>14-16,19, 20-22,</u>
				<u>28,29</u> , <u><b>32-34</b>, 39</u> ,
				<u>40,41, 42, 45,48</u>

## LSV/NEV

Codes	Models	Includes	Model Years	Body Types
598	Other (LSV/NEV)	Tomberlin, Ford, Fly Bo	2000- <b>18</b> , 9999	<u>94</u>

#### MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50cc	(Includes: ATK, Beta, Buell,	1965- <b>2018</b> , 9999	<u>80,81,<b>84-89</b></u>
		Cagiva, Cobra Trike, Jawa,		
		Husqvarna, KTM, Aprilia,		
		Maely, Riva, Strociek, BMC, MV		
		Agusta, Bimota, Husaberg,		
		Indian Scout, Indian, Laverda,		
		Big Dog, Polaris, Titan, Twin		
		Eagle, Viza, Viper)		
702	51-124cc	"	1965- <b>2018</b> , 9999	<u>80-89</u>
703	125-349cc	"	1965- <b>2018</b> , 9999	<u>80-89</u>
704	350-449cc	"	1965- <b>2018</b> , 9999	<u>80-89</u>
705	450-749cc	"	1965- <b>2018</b> , 9999	<u>80-89</u>
706	750cc or greater	"	1965- <b>2018</b> , 9999	<u>80-89</u>
707	Electric Motorcycle	"	2016-18, 9999	<u>80-89</u>
709	Unknown cc	<i>и</i>	1945- <b>2018</b> , 9999	<u>80-89</u>

## ALL TERRAIN VEHICLES

Codes	Models	Includes	Model Years	Body Types
731	0-50cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
732	51-124cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
733	125-349cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
734	350cc or greater		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
739	Unknown cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>

## MEDIUM/HEAVY TRUCKS

Codes	Models	Includes	Model Years	Body Types
802	Auto-Union-DKW		1965-88, 9999	<u>60-64, 66, 71, 72, 78</u>
803	Divco		1963-88, 9999	<u>60-64, 66, 71, 72, 78</u>
804	Western Star		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
805	Oshkosh	(includes trucks & buses)	1965- <b>2018</b> , 9999	50,52-59, 60-64, 66, 71, 72, 78
806	Hino	(includes trucks & buses)	1985- <b>2018</b> , 9999	<u>50-52,58,59, 60-64,</u> <u>66, 71, 72, 78</u>
807	Scania	(includes trucks & buses)	1986-2004, 9999	<u>50-52,58,59, 60-64,</u> <u>66, 71, 72, 78</u>
808	UD		1986- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
809	Sterling		1998- <b>2018</b> , 9999	<u>60-64, 66, <b>67,</b> 71,</u> <u>72, 78</u>
881	Medium/Heavy – CBE	DINA	1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
882	Medium/Heavy – COE low entry	DINA	1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
883	Medium/Heavy – COE high entry		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
884	Medium/Heavy – Unknown engine location		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
870	Medium/Heavy Van- Based Vehicle		1965- <b>2018</b> , 9999	<u>55, 61-64</u>
890	Medium/Heavy – COE entry position unknown		1965- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>
898	Other (medium/heavy truck) **	e.g., Marmon, Ward LaFrance	1945- <b>2018</b> , 9999	<u>60-64, 66, 71, 72, 78</u>

#### BUSES

Codes	Models	Includes	Model Years	Body Types
902	Neoplan		1950- <b>2018</b> , 9999	<u>50-52,58,59</u>
903	Carpenter		1923-2000, 9999	<u>21, 50-52,58,59</u>
904	Collins Bus		1967- <b>2018</b> , 9999	<u>21</u>
905	DINA		1989-2004, 9999	<u>50-52,58,59</u>
906	Mid Bus		1963-2008, 9999	<u>21</u>
907	Orion		1978-2013, 9999	<u>50-52,58,59</u>
908	Van Hool		1947- <b>2018</b> , 9999	<u>50-52,58,59</u>
981	Bus***: Conventional (Engine out front)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
982	Bus: Front engine, Flat front		1976- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)	****	1945- <b>2018</b> , 9999	<u>50-52,58,59</u>

## MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck-based	1965- <b>2018</b> ,	<u>65,73</u>
			9999	

## OTHER AND UNKNOWN VEHICLES

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)	(e.g., farm vehicle, snowmobile,	1940- <b>2018</b> ,	<u>91-93,<b>95-97</b></u>
		go-cart, golf carts)	9999	
999	Unknown (OTHER		1940- <b>2018</b> ,	<u>49, 79, 99</u>
	MAKE)		9999	

\*Occurs when make is not explicitly listed here.

\*\*Do not use Other Make (98) if <u>Other Domestic (29)</u> or <u>Other Import (69)</u> is applicable.

\*\*\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

\*\*\*\*Prior to 1999, MCI buses were coded Other Make/Other Bus. Starting in 1999, MCI has its own Make Code 93.

## Unknown Make

## MAKE: Unknown Make (99)

## **AUTOMOBILES**

Codes	Models	Includes	Model Years	Body Types
399	Unknown (automobile)		1945- <b>2018</b> , 9999	<u>01-09</u> , <u>10-13</u>

#### LIGHT TRUCKS

Codes	Models	Includes	Model Years	Body Types
499	Unknown (light truck)		1945- <b>2018</b> , 9999	<u>14-16,19, 20-22,</u>
				<u>28,29</u> , <u><b>32-34</b>,39</u> , <u>42</u> ,
				<u>45,48</u>

## LSV/NEV

Codes	Models	Includes	Model Years	Body Types
599	Unknown (LSV/NEV)		2000- <b>18</b> , 9999	<u>94</u>

## MOTORCYCLES

Codes	Models	Includes	Model Years	Body Types
701	0-50cc		1965- <b>2018</b> , 9999	<u>80-89</u>
702	51-124cc		1965- <b>2018</b> , 9999	<u>80-89</u>
703	125-349cc		1965- <b>2018</b> , 9999	<u>80-89</u>
704	350-449cc		1965- <b>2018</b> , 9999	<u>80-89</u>
705	450-749cc		1965- <b>2018</b> , 9999	<u>80-89</u>
706	750cc or greater		1965- <b>2018</b> , 9999	<u>80-89</u>
707	Electric Motorcycle		2017-18, 9999	<u>80-89</u>
709	Unknown cc		1945- <b>2018</b> , 9999	<u>80-89</u>

#### ALL TERRAIN VEHICLES

Codes	Models	Includes	Model Years	Body Types
731	0-50cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
732	51-124cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
733	125-349cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
734	350cc or greater		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>
739	Unknown cc		1965- <b>2018</b> , 9999	<u>90</u> , <u><b>96</b></u>

#### **MEDIUM/HEAVY TRUCKS**

Codes	Models	Includes	Model Years	Body Types
870	Medium Heavy Van- Based Vehicle		1965- <b>2018</b> , 9999	<u>55, 61-64</u>
881	Medium/Heavy – CBE		1965- <b>2018</b> , 9999	60-64,66,71,72,78
882	Medium/Heavy – COE		1965- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>
	low entry			
883	Medium/Heavy – COE		1965- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>
	high entry			
884	Medium/Heavy –		1965- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>
	Unknown engine location			

Codes	Models	Includes	Model Years	Body Types
890	Medium/Heavy – COE entry position unknown		1965- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>
898	Other (medium/heavy truck)		1965- <b>2018</b> , 9999	<u>60-64,66,71,72,78</u>

## BUSES

Codes	Models	Includes	Model Years	Body Types
981	Bus**: Conventional (Engine out front)		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
982	Bus: Front engine. Flat front		1976- <b>2018</b> , 9999	<u>50-52,58,59</u>
983	Bus: Rear engine, Flat front		1965- <b>2018</b> , 9999	<u>50-52,58,59</u>
988	Other (bus)		1945- <b>2018</b> , 9999	<u>50-52,58,59</u>
989	Unknown (bus)		1945- <b>2018</b> , 9999	<u>50-52,58,59</u>

\*\*Use code "989" (bus) if the frontal plane or the engine location is unknown.

## MOTOR HOME

Codes	Models	Includes	Model Years	Body Types
850	Motor Home	Truck based	1965- <b>2018</b> , 9999	<u>65, 73</u>

#### OTHER AND UNKNOWN VEHICLE

Codes	Models	Includes	Model Years	Body Types
998	Other (vehicle)	(e.g., farm vehicle, snowmobile, go-cart)	1945- <b>2018</b> , 9999	<u>91-93, <b>95-97</b></u>
999	Unknown (as to automobile, motored cycle, light truck or truck)		1945- <b>2018</b> , 9999	<u>49, 79, 99</u>

## V11 - Body Type

## **FORMAT:** 2 numeric **SAS NAME:** Vehicle.Body\_Typ, Person.Body\_Typ, parkwork.PBODYTYP **ELEMENT VALUES:**

## **Automobiles**

Codes	Attributes
01	Convertible (excludes sunroof, t-bar)
02	2-Door Sedan, Hardtop, Coupe
03	<u>3-Door/2-Door Hatchback</u>
04	4-Door Sedan, Hardtop
05	5-Door/4-Door Hatchback
06	Station Wagon (excluding van and truck based)
07	Hatchback, Number of Doors Unknown
17	<u>3-Door Coupe</u>
08	Sedan/Hardtop, Number of Doors Unknown
09	Other or Unknown Automobile Type

## **Automobile Derivatives**

Codes	Attributes
10	Auto-Based Pickup (includes Chevrolet - El Camino, GMC -Caballero, Ford - Ranchero, Chevrolet -
	SSR; Subaru-Baha, Brat, and Volkswagen - Rabbit Pickup)
11	Auto-Based Panel (Cargo Station Wagon, auto-based Ambulance/Hearse)
12	Large Limousine (More than four side doors or stretched chassis)
13	Three-Wheel Automobile or Automobile Derivative

## **Utility Vehicles**

Codes	Attributes	
14	<b><u>Compact Utility</u></b> (ANSI D16.1 Utility Vehicle Categories "Small" and "Midsize"):	
	• Small: Chevy-Tracker; GMC- Jimmy/Typhoon; Isuzu - Trooper II; Oldsmobile - Bravada (1991-	
	94); Suzuki - Samurai, Sidekick.	
	• Midsize: Acura - SLX, RDX; Audi - Q3, Q5, Q7, Allroad, SQ5; BMW - X1, X3, X5; Buick -	
	Rendezvous, Rainier, Encore, Enclave; Chevrolet - Captiva, S10-Blazer/TrailBlazer, Tracker	
	(1999 on), TrailBlazer (2003 on), Trax; Equinox; Diahatsu - Rocky; Dodge - Durango (1998-	
	2003), Nitro, Raider; Fiat - 500L; Ford - Bronco II (1984 on), Escape, Explorer, Explorer Sport;	
	GMC - Jimmy (1995 on), Envoy, Terrain; Honda - CRV, Passport, Element; Hummer - H3;	
	Hyundai - Santa Fe, Tuscon, Veracruz (2007 only); Infiniti - QX4, JX35, QX60, QX70; Isuzu -	
	Amigo, Axiom, Rodeo, Rodeo Sport, Vehicross, Trooper, Hombre; Jeep - Cherokee (1984 on),	
	Commander, Grand Cherokee, Liberty, Patriot, Renegade, Wagoneer, Wrangler; Kia -	
	Sportage, Sorrento; Land Rover - Defender (1993, 1995-1997), Discovery, Discovery Sport,	
	Freelander (2002-2003) Evogue; Lexus - RX300, RX330, GX470; Lincoln - Aviator, MKC; Mazda -	
	CX5, CX9 Navajo, Tribute; Mercedes - M, ML, G, GLK; Mercury - Mariner, Mountaineer;	
	Mitsubishi - Montero, Montero Sport, Endeavor; Nissan - Juke, Pathfinder, Xterra; Oldsmobile	
	- Bravada (1996 on); Pontiac - Aztek, Torrent; Porsche - Macan; Saab - 9-7x; Saturn - Vue;	
	Subaru - B9 Tribeca, Forester, XV Crosstrek; Suzuki - Vitara, Vitara V6, Grand Vitara, X90, XL7;	
	Toyota - 4-Runner, FJ Cruiser, Highlander, RAV4; Volkswagen - Tiguan; Volvo - XC70, XC90.	

Codes	Attributes		
15	Large utility (ANSI D16.1 Utility Vehicle Categories and "Full Size" and "Large")		
	• Full Size: Acura - MDX; AMC - Hummer; Buick - Enclave (2013 on), Cadillac - Escalade;		
	Chevrolet Full-size Blazer, Tahoe, Traverse (2013 on); Chrysler - Aspen, Dodge - Durango		
	(2004 on), Ford - Full-size Bronco (78 and after), Expedition; Honda - Pilot; Hyundai -		
	Veracruz (2008 on); GMC - Acadia (2013 on), Jimmy (1991-1994), Yukon (Denali/XL);		
	Infiniti - QX56, QX80; Isuzu - Ascender; Jeep - Cherokee (83 and before); Kia - Mesa,		
	Borrego; Land Rover - LR2, LR3, Freelander (2004 on), Range Rover; Mazda - CX-9,		
	Mercedes Benz - GL; Nissan - Armada; Porsche - Cayenne; Lexus - LX450/470; Lincoln -		
	Navigator; Toyota - Land Cruiser, Sequoia; Volkswagen - Touareg.		
	Large: Avanti - Studebaker XUV; AMC -Hummer (H1, H2)		
16	Utility station wagon (includes suburban limousines), Cadillac - Escalade ESV; Chevrolet - Suburban		
	(Yukon XL (2000 on), Travellall, Ford - Excursion, Jeep - Grand Wagoneer)		
19	Utility Vehicle, Unknown Body Type		

## Van-Based Light Trucks (GVWR < = 10,000 lbs.)

Codes	Attributes
20	Minivan (AM General - MV-1; Buick-Terraza; Chevrolet-Astro, City Express, Lumina, Uplander,
	Venture; Chrysler-Town and Country, Voyager; Dodge-Caravan, Grand Caravan, RAM-CV,
	Promater City; Ford-Aerostar, Windstar, Freestar, Transit Connect; GMC-Safari, Savana; Honda-
	Odyssey; Hyundai-Entourage; Isuzu-Oasis; Kia-Sedona; Mazda-MPV; Mercury-Monterey, Villager;
	Mitsubishi-Minivan; Nissan-Altra EV, Axxess, Quest, Van; Oldsmobile-Silhouette; Plymouth-
	Voyager, Grand Voyager, Vista; Pontiac-Transport, Montana; Saturn-Relay; Toyota-Previa, Sienna;
	Volkswagen-Camper, Eurovan, Routan, Vanagon.
21	Large Van-Includes van-based buses (B150-B350, Sportsman, Royal Maxiwagon, Ram, Tradesman,
	Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van,
	Beauville, Sport Van, G15-G35, Rally Van, Vandura, Ford - Transit, Freightliner -
	Sprinter/Advantage, Mercedes Benz -Sprinter, Dodge - Sprinter, RAM-Promaster, Nissan - NV,
	Ford - Transit)
22	Step-van or walk-in van (GVWR <= 10,000 lbs.)
28	Other van type (Hi-Cube Van, Kary)
29	Unknown van type

## Light Conventional Trucks (Pickup style cab, GVWR < = 10,000 lbs.)

Codes	Attributes
32	Pickup with slide-in camper
33	Convertible pickup
34	Light Pickup
39	Unknown (pickup style) light conventional truck type

## Other Light Conventional Trucks (GVWR < = 10,000 lbs.)

Codes	Attributes
40	Cab Chassis Based (includes Rescue Vehicle, Light Stake, Dump, and Tow Truck)
41	Truck Based Panel
45	Other light conventional truck type
48	Unknown light truck type
49	Unknown light vehicle type (automobile, utility vehicle, van, light truck)

## Buses (excludes van-based buses with a GVWR < = 10,000 lbs.)

Codes	Attributes
50	School Bus
51	Cross Country/Intercity Bus
52	Transit Bus (City Bus)
55	Van-Based Bus GVWR > 10,000 lbs.
58	Other Bus Type
59	Unknown Bus Type

## Medium/Heavy Vehicle (GVWR > 10,000 lbs.)

Codes	Attributes	
60	Step Van (>10,000 lbs. GVWR)	
61	Single-unit straight truck or Cab-Chassis (10,000 lbs. < GVWR < or = 19,500 lbs.)	
62	Single-unit straight truck or Cab-Chassis (19,500 lbs. < GVWR < or = 26,000 lbs.)	
63	Single-unit straight truck or Cab-Chassis (GVWR > 26,000 lbs.)	
64	Single-unit straight truck or Cab-Chassis (GVWR unknown)	
66	Truck-tractor (Cab only, or with any number of trailing units; any weight)	
67	Medium/heavy Pickup (>10,000 lbs. GVWR)	
71	Unknown if single-unit or combination unit Medium Truck (10,000 lbs. < GVWR < 26,000 lbs.)	
72	Unknown if single-unit or combination unit Heavy Truck (GVWR > 26,000 lbs.)	
78	Unknown medium/heavy truck type	
79	Unknown truck type (light/medium/heavy)	

## **Motor Homes**

Codes	Attributes
42	Light Truck Based Motorhome (Chassis Mounted)
65	Medium/heavy truck based motor home
73	Camper or motor home, unknown truck type

## Motorcycles, Mopeds, All-Terrain Vehicles; All-Terrain Cycles

Codes	Attributes	
80	Two Wheel Motorcycle (excluding motor scooters)	
81	Moped or motorized bicycle	
82	Three-wheel Motorcycle (2 Rear Wheels)	
83	Off-Road Motorcycle	
84	<u>Motor Scooter</u>	
85	Unenclosed Three Wheel Motorcycle / Unenclosed Autocycle (1 Rear Wheel)	
86	Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)	
87	Unknown Three Wheel Motorcycle Type	
88	Other motored cycle type (mini-bikes, pocket motorcycles "pocket bikes")	
89	Unknown motored cycle type	
90	ATV/ATC (All-Terrain Cycle)	

## **Other Vehicles**

Codes	Attributes
91	Snowmobile
92	Farm equipment other than trucks

Codes	Attributes	
93	Construction equipment other than trucks (includes graders)	
94	Low Speed Vehicle (LSV) / Neighborhood Electric Vehicle (NEV)	
95	Golf Cart	
96	Recreational Off-Highway Vehicle (ROV)	
97	Other vehicle type (includes go-cart, fork-lift, city street sweeper)	
98	Not Reported	
99	Unknown body type	

**Definition:** This element identifies a classification of this vehicle based on its general body configuration, size, shape, doors, etc.

#### Remarks: SEE ADDITIONAL REMARKS UNDER VEHICLE MAKE/VEHICLE MODEL OVERVIEW

#### **AUTOMOBILES**

These attributes are used to classify different types of passenger cars. These type of light vehicles, referred to as automobiles, are designed primarily to transport eight or fewer persons.

**01 (Convertible [excludes sunroof and t-bar])** refers to a passenger car equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This attribute takes priority over 2-door or 4-door codes.

**02 (2-Door Sedan, Hardtop, Coupe)** refers to a passenger car equipped with two doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**03 (3-Door/2-Door Hatchback)** refers to a passenger car equipped with two doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

**04 (4-Door Sedan, Hardtop)** refers to a passenger car equipped with four doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**05 (5-Door/4-Door Hatchback)** refers to a passenger car equipped with four doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

**06 (Station Wagon [excluding van and truck based])** refers to a passenger car with an enlarged cargo area. The entire roof covering the cargo area is generally equal in height from front to rear and full height side glass is installed between the C and D-pillars. The rearmost area is not permanently partitioned from the forward passenger compartment area (e.g., "horizontal window shades" to hide cargo do not constitute partitions).

**07 (Hatchback, Number of Doors Unknown)** refers to a passenger car with an unknown number of doors for ingress/egress and a rear hatch opening for cargo (e.g., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

**17 (3-Door Coupe)** refers to a passenger car equipped with three doors for ingress/egress in which 2 of the doors are located on the driver's side and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**08 (Sedan/Hardtop, Number of Doors Unknown)** refers to a passenger car equipped with an unknown number of doors for ingress/egress and a separate trunk area for cargo (e.g., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**09 (Other or Unknown Automobile Type)** is used for any passenger car that cannot be described by the other automobile codes OR when it is known that the vehicle is a passenger car, but there is insufficient data to determine the type. Do not use this attribute if the Police *Crash* Report alone or in combination with other information gives sufficient detail to identify a more specific attribute.

- **Example #1:** If the possible choices are codes "01," "02", or "09" but there is enough detail to identify that it is a 2-door and that it is NOT a convertible, then use <u>02 (2-Door Sedan, Hardtop, Coupe)</u>.
- **Example #2:** If there is information that it is a 4-door and the *Police Crash Report* eliminates the possibility of a hatchback or station wagon, then use <u>04 (4-Door Sedan, Hardtop)</u>.

## **AUTOMOBILE DERIVATIVES**

This describes certain passenger cars that have been modified to perform cargo-related tasks.

**10 (Auto-Based Pickup)** refers to a passenger car based, pickup type vehicle. The roof area (and side glass) rearward of the front seats on a station wagon have been removed and converted into a pickup-type cargo box.

**11 (Auto-Based Panel (Cargo Station Wagon, auto-based Ambulance/Hearse)** refers to an automotive station wagon that may have sheet metal rearward of the B-pillar rather than glass.

**12 (Large Limousine)** - more than four side doors or stretched chassis refers to an automobile that has sections added within its wheelbase to increase length and passenger/cargo carrying capacity.

**13 (Three-Wheel Automobile or Automobile Derivative)** refers to three-wheel vehicles with an enclosed passenger compartment.

## UTILITY VEHICLES

## (< = 10,000 lbs. GVWR)

Utility Vehicles are designed for carrying persons, and generally considered a multi-purpose vehicle that is designed to have off-road capabilities. These vehicles are: generally four-wheel drive (4 x 4), have increased ground clearance, and are equipped with a strong frame. Four-wheel drive automobiles are not considered utility vehicles.

**14 (Compact Utility)** refers to a short wheelbase and narrow tracked multi-purpose vehicle designed to operate in rugged terrain.

**15 (Large Utility)** refers to full-size multi-purpose vehicles primarily designed around a shortened pickup truck chassis. Generally, a station wagon style body, some models are equipped with a removable top.

16 (Utility Station Wagon) refers primarily to a pickup truck based chassis enlarged to a station wagon.

**19 (Utility Vehicle, Unknown Body Type)** is used when it is known that the vehicle is a utility vehicle, but there is insufficient data to determine the specific type.

## **VAN-BASED LIGHT TRUCKS**

## (< = 10,000 lbs. GVWR)

Van-Based Light Trucks (< = 10,000 lbs. GVWR) are designed to maximize cargo/passenger area versus overall length. Basically a "box on wheels", these vehicles are identifiable by their enclosed cargo/passenger area and relatively short (or non-existent) hood.

**20 (Minivan)** refers to down-sized cargo or passenger unibody vans.

**21 (Large Van)** refers to a standard cargo or passenger van and includes van-based buses less than 10,001 lbs. GVWR. These vans will generally have a larger capacity in both volume and GVWR.

**22 (Step Van or Walk-In Van [< = 10,000 lbs. GVWR])** refers to a multi-stop delivery vehicle with a GVWR less than or equal to 10,000 lbs. Examples are the Grumman LLV used by the US Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.

**28 (Other Van Type)** refers to a cargo or delivery van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in Minivans or Large Vans with a frame mounted cargo area unit added behind the driver/cab area or if the van cannot be described as a Minivan, Large Van, Step-van or a Van-based motor home. Annotate the van type when using this code. This code takes priority over Minivans and Large Vans.

**29 (Unknown Van Type)** is used when it is known that this vehicle is a light van, but its specific type cannot be determined.

## LIGHT CONVENTIONAL TRUCKS

## (Pickup Style Cab, < = 10,000 lbs. GVWR)

Light Conventional Trucks are used to describe vehicles commonly referred to as pickup trucks and some of their derivatives. These light trucks are characteristically designed with a small cab containing a single row of seats (extended cabs with additional seats are available for some models), a large hood covering a conventional engine placement, and a separate open box area (approximately 180 to 240 centimeters long) for cargo.

# Beginning in 2017 Body Types 30 and 31 were removed and replaced by the combined code of <u>34 (Light</u> <u>Pickup)</u>.

**32 (Pickup with Slide-in Camper)** is used to describe any pickup truck that is equipped with a slide-in camper. A slide-in camper is a unit that mounts within a pickup bed. Pickup bed caps, tonneau covers or frame mounted campers are not applicable for this code.

**33 (Convertible Pickup)** refers to a pickup truck equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over compact and large pickups.

34 (Light Pickup) is a single unit straight truck with a pickup body style and a GVWR of 10,000 lbs. or less. Prior to 2017 Light Pickups were separated by Compact Pickups and Standard Pickups, Body Type Codes 30 and 31. Beginning in 2017 Body Types 30 and 31 were removed and replaced by the combined code of 34 (Light Pickup).

**39 (Unknown (Pickup Style) Light Conventional Truck Type)** is used when this vehicle is a Light Conventional Truck, but there is insufficient data to determine the specific code.

#### OTHER LIGHT TRUCKS (< = 10,000 lbs. GVWR)

Other Light Trucks are used to describe vehicles that are based upon a conventional light pickup frame, but a commercial or recreational body has been affixed to the frame rather than a pickup box.

**40 (Cab Chassis Based [includes rescue vehicles, light stake, dump, and tow truck])** is used to describe a light vehicle with a pickup style cab and a commercial (non-pickup) body attached to the frame. Included are pickup based ambulances and tow trucks.

**41 (Truck Based Panel)** is used to describe a truck based station wagon that has sheet metal rather than glass above the beltline rearward of the B-pillars.

**45 (Other Light Conventional Truck Type)** is used for light conventional trucks that cannot be described elsewhere.

**48 (Unknown Light Truck Type)** is used when it is known that the vehicle is a light truck but further classification into one of the more detailed light truck categories (utility, van, pickup or other light trucks) is not possible. Example: It is known the light vehicle is a utility vehicle or van but it can't be determined which one.

**49 (Unknown Light Vehicle Type [automobile, utility, van, or light truck])** is used when it is known that the vehicle is a light vehicle, but insufficient data exists to specify what type of light vehicle it is.

#### BUSES

#### (excludes van-based buses GVWR < or = 10,000 lbs.)

Buses are defined as any motor vehicle designed primarily to transport large groups of passengers (nine or more persons, including the driver).

**50 (School Bus)** (designed to carry students, not cross country or transit) is a bus designed to carry passengers to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this code.

**51 (Cross Country/Intercity Bus)** describes a bus body type designed to travel long distances between cities (e.g. Greyhound).

52 (Transit Bus [City Bus]) describes a bus body type designed for public transportation typically within a city.

55 (Van-Based Bus GVWR > 10,000 lbs.) describes a bus body type built on a van-based chassis.

**58 (Other Bus Type)** is a vehicle designed/converted to carry nine or more persons, including the driver, not described by the attributes school bus, cross country/intercity bus, transit bus, or van-based bus. Examples include a specialized tour bus or bus based motor home.

**59 (Unknown Bus Type)** is used when it is known the transport device is a bus but there is insufficient data to choose between the bus attributes.

## MEDIUM/HEAVY TRUCKS

## (> 10,000 lbs. GVWR)

Medium/Heavy Trucks describe a single-unit truck specifically designed for carrying cargo on the same chassis as the cab. They pertain to a truck-tractor designed for towing trailers or semi-trailers. Although towing is their primary purpose, some truck-tractors are equipped with cargo areas located rearward of the cab.

**60 (Step Van [>10,000 lbs. GVWR])** defines a single-unit, enclosed body with a GVWR greater than 10,000 lbs. and an integral driver's compartment and cargo area. Step vans are generally equipped with a folding driver seat mounted on a pedestal and a sliding door for easy ingress/egress.

**61-63 (Single-Unit Straight Truck or Cab-chassis)** describes a non-articulated truck designed to carry cargo. The attribute selected is based on the applicable GVWR range for the vehicle. Includes "incomplete" or "cutaway".

**64 (Single-Unit Straight Truck or Cab-chassis [GVWR unknown])** describes a medium/heavy non-articulated truck designed to carry cargo. It is known not to be a step van, van, or pickup truck, but its GVWR is unknown. Includes "incomplete" or "cutaway".

**66 (Truck-Tractor [Cab only or with any number of trailing units])** describes a fifth wheel equipped tractor-trailer power unit. The number of trailing units is not a consideration.

**67 (Medium/Heavy Pickup [>10,000 lbs. GVWR])** is a single-unit straight truck with a pickup body style with a GVWR > 10, 000 lbs. Examples include the Ford Super Duty 350, 450, or 550.

**78 (Unknown Medium/Heavy Truck Type)** is used when it is unknown whether the medium/heavy truck is a single-unit truck or a truck-tractor and/or trailer combination and it is known that the vehicle is either a medium or heavy truck with GVWR >10,000 lbs.

**79 (Unknown Truck Type [light/medium/heavy])** is used when it is known that this vehicle is a truck, but there is insufficient data to classify the vehicle further.

#### **MOTOR HOMES**

Motor Homes are recreational vehicles mounted on an incomplete vehicle chassis that is suitable to live in and drive across the country.

**42 (Light Truck Based Motor Home [chassis mounted])** is used to describe a frame mounted recreational unit attached to a light van or conventional chassis.

**65 (Medium/Heavy Truck Based Motor Home)** describes a recreational vehicle mounted on a single unit medium/heavy truck chassis.

**73 (Camper or Motor Home, unknown truck type)** is used when it is known the vehicle is a camper or motor home, but the truck type is unknown.

## MOTORCYCLES, MOPEDS, ALL-TERRAIN VEHICLES, ALL-TERRAIN CYCLES

**80** (*Two Wheel* Motorcycle (*excluding motor scooters*)) is used when a motor vehicle having a seat or saddle for the use of its operator is a two-wheeled open (e.g., no enclosed body) vehicle propelled by *a motor*. Motorcycles equipped with a side car also use this code.

**81 (Moped** or Motorized Bicycle) is used when the vehicle is a speed-limited motor-driven cycle capable of moving either by pedaling or by a motor. Note: In the circumstance that a person operating a motorized bicycle is classified as a non-motorist on the Police Crash Report, this person should be coded as a motor vehicle occupant rather than a non-motorist in FARS/CRSS.

82 (Three-Wheeled Motorcycle (2 Rear Wheels)) is used when the vehicle is a three-wheeled open vehicle propelled by *a motor*, or a three-wheeled motorized bicycle capable of moving either by pedaling or by *a motor*.

**83 (Off-Road Motorcycle)** is used when the vehicle is a two-wheeled open vehicle propelled by *a motor* designed or built for off road use only.

84 (Motor Scooter) a light two-wheeled open motor vehicle on which the driver sits over an enclosed engine with legs together and feet resting on a floorboard.

85 (Unenclosed Three Wheel Motorcycle/Unenclosed Autocycle (1 Rear Wheel)) A large motorcycle with three wheels, configured with two front wheels and a saddle with handle bars or seat(s) and a steering wheel but not completely enclosed.

86 (Enclosed Three Wheel Motorcycle/Enclosed Autocycle (1 Rear Wheel)) A large motorcycle with three wheels, configured with two front wheels, a seat(s) and steering wheel and completely enclosed.

87 (Unknown Three Wheel Motorcycle Type) is used when the vehicle is known to be a three-wheel motorcycle but it is not known if attribute <u>82 (Three-wheel Motorcycle (2 Rear Wheels))</u>, <u>85 (Unenclosed Three Wheel Motorcycle / Unenclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel)</u>), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel</u>)), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel</u>)), or <u>86 (Enclosed Three Wheel Motorcycle / Enclosed Autocycle (1 Rear Wheel</u>)), or <u>86 (Enclosed Three Wheel</u>), or <u>86 (Enclosed Three Wheel</u>)), or <u>86 (Enclosed Three Wheel</u>), or <u>86 (Enclosed Three Wheel</u>)), or <u>86 (Enclosed Three Wheel</u>), or <u>86 (Enclosed Three Wheel</u>)), or <u>86 (Enclosed Three Wheel</u>)), or <u>86 (Enclosed Three Wheel</u>), or <u>86 (Enclosed Three Wheel</u>)), or <u>86 (Enclosed T</u>

**88 (Other Motored Cycle [mini-bike, pocket motorcycles "pocket bikes"])** is used when the vehicle in question does not qualify for attributes **80-87**.

**89 (Unknown Motored Cycle Type)** is used when it is known that the vehicle is a motored cycle, but no further data is available.

**90 (ATV/ATC [All-Terrain Cycle])** is used for off-road recreational vehicles which cannot be licensed for use on public roadways. ATV/ATCs have 3 or 4 wheels, a saddle type seat and handle bars for steering (no steering wheel). Does not include <u>96 (Recreational Off-Highway Vehicles(ROV))</u> (automobile type seats and steering wheel).

## **OTHER VEHICLES**

Other Vehicles describes all motored vehicles that are designed primarily for off-road use.

91 (Snowmobile) refers to a vehicle designed to be operated over snow propelled by *a motor*.

**92 (Farm Equipment Other Than Trucks)** refers to farming implements other than trucks propelled by *a motor* (e.g., farm tractors, combines, etc.).

**93 (Construction Equipment Other Than Trucks)** refers to construction equipment other than trucks propelled by *a motor* (e.g., bulldozer, road grader, etc.).

**94 (Low speed vehicle (LSV)/Neighborhood Electric Vehicle (NEV))** refers to a vehicle that is designed for travel on secondary roads with speed limits equal to or less than 35 mph. LSVs can sometimes resemble golf carts but differ in that they must adhere to Federal Motor Vehicle Safety Standard (FMVSS) 500. Provisions of FMVSS 500 include the following:

The Vehicle must have:

- Four wheels
- Top speed of at least 20 mph, but it cannot exceed 25 mph
- GVWR less than 3,001 pounds
- Head, turn signal and tail lamps
- Reflex reflectors
- Parking brake
- Rear view mirrors
- Windshield
- Safety belts
- Seventeen (17) character VIN

**95 (Golf Cart)** is a motor vehicle that is designed and manufactured for operation on a golf course for sporting or recreational purposes. Golf carts or golf cars are different from code 94 (Low speed vehicle (LSV)/Neighborhood Electric Vehicle (NEV)) in that if they are manufactured to go less than 20 mph they are not subject to the Federal Motor Vehicle Safety Standard (FMVSS) 500. As a result, golf carts will **not have** a 17-digit VIN. Golf carts will have a nonstandard serial number that may be reported *in* the *case materials*. Also, typically golf carts will **not have** safety features required of LSVs/NEVs under the FMVSS like safety belts, head lights, turn signal and tail lamps, rear view mirrors, etc. (See definition of LSV/NEV below).

96 (Recreational Off-Highway Vehicle [ROV]) ROVs are intended to be used on terrain similar to that on which all-terrain vehicles (ATVs) are used. ROVs are distinguished from ATVs by the presence of a steering wheel instead of a handle bar for steering, bench or bucket seats for the driver and passenger(s) instead of straddle seating, and foot controls for throttle and braking instead of levers located on the handle bar. In addition, ROVs have a rollover protective system (ROPS), restraint systems, and a maximum speed greater than 30 mph.

**97 (Other Vehicle Type)** is used when the motorized vehicle in question does not qualify for Construction equipment other than trucks, Farm equipment other than trucks, or Snowmobile (e.g., fork-lift, city street sweeper, go-kart, "kit" car, etc.).

## 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown Body Type)** is used when the available information regarding the type of vehicle is reported as Unknown.

Check	IF	THEN
(1D0P)	SPECIAL USE equals 01,	BODY TYPE must equal 02-09, 12, 14-21, 28, 29, 49, 99.
(1Q0F)	PERSON TYPE equals 01, and BODY TYPE equals <b>80-84</b> , 88, 89,	SEATING POSITION must not equal 12-55, 99.
(1ROP)	SEATING POSITION equals 51, and BODY TYPE equals 50-52, 55, 58, 59,	INJURY SEVERITY must not equal 0, 9.
(1Z2P)	any SEQUENCE OF EVENTS equals 01, and (BODY TYPE equals 01-79, 82, 90-99, or any RELATED FACTORS-VEHICLE LEVEL equals 30),	ROLLOVER must equal 1, 2, 9.
(2D0P)	SPECIAL USE equals 02,	BODY TYPE should equal 15, 16, 19-21, 28, 29, 45, 48, 50-52, 55, 58, 59.
(2Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01, 02, 04, 08, 10, 17, <b>33-34</b> , 39- 41, 45, 48, 90, 91,	SEATING POSITION must not equal 31-50.

## **Consistency Checks:**

Check	IF	THEN
(2R0P)	RESTRAINT SYSTEM/HELMET USE equals 01-	BODY TYPE must not equal 80-83, 88, 89, 90, 91.
	<b>04, 08-12, 20</b> ,	
(2U0P)	BODY TYPE equals <b>80-97</b> ,	AIR BAG DEPLOYED should equal <b>20, 98</b> .
(2U0Q)	BODY TYPE equals <b>80-84</b> , 88, 89,	AREAS OF IMPACT - INITIAL CONTACT POINT
		should not equal 14.
(3A0P)	SPECIAL USE equals 07,	BODY TYPE must equal 60-64, 66, 67, 71, 72, 78,
		79, 99.
(3Q0F)	PERSON TYPE equals 02, 03, 09, and BODY	SEATING POSITION must not equal 50.
	TYPE equals 01-17, 19, 20, 22, <b>28-34</b> , 39, 41,	
	42, 50-52, 55, 58, 59, 65, <b>80-97</b> ,	
(4A0P)	BODY TYPE equals <b>80-93</b> , <b>95, 96</b> ,	SPECIAL USE must not equal 01-03, 06, 07.
(4C1P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94,	than 20.
	95, <b>96,</b> 97, and VEHICLE TRAILING does NOT	
	equal 0,	
(4C2P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 06, 11, 16, and VEHICLE	than 22.
	TRAILING does NOT equal 0,	
(4C3P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 12, and VEHICLE TRAILING does	than 25.
	NOT equal 0,	
(4C4P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 80-89, and VEHICLE TRAILING	than <b>15</b> .
	does NOT equal 0,	
(4C5P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 42, 73, and VEHICLE TRAILING	than 30.
	does NOT equal 0,	
(4C6P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 60-65, 71, 72, 79, and VEHICLE	than 55.
	TRAILING does NOT equal 0,	
(4C7P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 66, and VEHICLE TRAILING does	than 77.
	NOT equal 0,	
(4C8P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 91, and VEHICLE TRAILING does	than 10.
	NOT equal 0,	
(4C9P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 90, and VEHICLE TRAILING does	than 20.
	NOT equal 0,	
(4C0P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 99, and VEHICLE TRAILING does	than 10.
(100-)	NOT equal 0,	
(4D0P)	SPECIAL USE equals 03,	BODY TYPE must equal 21, 28, 29, 50-52, 55, 58,

Check	IF	THEN
(4F1P)	NUMBER OF OCCUPANTS is less than 99, and	NUMBER OF OCCUPANTS must not be greater
	BODY TYPE equals 01-05, 07-10, 13, 17, <b>90-</b>	than 15.
	97, and VEHICLE TRAILING equals 0,	
(4F2P)	NUMBER OF OCCUPANTS is less than 99, and	NUMBER OF OCCUPANTS must not be greater
	BODY TYPE equals 06, 11, and VEHICLE	than 22.
	TRAILING equals 0,	
(4F3P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
(	TYPE equals 12, and VEHICLE TRAILING equals	than 25.
	0,	
(4F4P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
(+1 +1 )	TYPE equals <b>80-89</b> , and VEHICLE TRAILING	than 5.
	equals 0,	than 5.
(4F5P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
(41 )7)	TYPE equals 15, 16, 42, 73, and VEHICLE	than 30.
	TRAILING equals 0,	
(4F6P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
(4609)		than 55.
	TYPE equals 60-65, 71, 72, 79, and VEHICLE	
	TRAILING equals 0,	
(4F7P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 66, and VEHICLE TRAILING equals	than 50.
(4500)		
(4F8P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 91, and VEHICLE TRAILING equals	than 10.
(4500)		
(4F9P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 90, and VEHICLE TRAILING equals	than 20.
(	0,	
(4F9Q)	NUMBER OF OCCUPANTS is less than 99, and	NUMBER OF OCCUPANTS should not be greater
	BODY TYPE equals 06, 11, 12, 14-16, 19, and	than 15.
	VEHICLE TRAILING equals 0,	
(4F0P)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS must not be greater
	TYPE equals 99, and VEHICLE TRAILING equals	than 10.
	0,	
(4N4P)	MOTOR CARRIER IDENTIFICATION NUMBER	BODY TYPE must equal <b>12, 16,</b> 21, 28, <b>34</b> , 40, 45,
	does not equal 00-000000000,	48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 79, 92, 93, 99,
		or HM2 must equal 2.
(4N5P)	BODY TYPE does not equal <b>12, 16,</b> 21, 28, <b>34</b> ,	MOTOR CARRIER IDENTIFICATION NUMBER
	40, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92,	must equal 00-000000000, 99-9999999999.
	93, or HM2 does not equal 2,	
(4Q0F)	PERSON TYPE equals 02, 03, 09, and BODY	SEATING POSITION must not equal 12, 14-19,
	TYPE equals <b>80-84,</b> 88, 89,	22-50.
(4Q1F)	PERSON TYPE equals 02, 03, and BODY TYPE	SEATING POSITION must not equal 50, 52.
	equals 21,	
(4S0P)	BODY TYPE equals <b>80-84,</b> 88, 89,	EJECTION must equal 8.
(4S1P)	BODY TYPE equals <b>80-89</b> , <b>96</b> , and HM1 does	COMPLIANCE WITH CDL ENDORSEMENTS MUST
,	not equal 1,	1

Check	IF	THEN
(5A0P)	BODY TYPE equals 80, 81, 83, <b>84,</b> 88, 89, and any RELATED FACTORS - VEHICLE LEVEL does not equal 30,	ROLLOVER must equal 0.
(5B0P)	JACKKNIFE equals 0, and BODY TYPE equals 66,	VEHICLE TRAILING must not equal 1-4.
(5D0P)	SPECIAL USE equals 04,	BODY TYPE must equal 01-12, 15-17, 19-22, <b>28-</b> <b>34</b> , 39-41, 45, 48-50, 55, 58, 59, 60-64, 66, 67, 71, 72, 78, 79, 90, 99.
(5F0F)	NUMBER OF OCCUPANTS equals 00-98, and BODY TYPE does not equal 50-52, 55, 58, 59,	the number of Person Level forms for that vehicle must be equal to the NUMBER OF OCCUPANTS.
(5Q0F)	PERSON TYPE equals 02, and BODY TYPE equals 50-52, 55, 58, 59,	SEATING POSITION must not equal 11, 21-50, 98, 99.
(5S0P)	BODY TYPE equals <b>80-84</b> , 88, 89 or 90,	EXTRICATION must equal 0.
(6A1P)	UNDERRIDE/OVERRIDE equals 1-8,	BODY TYPE must not equal <b>80-84</b> , 88-91.
(6D0P)	SPECIAL USE equals 05,	BODY TYPE must equal 01-12, 14-17, 19-22, <b>28-</b> <b>34</b> , 39-41, 45, 48, 49, 55, 58-64, 66, 67, 71, 72, 78-82, 88-91, 94, 95, <b>96</b> , 97-99.
(6G0Q)	any RELATED FACTORS - VEHICLE LEVEL equals 30,	BODY TYPE must equal 80 for this vehicle.
(6Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 60-67, 71, 72, 78, 79,	SEATING POSITION must not equal 31-49.
(7D0P)	SPECIAL USE equals 06,	BODY TYPE must equal 11, 14-17, 19, 21, 22, 28, 29, 40, 41, 45, 48, 49, 61, 62, 64, 79, 98, 99.
(7Q0F)	PERSON TYPE equals 09, and BODY TYPE equals 50-52, 55, 58, 59,	SEATING POSITION must not equal 12-50, 52-54.
(8D0P)	SPECIAL USE equals 08,	BODY TYPE must not equal 60-64, 66, 67, 71, 72, 78, 79, 99.
(8L9P)	BODY TYPE does not equal <b>80-84</b> , 88-91, and the CRASH EVENTS event equals 54, and the corresponding AREAS OF IMPACT (THIS VEHICLE) equals 19 <b>or 20</b> in that row,	there should be a previous event with CRASH EVENTS event equal to 18, 73, <i>or 91</i> involving that vehicle.
(8POP)	PERSON TYPE equals 01, and AGE is less than 008,	BODY TYPE must not equal 01-17, 19-22, <b>28-34</b> , 39-42, 45, 48-52, 55, 58-67, 71, 72, 78-83, 89, 92, 93.
(920P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, equals Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also equal Not Reported.
(930P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, does not equal Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.
(960P)	MAKE is not 98, 99, and equals, and MODEL equals,	BODY TYPE must equal (MAKE, MODEL and BODY TYPE must be valid according to Vehicle Tables).

Check	IF	THEN
(981P)	BODY TYPE equals <b>80-84</b> , 88, 89,90, 91,	RESTRAINT SYSTEM/HELMET USE must equal
		05, 16, 17, 19, 29, 97, 98.
(982P)	BODY TYPE does not equal <b>80-91</b> ,	RESTRAINT SYSTEM/HELMET USE must not
		equal 05, 16, 17, 19, 29.
(A380)	FIRST HARMFUL EVENT equals 01 and this	LOCATION OF ROLLOVER should equal
	vehicle is involved in the first harmful event,	respectively.
	and BODY TYPE does not equal 80, 81, 83, 84,	
	88, 89, for this vehicle, and RELATION TO	
	TRAFFICWAY equals,	
(AE1P)	VEHICLE CONFIGURATION equals 05-08,	BODY TYPE must equal 66.
(AF2P)	VEHICLE CONFIGURATION equals 20, 21,	BODY TYPE must equal 12, 16, 20, 21, 50-52, 55,
		58, 59.
(AHOP)	VEHICLE CONFIGURATION does not equal 00,	BODY TYPE should equal <b>12,</b> 15,16, 21, 28, <b>34</b> ,
	99,	40, 41, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92,
		93, or HM2 must equal 2.
(AH1P)	BUS USE equals 08,	BODY TYPE must equal 21, 22, 28, 29, 50-59.
(AH2P)	BUS USE equals 06,	BODY TYPE should equal 21, 52 or 55.
(ALOP)	CARGO BODY TYPE equals 22,	BODY TYPE must equal <b>12, 16,</b> 21, 50-52, 55,58,
		59.
(AM0P)	CARGO BODY TYPE does not equal 00, 99,	BODY TYPE should equal <b>12,</b> 15, 16, 21, 28, <b>34</b> ,
		40, 41, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92,
		93, or HM2 must equal 2.
(D270)	BODY TYPE equals 50-52, 55, 63, 66, 72, or	COMMERCIAL MOTOR VEHICLE LICENSE STATUS
	HM1 equals 2,	should not equal 00.
(D440)	COMMERCIAL MOTOR VEHICLE LICENSE	BODY TYPE should not equal 50-52, 55, 63, 66,
	STATUS equals 00,	72, and HM2 should not equal 2.
(D560)	VIOLATIONS CHARGED equals 66,	BODY TYPE should equal 80-83, 88, 89.
(P01F)	PERSON TYPE equals 01-03, 09, and	EJECTION should equal 0 or 7.
	RESTRAINT SYSTEM/HELMET USE equals 01-	
	04, 08, 10-12, and BODY TYPE does not equal	
	80-89,	
(P094)	EJECTION equals 8,	SEATING POSITION must equal 55, or BODY
		TYPE must equal 80- <b>85, 87-89.</b>
(P130)	BODY TYPE equals 60-67, 71, 72, 78, 79, and	FATAL INJURY AT WORK should equal 1.
	PERSON TYPE equals 01, 03, and INJURY	
	SEVERITY equals 4,	
(P290)	AIR BAG DEPLOYED equals 01-03, 07-09, and	SEATING POSITION should equal 11, 13, 21, 23,
	BODY TYPE equals 01-49, and MODEL YEAR	31 or 33.
	equals 1998 or newer,	
(P310)	EJECTION equals 1-3, and BODY TYPE does	RESTRAINT SYSTEM/HELMET USE must not
<u> </u>	not equal 90, 91, <b>96,</b> 97,	equal 05, 16, 17, 19, 29.
(U080)	BODY TYPE does not equal 21, 28, 29, 50-59,	UNLIKELY: SPECIAL USE equals 02 or 03.
(U470)	UNLIKELY: BODY TYPE equals 98 if HIT AND	
	RUN does not equal 1.	
(V020)	VEHICLE TRAILING equals 1,	BODY TYPE should not equal 50-52, 55, 80-83,
		88-91.

Check	IF	THEN
(V031)	RELATED FACTORS-VEHICLE LEVEL equals 39,	BODY TYPE should not equal 01, 12, 13, 32, 33, 42, 50-52, 55, 58, 59, 65, 73, 80-83, 88-92.
(V032)	RELATED FACTORS-VEHICLE LEVEL equals 40,	BODY TYPE should not equal 01, 12, 13, 32, 33, 42, 50-52, 55, 58, 59, 60-67, 71-73, 78, 80-83, 88-93.
(V050)	RESTRAINT SYSTEM/HELMET USE equals 05, 16, 17,19, 29,	BODY TYPE must equal 80- <b>91</b> .
(V051)	BUS USE equals 01,	BODY TYPE should equal 21, 50 or 55.
(V052)	BUS USE equals 04,	BODY TYPE should equal 51.
(V053)	BUS USE equals 05,	BODY TYPE should equal 12, 16, 21, 51, 55 or 58.
(V054)	BUS USE equals 07,	BODY TYPE should equal 21, 22, 29, 50 -59.
(V055)	BUS USE equals 00,	BODY TYPE must not equal 50-59.
(V170)	NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94, 95, <b>96,</b> 97,	NUMBER OF OCCUPANTS should not be greater than 8.
(V180)	NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY TYPE equals 06, 11,	NUMBER OF OCCUPANTS should not be greater than 12.
(V190)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 12,	NUMBER OF OCCUPANTS should not be greater than 15.
(V200)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 80-83, 88, 89,	NUMBER OF OCCUPANTS should not be greater than 2.
(V210)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 15, 16, 42, 73,	NUMBER OF OCCUPANTS should not be greater than 12.
(V220)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 60-65, 71, 72, 79,	NUMBER OF OCCUPANTS should not be greater than 12.
(V230)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 66,	NUMBER OF OCCUPANTS should not be greater than 5.
(V240)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 91,	NUMBER OF OCCUPANTS should not be greater than 2.
(V250)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 90,	NUMBER OF OCCUPANTS should not be greater than 8.
(V260)	NUMBER OF OCCUPANTS is, 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 99,	NUMBER OF OCCUPANTS should not be greater than 5.
(V290)	BODY TYPE equals 90,	NUMBER OF OCCUPANTS should equal 01.

Check	IF	THEN
(V320)	BODY TYPE equals 42, 50-79, and SEATING	AIR BAG DEPLOYED should equal 20, 98.
	POSITION does not equal 11, 13, 98,	
(V330)	SCHOOL BUS RELATED equals 1,	BODY TYPE of at least one of the involved vehicles should equal 50 (School Bus) or SPECIAL USE for at least one involved vehicle should equal 02 - Vehicle Used as School Bus, <b>or</b> BUS USE for at least one vehicle should equal 01.
(V340)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, <b>94,</b> <b>95, 96,</b> 97, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than <i>15</i> .
(V350)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V360)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 15.
(V370)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 80-83, 88, 89, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 02.
(V380)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V390)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V400)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 5.
(V410)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 2.
(V420)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 8.
(V430)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 98, 99, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 5.
(V440)	BODY TYPE equals 50,	SCHOOL BUS RELATED should equal 1.
(V46P)	VEHICLE CONFIGURATION equals 21,	BODY TYPE must equal 21, 50-52, 55, 58, 59.
(V504)	GVWR/GCWR equals 1,	BODY TYPE should equal 01-22, 28-39, 41-49.
(V505)	GVWR/GCWR equals 9,	BODY TYPE should not equal 61-63, 66, 67.
(V506)	BODY TYPE equals 60,	GVWR/GCWR should equal 2.
(V507)	BODY TYPE equals 01-21, 28-30, 32-39, 45- 49,	GVWR/GCWR should equal 0, 1.

Check	IF	THEN
(V50P)	BODY TYPE equals 61, 62, 67, 71, and	GVWR/GCWR must equal 2, 9. (See
	VEHICLE CONFIGURATION does not equal 04,	GVWR/GCWR Remarks on how to use the VIN to
		determine GVWR.)
(V51P)	BODY TYPE equals 63, 66, 72,	GVWR/GCWR must equal 3. (See GVWR/GCWR
		Remarks on how to use the VIN to determine
		GVWR.)
(V540)	BODY TYPE equals 42, 73, and HM1 equals 1,	GVWR/GCWR should equal 0, 9.
(V56P)	VEHICLE CONFIGURATION equals 10,	BODY TYPE must equal 01-22, 28-49.
(V57P)	VEHICLE CONFIGURATION equals 05,	CARGO BODY TYPE must equal 12, 96, and BODY
		TYPE must equal 66.
(V58P)	VEHICLE CONFIGURATION equals 04,	BODY TYPE must not equal 66.
(V59P)	VEHICLE CONFIGURATION equals 06,	BODY TYPE must equal 66, and VEHICLE
		TRAILING must equal 1.
(V60P)	VEHICLE CONFIGURATION equals 07,	BODY TYPE must equal 66, and VEHICLE
		TRAILING must equal 2.
(V61P)	VEHICLE CONFIGURATION equals 08,	BODY TYPE must equal 66, and VEHICLE
		TRAILING must equal 3.
(V640)	VEHICLE CONFIGURATION does not equal 00,	BODY TYPE should not equal 28, <b>34</b> , 42, 45, 48,
	99,	49.
(V64P)	BODY TYPE equals 50-59, <i>60-72,</i> 78,	GVWR/GCWR must not equal 0, 1.
(V660)	CARGO BODY TYPE does not equal 00, 99,	BODY TYPE should not equal 28, <b>34</b> , 42, 45, 48,
		49.
(V790)	BODY TYPE equals 20,	VEHICLE CONFIGURATION should equal 00, and
		CARGO BODY TYPE should equal 00.
(V800)	BODY TYPE equals 21, 22, 28, 29,	VEHICLE CONFIGURATION should equal 00, 04,
		10, 20, 21, 99, and CARGO BODY TYPE should
		equal 00, 01, 22, 99.
(V810)	BODY TYPE equals 67, and VEHICLE TRAILING	VEHICLE CONFIGURATION should equal 04, and
	equals 1-4,	CARGO BODY TYPE should equal 01, 03, 04, 09.
(V840)	BODY TYPE equals 50-59,	VEHICLE CONFIGURATION should equal 21, and
		CARGO BODY TYPE should equal 22.
(V850)	BODY TYPE equals 60,	VEHICLE CONFIGURATION should equal 01, 03,
		04, and CARGO BODY TYPE should equal 01.
(V860)	HIT-AND-RUN equals 0, and BODY TYPE	VEHICLE CONFIGURATION should equal 01, 02,
	equals 61-64,	04, and CARGO BODY TYPE should equal 01-10,
		12, 96-98.
(V870)	BODY TYPE equals 65,	VEHICLE CONFIGURATION should equal 19, and
		CARGO BODY TYPE should equal <b>97</b> .
(V880)	HIT-AND-RUN equals 0, and BODY TYPE	VEHICLE CONFIGURATION should equal 05-08,
	equals 66,	19, and CARGO BODY TYPE should equal 01-04,
		06-12, 96-98.
(V890)	BODY TYPE equals 71, 72,	VEHICLE CONFIGURATION should equal 19, and
		CARGO BODY TYPE should equal 01-04, 08, 10,
		96-98.
(V900)	BODY TYPE equals 73,	VEHICLE CONFIGURATION should equal <b>99</b> , and
		CARGO BODY TYPE should equal <b>99</b> .

Check	IF	THEN
(V910)	BODY TYPE equals 78,	VEHICLE CONFIGURATION should equal 19, and
		CARGO BODY TYPE should equal 98.
(V915)	BODY TYPE equals 67, and VEHICLE TRAILING	VEHICLE CONFIGURATION should equal 01, and
	equals 0,	CARGO BODY TYPE should equal 97.
(V920)	BODY TYPE equals 79,	VEHICLE CONFIGURATION should equal 99, and
		CARGO BODY TYPE should equal 99.
(V930)	VEHICLE CONFIGURATION equals 00, or	BODY TYPE should not equal 50-64, 66-72, 78,
	CARGO BODY TYPE equals 00,	79.
(V950)	VEHICLE MODEL YEAR is less than 1994, and	RESTRAINT SYSTEM/HELMET USE should not
	SEATING POSITION equals 31, 33, 39,	equal 01, 03, and BODY TYPE should equal 12,
		15, 16, 19-21.
(V961)	MAKE equals 98, 99, and MODEL equals,	BODY TYPE should equal (MODEL and BODY
		TYPE should be valid according to the Vehicle
		Tables).
(V980)	BODY TYPE equals 50-52, 55, <b>58-67,</b> 71, 72,	MOTOR CARRIER IDENTIFICATION NUMBER
	78, 93, or HM1 equals 2,	must not equal 00-000000000.
(VH06)	BODY TYPE equals 82,	RELATED FACTORS-VEHICLE LEVEL must not
		equal 30.

## V12 - Vehicle Model Year

## **FORMAT:** 4 numeric **SAS NAME:** Vehicle.MOD\_YEAR, Person MOD\_YEAR, Parkwork.PMODYEAR **ELEMENT VALUES:**

Codes	Attributes
	Actual Four Digit Model Year
9998	Not Reported
9999	Unknown

Definition: This element identifies the manufacturer's model year of this vehicle.

## Remarks: SEE ADDITIONAL REMARKS UNDER VEHICLE MAKE/VEHICLE MODEL OVERVIEW

## 9998 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code **9998 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

Code all four digits of the model year for which the vehicle was manufactured. For example, a vehicle manufactured as a 1985 model is to be coded as "1985."

Consistency	Checks:
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Check	IF	THEN
(1COP)	the MODEL YEAR is not equal to 9998 or 9999,	the MODEL YEAR must not be greater than
		CRASH YEAR plus ONE.
(900P)	VEHICLE IDENTIFICATION NUMBER (VIN) does	the 10th digit of the valid VEHICLE
	not equal 0s, 8s or 9s and VEHICLE MODEL	IDENTIFICATION NUMBER (VIN) should equal
	YEAR is a valid year and greater than or equal	(contact NHTSA Headquarters for
	to 1980 and VEHICLE MODEL YEAR equals	VIN Assistance).
(902P)	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL	VEHICLE IDENTIFICATION NUMBER positions
	YEAR is not equal to 9998 or 9999, and	1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9,
	VEHICLE IDENTIFICATION NUMBER is not equal	or, blank; VEHICLE IDENTIFICATION NUMBER
	to '000000000000000';	position 9 should equal 0-9, X, or blank;
		VEHICLE IDENTIFICATION NUMBER position
		10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or,
		blank; VEHICLE IDENTIFICATION NUMBER
		positions 15-17 should equal 0-9 or blank.

Check	IF	THEN
(903P)	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to '0000000000000000';	VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, or 0-9; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, or X; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, or 1-9; VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9 or blank; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or blank.
(920P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, equals Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also equal Not Reported.
(921P)	MAKE is not 97, 98, 99, and equals, and MODEL equals,	MODEL YEAR must equal, or CRASH YEAR plus 1.
(930P)	any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, does not equal Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],	the other three must also not be coded as Not Reported.
(P290)	AIR BAG DEPLOYED equals 01-03, 07-09, and BODY TYPE equals 01-49, and MODEL YEAR equals 1998 or newer,	SEATING POSITION should equal 11, 13, 21, 23, 31 or 33.
(U490)	UNLIKELY: GVWR/GCWR equals 8 or 9 and VEHICLE MODEL YEAR is greater than 1980 and not equal to 9998 or 9999 and VIN is not equal to 0000000000000000, 8888888888888888888 or 999999999999999999 and VIN passes the check digit check (i.e., VIN is a Valid VIN).	
(U510)	UNLIKELY: VEHICLE MODEL YEAR equals 9998 <i>if HIT AND RUN does not equal 1</i> .	
(V010)	MODEL YEAR should not be less than 1940.	
(V011)	VEHICLE MODEL YEAR is less than 1950,	VEHICLE IDENTIFICATION NUMBER must equal 0s.
(V620)	CRASH MONTH is between January and March,	the VEHICLE MODEL YEAR should NOT be greater than the CRASH YEAR unless it equals 9998 or 9999 (contact Coding Assistance).
(V922)	MAKE equals 98, 99, and MODEL equals,	MODEL YEAR should equal (MODEL and MODEL YEAR should be valid according to Vehicle Tables).
(V950)	VEHICLE MODEL YEAR is less than 1994, and SEATING POSITION equals 31, 33, 39,	RESTRAINT SYSTEM/HELMET USE should not equal 01, 03, and BODY TYPE should equal 12, 15, 16, 19-21.

## V13 - Vehicle Identification Number

## FORMAT: 17 alphanumeric SAS NAME: Vehicle.VIN, Parkwork.PVIN ELEMENT VALUES:

Codes Attributes		
000000000000000000000000000000000000000	00000000000000000000000000000000000000	
Any Alphanumeric Characters – Actual VIN number		
88888888888888888888888888888888888888		
99999999999999999999	Unknown	

**Definition:** This element records the vehicle identification number (VIN) of a single vehicle or the power unit of a combination vehicle.

## Remarks: SEE ADDITIONAL REMARKS UNDER VEHICLE MAKE/VEHICLE MODEL OVERVIEW

Code the complete VIN of the single vehicle or the power unit of a combination vehicle. The VIN is always leftjustified. Trailer VINs are not coded in this element. See **TRAILER VEHICLE IDENTIFICATION NUMBER** to record the VIN on any trailer. If the VIN for the power unit of a combination vehicle is not available, code <u>8s (Not</u> <u>Reported</u>) for this element, rather than the trailer VIN.

Vehicles manufactured after September 1980 conform to <u>49 CFR Part 565</u>. This standard requires that each VIN have 17 characters, not contain the letter "I", "O" or "Q", and pass a mathematical test (check digit). If the VIN is less than 17-characters long (pre-1981 VIN), do not zero-fill. Instead, leave the remaining characters blank.

Only enter 8s (Not Reported) or 9s (Unknown) when the entire VIN is missing or unknown.

Enter all **Os (No VIN Required)** if the vehicle is not required to have a VIN as per 49 CFR Part 565 (e.g. ATVs, off road motorcycles, farm tractors, go-carts) AND there is no VIN data available. If VIN data is available enter the VIN.

If the vehicle is required to have a VIN as per 49 CFR Part 565 (i.e. all vehicles designed for road use) and no VIN data is available see <u>8s (Not Reported)</u>.

**NOTE:** For any multi-stage manufactured vehicle (e.g., school bus, motor home, limousine, tow truck, etc.), enter the VIN for the vehicle's power unit/chassis. Do not code the secondary manufacturer's serial number, which is not considered a VIN under 49 CFR Part 565.

If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script "f", the script "f" is not entered. Proceed to the next character, as in the example below.

Example: VIN: f3U62S100932f ENTER: 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

Example: VIN: SM-E.3076421 ENTER: SME3076421

## 8s (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **8s (Not Reported)** in these three situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials), or
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials), or
- 3. Information on the *Police Crash Report* has been sanitized/redacted and no other information is available in the case materials.

9s (Unknown) is used when the entire power unit VIN is reported as Unknown with no information available.

## FARS SPECIAL INSTRUCTION:

If the state will not allow transmittal of a complete standard VIN, code the right-most four characters as numeric zeroes. The vehicle registration file must be used to verify the VIN.

## **CRSS SPECIAL INSTRUCTION:**

Leave "Blank" any column which does not have a VIN character. If part of the VIN is missing or not decipherable, leave "blank" the column any such character would ordinarily occupy. In the special case where the first 11 columns of the VIN are blank, but part or all of columns 12 through 17 contain information, code Unknown instead of the partial information contained in the columns 12 through 17 of the VIN.

If the information from *a decoded* VIN and the *Police Crash Report* are inconsistent, use the following guidelines:

- Make and model on the *Police Crash Report* takes precedence over the make and model indicated by the VIN.
- Model year Use model year as indicated by VIN if the VIN Make and Model matches the make and model shown on the *Police Crash Report*.
- Body type Use body type indicated by the VIN if the VIN Make and Model matches the make and model shown on the *Police Crash Report*.

If the information about make and model on the *Police Crash Report* is inconsistent, model takes precedence over the make.

Check	IF	THEN
(900P)	VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s or 9s and VEHICLE MODEL YEAR is a valid year and greater than or equal to 1980 and VEHICLE MODEL YEAR equals	the 10th digit of the valid VEHICLE IDENTIFICATION NUMBER (VIN) should equal (contact NHTSA Headquarters for VIN Assistance).
(901P)	any VEHICLE IDENTIFICATION NUMBER (VIN) that does not equal 0s,8s, or 9s,	VEHICLE IDENTIFICATION NUMBER (VIN) must be unique within a crash.

## Consistency Checks:

Check	IF	THEN
(902P)	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to '00000000000000000';	VEHICLE IDENTIFICATION NUMBER positions 1- 8, 11-14 should equal A-H, J-N, P, R-Z, O-9, or, blank; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or blank; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or, blank; VEHICLE IDENTIFICATION NUMBER positions 15- 17 should equal 0-9 or blank.
(903P)	VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and VEHICLE IDENTIFICATION NUMBER is not equal to '00000000000000000';	VEHICLE IDENTIFICATION NUMBER positions 1- 8, 11 should equal A-H, J-N, P, R-Z, or 0-9; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, or X; VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R- T, V-Y, or 1-9; VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9 or blank; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or blank.
(U490)	UNLIKELY: GVWR/GCWR equals 8 or 9 and VEHICLE MODEL YEAR is greater than 1980 and not equal to 9998 or 9999 and VIN is not equal to 000000000000000, 88888888888888888, or 99999999999999999 and VIN passes the check digit check (i.e., VIN is a Valid VIN).	
(V011)	VEHICLE MODEL YEAR is less than 1950,	VEHICLE IDENTIFICATION NUMBER must equal Os.
(V270)	Model Year is greater than 1980	the VIN should be 17 characters, all characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
(V280)	Model Year is greater than 1980 and VIN is 17 characters, all characters are alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q,	the VIN should pass check digit calculation.
(V300) (V62P)	Possible error in VIN Production Number. CARGO BODY TYPE equals 01-12, 97, 98, and VEHICLE IDENTIFICATION NUMBER does not equal Not Reported or Unknown,	 GVWR/GCWR must equal 2, 3.

## V14 - Vehicle Trailing

## **FORMAT:** 1 numeric **SAS NAME:** Vehicle.TOW\_VEH; Person.TOW\_VEH; Parkwork.PTRAILER **ELEMENT VALUES:**

Codes	Attributes
0	No Trailing Units
1	One Trailing Unit
2	Two Trailing Units
3	Three or more Trailing Units
4	Yes, Number of Trailing Units Unknown
5	Vehicle Towing Another Motor Vehicle - Fixed Linkage
6	Vehicle Towing Another Motor Vehicle - Non-Fixed Linkage
9	Unknown

**Definition:** This element identifies whether or not this vehicle had any attached trailing units or was towing another motor vehicle.

**Remarks:** Trailing unit applies to any device connected to a motor vehicle by a hitch, including tractor-trailer combinations, a single-unit truck pulling a trailer (truck trailer), a boat trailer hitched onto a motor vehicle, etc. If the case materials do not provide sufficient information if the linkage was fixed or not, consider the linkage as fixed.

A vehicle towing another motor vehicle is not considered to be a trailer but is considered to be a towed vehicle (see <u>5 (Vehicle Towing Another Motor Vehicle - Fixed Linkage)</u> or <u>6 (Vehicle Towing Another Motor Vehicle - Non-Fixed Linkage)</u>). A converter dolly is a device used to hitch a trailer to another semi-trailer or straight truck and is not counted as a separate trailing unit. For combination vehicles (medium/heavy trucks), count only the cargo-carrying units.

**0 (No Trailing Units)** is used when this vehicle was not pulling or towing a wheeled unit.

1 (One Trailing Unit) is used when one trailer was being pulled by this vehicle.

2 (Two Trailing Units) is used when this vehicle was pulling two trailers.

3 (Three or More Trailing Units) is used when this vehicle was pulling three or more trailers.

**4 (Yes, Number of Trailing Units Unknown)** is used when it is known that there was a trailer(s) but the number of trailers cannot be determined.

**5 (Vehicle Towing Another Motor Vehicle - Fixed Linkage)** is used to identify that a vehicle was towing another motor vehicle(s) connected by a fixed linkage. The towed vehicle will have two or more wheels on the ground. This will most commonly apply to drive-away/tow-away tow trucks. These are vehicles equipped with a mechanism designed to be attached to a towed vehicle (e.g., hoist). This attribute would also be used for saddle-mounted towed vehicles. An example of a saddle-mount unit would be a bobtail towing one or more other bobtails. This attribute does not apply to vehicles towed by being loaded on a flatbed or auto transporter.

**6 (Vehicle Towing Another Motor Vehicle - Non-Fixed Linkage)** is used to identify that a vehicle was towing another motor vehicle(s) connected by a non-fixed linkage. A non-fixed linkage includes ropes, chains, or cables.

9 (Unknown) is used when it cannot be determined from any information if a unit was being pulled or towed.

## FARS SPECIAL INSTRUCTION:

For vehicles being towed by an illegal hitch (rope, chain, cable), use the <u>22 (Towing or Pushing Improperly)</u> for the data element <u>Related Factors-Driver Level</u>.

## **Consistency Checks:**

Check	IF	THEN
(2B0P)	JACKKNIFE equals 1-3,	VEHICLE TRAILING must not equal 0, 9.
(4C1P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94, 95, <b>96,</b> 97, and VEHICLE TRAILING does NOT	NUMBER OF OCCUPANTS must not be greater than 20.
	equal 0,	
(4C2P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 22.
(4C3P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 25.
(4C4P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals <b>80-89</b> , and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than <i>15</i> .
(4C5P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 30.
(4C6P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 55.
(4C7P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 77.
(4C8P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(4C9P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 20.
(4C0P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 99, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(4E0P)	VEHICLE TRAILING equals 1 or 2 or 3,	TRAILER VEHICLE IDENTIFICATION NUMBER must not equal 7s or blanks for all three sets.
(4E1P)	VEHICLE TRAILING equals 4,	TRAILVER VEHICLE IDENTIFICATION NUMBER must not equal 7s for any of the three sets.
(4F1P)	NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 01-05, 07-10, 13, 17, <b>90-</b> <b>97</b> , and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 15.

Check	IF	THEN
(4F2P)	NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 06, 11, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 22.
(4F3P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 25.
(4F4P)	NUMBER OF OCCUPANTS is 01-98, and BODYNUMBER OF OCCUPANTS must not be gTYPE equals 80-89, and VEHICLE TRAILINGthan 5.equals 0,	
(4F5P)		
(4F6P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 55.
(4F7P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 50.
(4F8P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 10.
(4F9P)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS must not be greater than 20.
(4F9Q)	NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 06, 11, 12, 14-16, 19, and VEHICLE TRAILING equals 0,	NUMBER OF OCCUPANTS should not be greater than 15.
(4F0P)		
(4R0P)	SEATING POSITION equals 54,	VEHICLE TRAILING must not equal 0 or 9.
(5BOP)		
(5B0Q)	JACKKNIFE equals 0,	VEHICLE TRAILING must equal 0, 5, 6, or 9.
(ADOP)	VEHICLE CONFIGURATION equals 04, 06-08,	VEHICLE TRAILING must not equal 0.
(AEOP)	VEHICLE CONFIGURATION equals 05, and CARGO BODY TYPE does not equal 12,VEHICLE TRAILING must equal 0.	
(AL1P)	SEQUENCE OF EVENTS equals 51, 62, 70, VEHICLE TRAILING must not equal 0	
(CIOP)	VEHICLE TRAILING equals 1-4, JACKKNIFE must not equal 0.	
(V020)	VEHICLE TRAILING equals 1, BODY TYPE should not equal 50-52, 55 88-91.	
(V170)	NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94, 95, <b>96,</b> 97,	NUMBER OF OCCUPANTS should not be greater than 8.

Check	IF	THEN
(V180)	NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY TYPE equals 06, 11,	NUMBER OF OCCUPANTS should not be greater than 12.
(V190)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 12,	NUMBER OF OCCUPANTS should not be greater than 15.
(V200)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 80-83, 88, 89,	NUMBER OF OCCUPANTS should not be greater than 2.
(V210)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 15, 16, 42, 73,	NUMBER OF OCCUPANTS should not be greater than 12.
(V220)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 60-65, 71, 72, 79,	NUMBER OF OCCUPANTS should not be greater than 12.
(V230)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 66,	NUMBER OF OCCUPANTS should not be greater than 5.
(V240)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 91,	NUMBER OF OCCUPANTS should not be greater than 2.
(V250)	NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 90,	NUMBER OF OCCUPANTS should not be greater than 8.
(V260)	NUMBER OF OCCUPANTS is, 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE equals 99,	NUMBER OF OCCUPANTS should not be greater than 5.
(V310)	SEATING POSITION equals 54 and VEHICLE TRAILING equals 1-4,	AIR BAG DEPLOYED must equal <b>20</b> .
(V340)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19, <b>94</b> , <b>95, 96,</b> 97, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than <i>15</i> .
(V350)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.
(V360)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 15.
(V370)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 80-83, 88, 89, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 02.
(V380)	NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE TRAILING does NOT equal 0,	NUMBER OF OCCUPANTS should not be greater than 12.

Check	IF	THEN
(V390)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS should not be greater
	TYPE equals 60-65, 71, 72, 79, and VEHICLE	than 12.
	TRAILING does NOT equal 0,	
(V400)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS should not be greater
	TYPE equals 66, and VEHICLE TRAILING does	than 5.
	NOT equal 0,	
(V410)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS should not be greater
. ,	TYPE equals 91, and VEHICLE TRAILING does	than 2.
	NOT equal 0,	
(V420)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS should not be greater
\ - \/	TYPE equals 90, and VEHICLE TRAILING does	than 8.
	NOT equal 0,	
(V430)	NUMBER OF OCCUPANTS is 01-98, and BODY	NUMBER OF OCCUPANTS should not be greater
(1.00)	TYPE equals 98, 99, and VEHICLE TRAILING	than 5.
	does NOT equal 0,	
(V59P)	VEHICLE CONFIGURATION equals 06,	BODY TYPE must equal 66, and VEHICLE
(1001)		TRAILING must equal 1.
(V60P)	VEHICLE CONFIGURATION equals 07,	BODY TYPE must equal 66, and VEHICLE
(1001)		TRAILING must equal 2.
(V61P)	VEHICLE CONFIGURATION equals 08,	BODY TYPE must equal 66, and VEHICLE
(0011)	VEHICLE CONTROLLATION equals 00,	TRAILING must equal 3.
(V68P)	CARGO BODY TYPE equals 12,	VEHICLE TRAILING must equal 5.
(V810)	BODY TYPE equals 67, and VEHICLE TRAILING	VEHICLE CONFIGURATION should equal 04, and
(0010)	equals 1-4,	CARGO BODY TYPE should equal 01, 03, 04, 09.
(V915)	BODY TYPE equals 67, and VEHICLE TRAILING	VEHICLE CONFIGURATION should equal 01, and
(*515)	equals 0,	CARGO BODY TYPE should equal 97.
(V983)	VEHICLE TRAILING equals 3,	STATE should equal 04, 08, 16, 18, 20, 30-32, 38-
(0905)	VEHICLE TRAILING Equals 5,	41, 46, 49.
(V984)	STATE does not equal 04, 08, 16, 18, 20, 30-	VEHICLE TRAILING should not equal 3.
(1904)	32, 38-41, 46, 49,	VEHICLE TRAILING SHOuld hot equal 5.
		VELUCIE CONFICURATION should not agual 00
(V985)	VEHICLE TRAILING equals 5,	VEHICLE CONFIGURATION should not equal 00,
() (0.01)		10, 19-21.
(V991)	VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION must not equal 04,
() (000)		06-08.
(V992)	VEHICLE TRAILING equals 1,	VEHICLE CONFIGURATION must not equal 01,
() (0.0.0.)		02, 05, 07 or 08.
(V993)	VEHICLE TRAILING equals 2,	VEHICLE CONFIGURATION must not equal 01,
()		02, 05, 06 or 08.
(V994)	VEHICLE TRAILING equals 3,	VEHICLE CONFIGURATION must not equal 01,
		02, 05-07.
(V995)	VEHICLE TRAILING equals 4,	VEHICLE CONFIGURATION must not equal 01,
		02, 05-08.
(V997)	VEHICLE TRAILING equals 6,	VEHICLE CONFIGURATION must not equal 04,
		06-08.
(V998)	VEHICLE TRAILING equals 9,	VEHICLE CONFIGURATION must not equal 04-07
		or 08.

## Consistency Check (CRSS Only):

Check	IF	THEN
(V986)	VEHICLE TRAILING equals 3,	PSU should equal OH, OK, SD, UT.

## Consistency Check (FARS Only):

Check	IF	THEN
(V16P)	RELATED FACTORS-DRIVER LEVEL equals 88,	VEHICLE TRAILING must not equal 0, 9.

## V15 - Trailer Vehicle Identification Number

## FORMAT: 3 sets, 17 alphanumeric SAS NAME: TBD ELEMENT VALUES:

Codes	Attributes
000000000000000000000000000000000000000	No VIN Required
	Any Alphanumeric Characters – Actual VIN
777777777777777777777777777777777777777	No Trailing Units
888888888888888888888888888888888888888	Not Reported
999999999999999999999	Unknown

**Definition:** This element records the vehicle identification number (VIN) of any trailing units of a combination vehicle.

## Remarks: SEE VEHICLE MAKE/VEHICLE MODEL OVERVIEW.

VINs for the power unit are not coded in this element. See <u>V13 Vehicle Identification Number</u> to record the VIN on the power unit.

Code the complete VIN of any trailing units of a combination vehicle (up to three trailing units). The number of VIN fields available to code is system generated based on the presence of a trailer or trailers in the element <u>VEHICLE TRAILING</u>. For example, if VEHICLE TRAILING equals **0** (No Trailing Units), **5** (Vehicle Towing Fixed), **6** (Vehicle Towing Non-fixed), or **9** (Unknown) then TRAILER VEHICLE IDENTIFICATION NUMBER is auto-filled with **7s** (No Trailing Units). If VEHICLE TRAILING equals **1** (One Trailing Unit) then one TRAILER VEHICLE IDENTIFICATION NUMBER set of 17 alphanumeric characters is available to code and the remaining two are 7-filled by the system.

The VIN is always left-justified.

If the VIN for any trailing unit of a combination vehicle is not available, code <u>8s (Not Reported)</u> here. For example, if a truck tractor semi-trailer combination has no VIN information for the trailer, code <u>8s (Not Reported)</u> in the available field. If a truck tractor double-trailer combination has VIN information for only one of the two trailers, code the known VIN in the first field and <u>8s (Not Reported)</u> in the second Trailer Vehicle Identification Number field.

Vehicles manufactured after September 1980 conform to Federal Motor Vehicle Safety Standard **565**. This standard requires that each VIN have 17 characters, not contain the letter "I," "O," or "Q", and pass a mathematical test (check digit). If the VIN is less than 17-characters long (pre-1981 VIN), do not zero-fill. Instead, leave the remaining characters blank.

Only enter 8s (Not Reported) or 9s (Unknown) when the entire VIN is missing or reported unknown.

Enter all **0s (No VIN Required)** if the vehicle has a trailer but the trailer is not required to have a VIN as per <u>49</u> <u>CFR Part 565 Requirements for Trailer Manufacturers</u>. This attribute should only be used for homemade or custom trailers not manufactured for sale to the public. If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script "f", the script "f" is not entered. Proceed to the next character, as in the example below.

**VIN:** f3U62S100932f **ENTER:** 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

VIN: SM-E.3076421 ENTER: SME3076421

## 8s (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "Not Reported".

Code 8s (Not Reported) in these three situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials), or
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials), or
- 3. Information on the *Police Crash Report* has been sanitized/redacted and no other information is available in the case materials.

**9s (Unknown)** is used when the entire trailing unit VIN is reported as Unknown. For example, the police report the vehicle information is unknown for hit-and-run vehicle known to have a trailer(s).

## FARS SPECIAL INSTRUCTION:

If the state will not allow transmittal of a complete standard VIN, code the right-most four characters as numeric zeroes. The vehicle registration file must be used to verify the VIN.

## **CRSS SPECIAL INSTRUCTION:**

Leave "Blank" any column which does not have a VIN character. If part of the VIN is missing or not decipherable, leave "Blank" the column any such character would ordinarily occupy. In the special case where the first 11 columns of the VIN are blank, but part or all of columns 12 through 17 contain information, code Unknown instead of the partial information contained in the columns 12 through 17 of the VIN.

Check	IF	THEN
(4E0P)	VEHICLE TRAILING equals 1 or 2 or 3,	TRAILER VEHICLE IDENTIFICATION NUMBER
		must not equal 7s or blanks for all three sets.
(4E1P)	VEHICLE TRAILING equals 4,	TRAILER VEHICLE IDENTIFICATION NUMBER
		must not equal 7s for any of the three sets.
(904P)	TRAILER VEHICLE IDENTIFICATION NUMBER is	TRAILER VEHICLE IDENTIFICATION NUMBER
	not equal to '0000000000000000',	positions 1-8, 11-14 should equal A-H, J-N, P, R-
		Z, 0-9, or, blank; TRAILER VEHICLE
		IDENTIFICATION NUMBER position 9 should
		equal 0-9, X, or blank; TRAILER VEHICLE
		IDENTIFICATION NUMBER position 10 should
		equal A-H, J-N, P, R-T, V-Y, 1-9, or, blank;
		TRAILER VEHICLE IDENTIFICATION NUMBER
		positions 15-17 should equal 0-9 or blank.
(905P)	TRAILER VEHICLE IDENTIFICATION NUMBER is	TRAILER VEHICLE IDENTIFICATION NUMBER
	not equal to '0000000000000000',	positions 1-8, 11 should equal A-H, J-N, P, R-Z, or
		0-9; TRAILER VEHICLE IDENTIFICATION NUMBER
		position 9 should equal 0-9 <i>or X</i> ; TRAILER
		VEHICLE IDENTIFICATION NUMBER position 10
		should equal A-H, J-N, P, R-T, V-Y, or 1-9;
		TRAILER VEHICLE IDENTIFICATION NUMBER
		positions 12-14 should equal A-H, J-N, P, R-Z, 0-9
		or blank; TRAILER VEHICLE IDENTIFICATION
		NUMBER positions 15-17 should equal 0-9 or
		blank.
(U687)	UNLIKELY: TRAILER VEHICLE IDENTIFICATION	
	NUMBER equals 0s for any of the three sets.	

# V16 - Jackknife

#### FORMAT: 1 numeric SAS NAME: Vehicle.J\_KNIFE ELEMENT VALUES:

Codes	Attributes
0	Not an Articulated Vehicle
1	No
2	Yes - First Event
3	Yes - Subsequent Event

**Definition:** This element identifies if this vehicle experienced a "jackknife" anytime during the unstabilized situation.

**Remarks:** Jackknife can occur at any time during the crash sequence. This element is applicable for all power unit/trailing unit combinations (e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, light utility vehicle/trailing unit combination, etc.).

Jackknife applies to a condition that occurs to an articulated vehicle, any vehicle with a trailing unit connected by a hitch (fixed linkage) while in motion. A jackknife occurs when there is an uncontrolled articulation between the power unit and the trailing unit in which the trailing unit does not follow directly behind the power unit (tracking), and the driver did not initiate the non-tracking situation. The condition reflects a loss of control of the vehicle by the driver in which the trailing units' normal straight-line path behind the power unit is not maintained.

If the final resting configuration of the vehicle in the *Police Crash Report* diagram is in a jackknife position, it does not necessarily mean that the vehicle has jackknifed. Turning and backing are examples of driver initiated non-tracking controlled articulation and are not coded as a jackknife.

In the case materials, the terms "tractor jackknife" or "trailer swing" may be used to describe particular incidences of uncontrolled articulation. Either incident shall be coded as Jackknife. Jackknife is not likely to be a harmful event but may be part of an unstabilized condition just before the first harmful event.

**0** (Not an Articulated Vehicle) is used when this vehicle is not a vehicle-trailing unit combination. This attribute can also be used when coding a hit-and-run vehicle when there is not an indication in the case materials that the hit and run vehicle had a trailer.

**1** (No) is used when no uncontrolled articulation was reported between a vehicle and a trailing unit.

**2 (Yes - First Event)** is used when an uncontrolled articulation was reported as occurring before or as part of the first injury or damage producing event for this vehicle.

**3 (Yes - Subsequent Event)** is used when an uncontrolled articulation occurs after the first injury or damage producing event for this vehicle.

Check	IF	THEN
(2B0P)	JACKKNIFE equals 1-3,	VEHICLE TRAILING must not equal 0, 9.
(3B0P)	JACKKNIFE equals 2, 3,	TRAVEL SPEED must not equal 000.
(5B0P)	JACKKNIFE equals 0 and BODY TYPE equals 66,	VEHICLE TRAILING must not equal 1-4.
(5B0Q)	JACKKNIFE equals 0,	VEHICLE TRAILING must equal 0, 5, 6, or 9.
(7B0F)	JACKKNIFE equals 2, 3,	DRIVER PRESENCE must equal 1.
(AK00)	CARGO BODY TYPE equals 22, 96,	JACKKNIFE should equal 0.
(AL8P)	SEQUENCE OF EVENTS equals 51, 70,	JACKKNIFE must equal 2, 3.
(CIOP)	VEHICLE TRAILING equals 1-4,	JACKKNIFE must not equal 0.
(V538)	JACKKNIFE equals 2,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) must not
		equal 04, 05, 07-09 or 13 for this vehicle.
(VH70)	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, and
		SEQUENCE OF EVENTS must all be left blank.

### V17 - Motor Carrier Identification Number

FORMAT: 1 set 2 numeric, 1 set 9 alphanumeric

SAS NAME: Vehicle.MCARR\_ID, parkwork.PMCARR\_ID, Vehicle.MCARR\_I1; parkwork.PMCARR\_I1,

Vehicle.MCARR\_I2; parkwork.PMCARR\_I2

#### **ELEMENT VALUES:**

#### **Issuing Authority:**

ssuing Autionty.	
Codes	Attributes
00	Not Applicable
01-56	State Code
57	<u>US DOT</u>
58	MC/MX (ICC)
95	<u>Canada</u>
96	Mexico
88	None
77	Not Reported
99	<u>Unknown</u>

#### **Identification Number:**

Codes	Attributes
	Actual Number
Os	Not Applicable
8s	None
7s	Not Reported
9s	Unknown

**Definition:** This element records the issuing authority and motor carrier identification number if applicable to this vehicle.

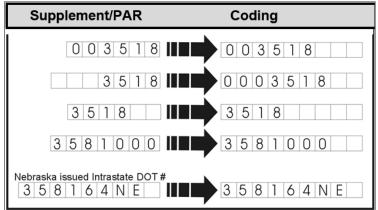
**Remarks:** The Motor Carrier Identification Number is recorded on the Truck Supplement or **Police Crash Report** next to the appropriate Source (Issuing Authority.) This information should be available on your Police **Crash** Report or Truck and Bus Supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA). You should expect to find motor carrier identification numbers for the following qualifying vehicles:

- 1. Light trucks pulling a trailer with gross combination weight rating (GCWR) greater than 10,000 lbs.
- 2. Medium/Heavy Trucks: vehicles with GVWR greater than 10,000 lbs.
- 3. Vehicles with 9 or more seats (including the driver).
- 4. Light Trucks, Vans, and Passenger Vehicles displaying a hazardous materials placard.

Federal regulations require that almost all commercial trucks/buses operating across state lines that meet the above criteria (i.e., interstate) have Identification Numbers except those hauling "exempt" commodities (such as unprocessed agricultural products). This will be a US DOT or MC/MX (ICC) Number. Some states issue "Intrastate" motor carriers a state number that can also be recorded here.

Identification Number should be left justified. If less than 9 characters, left-justify and do not zero-fill.

Figure 11: Examples of Left-Justified Coding of Motor Carrier Identification Number



Note: Many carriers will have a US DOT or MC/MX (ICC) Number plus a State Number.

**HIERARCHY:** When Identification Numbers are available from more than one Source (Issuing Authority), it is most important to code the US DOT number then the MC/MX (ICC) number if one is available. It is next most important to code the Mexican or Canadian issued number. Finally, State-issued numbers should be coded.

**57 (US DOT NUMBERS): US DOT** is used in "Issuing Authority" if a US DOT Number or a State Number and US DOT Number are recorded on the *Police Crash Report* or Supplement. Enter the US DOT Number in "Identification Number."

• US DOT Numbers are in the process of being assigned to Intrastate motor carriers in a number of states. These should include the issuing state's two-character abbreviation on the end; e.g., US DOT 123456XX (where "XX" is the State abbreviation). See example of proper coding in <u>Figure 11</u>.

**58 (MC/MX (ICC) NUMBERS): MC/MX (ICC)** is used in "Issuing Authority" if an MC/MX (ICC) Number or a State Number and an MC/MX (ICC) Number are recorded on the *Police Crash Report* or Supplement. Enter the MC/MX (ICC) Number in "Identification Number."

**STATE NUMBERS:** If only a State Number is recorded on the *Police Crash Report* or Supplement, then code the appropriate FARS State Code in "Issuing Authority" and enter the State Number in "Identification Number."

State Numbers are issued by a public utility commission, a public service commission, or some other state agency, to vehicles that operate either in interstate commerce or only within that state. However, some states do not regulate the motor carrier industry. Trucks and buses that operate strictly within such states (i.e., intrastate) may not have numbers.

**CANADIAN/MEXICAN NUMBERS:** Use attributes "95" or "96" in "Issuing Authority" if a Canadian or Mexican authority (respectively) has issued the only Carrier Identification Number recorded on the *Police Crash Report* or Supplement.

00/0s (Not Applicable) is used when none of the qualifying criteria above apply to this vehicle.

**88/8s (None)** *is* used when you *would* expect this type of vehicle to have an ID Number *because the qualifying criteria above apply to this vehicle,* but *there is no Motor Carrier Identification number to record or the case material states "No Number." This can occur because the vehicle is not properly marked or because* its use or activity at the time of the crash *does not require it to have a number. Examples of vehicles that may not require a number include* construction *or farm* equipment, *vehicles operated strictly intrastate in a state that does not regulate intrastate carriers, government owned/operated vehicles, and personal use vehicles (i.e. non-commercial).* 

**99/9s (Unknown)** is used if the investigating officer reported the motor carrier identification number as unknown or when the body type of the vehicle is unknown.

#### 77/7s (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 77/7s (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

Note: For this element, Not Reported is used when the qualifying criteria above apply to this vehicle but 88/8s (None) does not apply, and:

- the Police Crash Report or truck supplement leaves the identification number field blank; or
- **the officer did not complete a** supplement or a field on the **Police Crash Report** (no further information given).

#### FARS SPECIAL INSTRUCTION:

If your state uses separate Truck/Bus Supplements, you should seek help to get routine access to them, just as with your state's **Police Crash Report**. Your state's SAFETYNET representative may be able to provide a Motor Carrier Identification Number.

Check	IF	THEN
(4N1P)	VEHICLE CONFIGURATION does not equal 00,	MOTOR CARRIER IDENTIFICATION NUMBER
		must not equal 00-000000000.
(4N2P)	MOTOR CARRIER IDENTIFICATION NUMBER	VEHICLE CONFIGURATION must equal 00.
	equals 00-00000000,	
(4N3P)	MOTOR CARRIER IDENTIFICATION NUMBER	MOTOR CARRIER IDENTIFICATION NUMBER
	(Identification Number) equals 000000000,	(Issuing Authority) must equal 00.
(4N4P)	MOTOR CARRIER IDENTIFICATION NUMBER	BODY TYPE must equal <b>12, 16,</b> 21, 28, <b>34</b> , 40, 45,
	does not equal 00-000000000,	48-52, 55, <b>58-66</b> , 67, 71, 72, 78, 79, 92, 93, 99,
		or HM2 must equal 2.
(4N5P)	BODY TYPE does not equal <b>12, 16,</b> 21, 28, <b>34</b> ,	MOTOR CARRIER IDENTIFICATION NUMBER
	40, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92,	must equal 00-00000000, 99-9999999999.
	93, or HM2 does not equal 2,	

Check	IF	THEN
(4N7P)	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 8888888888 or 777777777 or 999999999,	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) should be filled respectively as 88 or 77 or 99.
(4NAP)	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) equals 01-58, 95, 96,	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) should not equal 888888888, 777777777, 999999997, 9999999999.
(4NBP)	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) equals 01-58, 95, 96,	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must not equal 000000000.
(4NCP)	MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) is 00 or 77 or 88 or 99,	MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must be filled respectively as 00000000 or 777777777 or 88888888 or 999999999.
(U680)	UNLIKELY: MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 999999997.	
(V980)	BODY TYPE equals 50-52, 55, <b>58-67,</b> 71, 72, 78, 93, or HM1 equals 2,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.
(V981)	VEHICLE CONFIGURATION equals 00,	MOTOR CARRIER IDENTIFICATION NUMBER should equal 00-000000000.
(V982)	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000,	VEHICLE CONFIGURATION should not equal 00.

# V18 – GVWR / GCWR Gross Vehicle Weight Rating/ Gross Combination Weight Rating

#### FORMAT: 1 numeric SAS NAME: Vehicle.GVWR, parkwork.PGVWR ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
1	<u>10,000 lbs. or less</u>
2	10,001 lbs 26,000 lbs.
3	26,001 lbs. or more
8	Not Reported
9	<u>Unknown</u>

Definition: This element identifies the gross vehicle weight rating of this vehicle when applicable.

**Remarks:** Record the applicable weight range for a single vehicle's Gross Vehicle Weight Rating (GVWR) or combination vehicle's Gross Combination Weight Rating (GCWR).

It may appear as a numeric value or as a range of values like those displayed above. This information should be available on your Police *Crash* Report or Truck and Bus Supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA).

**Gross Vehicle Weight Rating (GVWR)** is the value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle.

**Gross Combination Weight Rating (GCWR)** is the value specified by the manufacturer(s) as the recommended maximum loaded weight of a combination (articulated) motor vehicle. This is for truck tractors and single-unit trucks pulling a trailer(s). GCWR is the sum of the gross vehicle weight ratings (GVWR) of all units, power unit and its trailer(s).

For Truck/Trailer Combinations: If your state records the GVWR of the power unit and trailer(s) in separate fields, be sure to add together the GVWRs of all the units when recording this element.

**0 (Not Applicable)** should be used for vehicles 10,000 lbs. or less *GVWR/GCWR that do not have a hazardous material placard, and for any vehicle with* less than 9 seats (including driver).

**1 (10,000 lbs. or less)** should be used for *vehicles* 10,000 lbs. or less GVWR/GCWR when displaying a hazardous materials placard *and* for *any vehicle* with 9 or more seats (including driver) *that is* 10,000 lbs. GVWR or less.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**9 (Unknown)** should be used when GVWR/GCWR information is reported as "Unknown" on your **Police Crash Report** or Truck/Bus Supplement and the **decoded** VIN is unable to return a value.

#### PROCEDURE FOR VERIFICATION OF GVWR/GCWR RANGE:

The MDE provides *decoded* VIN values for GVWR. This information is available under the Vehicle Information tab.

**NOTE:** The VIN decoding only provides the GVWR of a single vehicle or the GVWR of the power unit in a combination unit motor vehicle.

- For Truck/Trailer Combinations:
  - 1. If the VIN return fits within the range provided on the *Police Crash Report* or Truck and Bus supplement, use that value.
  - If the VIN return falls below the range provided on the *Police Crash Report* or Truck and Bus Supplement, use the value provided on the crash report to account for the addition of the trailer's GVWR.
- If GVWR/GCWR information is unavailable or not reported on your *Police Crash Report* or Truck/Bus Supplement, and you have a valid VIN, utilize the information on the power unit provided by the *decoded* VIN to code this element.

<b>DECODED VIN RANGES (trucks only)</b>	FARS/CRSS CODES
	<u>0 – Not Applicable</u>
6,000 lbs. or less	<u>1 – 10,000 lbs. or less</u>
6,001 – 10,000 lbs.	"
10,001 – 14,000 lbs.	2 – 10,001 – 26,000 lbs.
14,001 – 16,000 lbs.	"
16,001 – 19,500 lbs.	<i>u</i>
19,501 – 26,000 lbs.	<i>u</i>
26,001 – 33,000 lbs.	3 – 26,001 lbs. or more
33,001 lbs. or more	<i>u</i>
Unknown	<u>9 – Unknown</u>

#### Comparison of the VIN and Codes for GVWR/GCWR

Use of GCWR instead of GVWR will only impact these vehicles:

- 1. Light trucks, 10,000 lbs. or less, pulling trailers (truck/trailers) (greater than 10,000 lbs. GCWR)
- 2. Single-unit trucks, less than 26,000 lbs., pulling trailers (truck/trailers) (greater than 26,000 lbs. GCWR)

Check	IF	THEN
(U490)	UNLIKELY: GVWR/GCWR equals 8 or 9 and	
	VEHICLE MODEL YEAR is greater than 1980	
	and not equal to 9998 or 9999 and VIN is not	
	equal to 0000000000000000,	
	888888888888888888, or	
	9999999999999999999 and VIN passes the	
	check digit check (i.e., VIN is a Valid VIN).	
(V502)	GVWR/GCWR equals 0, and HM1 equals 1,	VEHICLE CONFIGURATION and CARGO BODY
		TYPE must equal 00.
(V503)	GVWR/GCWR equals 1,	HM2 should equal 2, or VEHICLE
		CONFIGURATION should equal 20.
(V504)	GVWR/GCWR equals 1,	BODY TYPE should equal 01-22, 28-39, 41-49.
(V505)	GVWR/GCWR equals 9,	BODY TYPE should not equal 61-63, 66, 67.
(V506)	BODY TYPE equals 60,	GVWR/GCWR should equal 2.
(V507)	BODY TYPE equals 01-21, 28-30, 32-39, 45-49,	GVWR/GCWR should equal 0, 1.
(V50P)	BODY TYPE equals 61, 62, 67, 71, and	GVWR/GCWR must equal 2, 9. (See
	VEHICLE CONFIGURATION does not equal 04,	<u>GVWR/GCWR Remarks</u> on how to use the VIN to
		determine GVWR.)
(V51P)	BODY TYPE equals 63, 66, 72,	GVWR/GCWR must equal 3. (See <u>GVWR/GCWR</u>
		Remarks on how to use the VIN to determine
		GVWR.)
(V532)	VEHICLE CONFIGURATION equals 01, 02, 04-	GVWR/GCWR should not equal 0 or 1.
	08, 19, 21,	
(V540)	BODY TYPE equals 42, 73, and HM1 equals 1,	GVWR/GCWR should equal 0, 9.
(V62P)	CARGO BODY TYPE equals 01-12, 97-98, and	GVWR/GCWR must equal 2, 3.
	VEHICLE IDENTIFICATION NUMBER does not	
	equal Not Reported or Unknown,	
(V64P)	BODY TYPE equals 50-59, <b>60-72,</b> 78,	GVWR/GCWR must not equal 0, 1.
(V65P)	GVWR/GCWR equals 2, 3,	VEHICLE CONFIGURATION must not equal 00,
		and CARGO BODY TYPE must not equal 00.
(VA70)	GVWR/GCWR equals 1, and HM2 equals 2,	VEHICLE CONFIGURATION must equal 10.

# V19 - Vehicle Configuration

#### **FORMAT:** 2 numeric **SAS NAME:** Vehicle.V\_Config, Parkwork.PV\_Config **ELEMENT VALUES:**

Codes	Attributes
00	Not Applicable
10	Vehicle 10,000 pounds or less placarded for hazardous materials
01	Single-Unit Truck (2-axle and GVWR more than 10,000 lbs.)
02	Single-Unit Truck (3 or more axles)
04	Truck Pulling Trailer(s)
05	Truck Tractor (Bobtail)
06	Truck Tractor/Semi-Trailer
07	Truck Tractor/Double
08	Truck Tractor/Triple
19	Truck More Than 10,000 lbs., Cannot Classify
20	Bus/Large Van (seats for 9-15 occupants, including driver)
21	Bus (seats for more than 15 occupants, including driver)
99	<u>Unknown</u>

**Definition:** This element identifies the general configuration of this vehicle when applicable.

**Remarks:** This information should be available on your *Police Crash Report* or Truck and Bus Supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA).

In some states, the data element "Vehicle Configuration" or its attributes may appear under another title, such as: Unit Type, Vehicle Type, Type of Unit, etc. In many states, Vehicle Configuration is recorded for all vehicles. However, in our data systems, only code Vehicle Configurations for the following qualifying vehicles:

- 1. Light trucks pulling a trailer with gross combination weight rating (GCWR) greater than 10,000 lbs.
- 2. Medium/Heavy Vehicles with GVWR greater than 10,000 lbs.
- 3. Vehicles with 9 or more seats (including the driver).
- 4. Light Trucks, Vans, and Passenger Vehicles displaying a hazardous materials placard.

If Vehicle Configuration is coded "01-99," Cargo Body Type should be coded "01-99."

**00 (Not Applicable)** is used for automobiles, motorcycles, passenger vans (with less than 9 seats, including driver), and single-unit light trucks or cargo vans (10,000 lbs. or less GVWR), not carrying hazardous cargo.

A light truck carrying hazardous cargo is coded **10 (Vehicle 10,000 Pounds or Less Placarded for Hazardous Materials)**. When vehicles in this category are not displaying a hazardous materials placard, use **00 (Not Applicable)**.

**01 (Single-Unit Truck [2-axle and GVWR more than 10,000 lbs.])** is a power unit that includes a permanently mounted cargo body (also called a straight truck) that has only two axles and a GVWR of over 10,000 lbs. This also includes a single-unit truck towing other vehicles where the towed vehicle has at least two wheels on the ground. (See <u>Cargo Body Type</u> attribute <u>12 (Vehicle Towing Another Motor Vehicle)</u>).

**02 (Single-Unit Truck [3 or more axles])** is a power unit that includes a permanently mounted cargo body (also called a straight truck) that has three or more axles. When counting axles on a single-unit truck, include raised axles. This also includes a single-unit truck towing other vehicles where the towed vehicle has at least two wheels on the ground. (See <u>Cargo Body Type</u> attribute <u>12 (Vehicle Towing Another Motor Vehicle)</u>).

**04 (Truck Pulling Trailer [s])** is used for single-unit trucks pulling a trailer.

**05 (Truck Tractor [Bobtail])** is a motor vehicle consisting of a single motorized transport device designed primarily for pulling semi-trailers (e.g., cab only). These vehicles are sometimes referred to as a "bobtail." This also includes truck tractors towing other truck tractors in a saddlemount towing position, or towing other vehicles where the towed vehicle has at least two wheels on the ground. (See <u>Cargo Body Type</u> attribute <u>12</u> (Vehicle Towing Another Motor Vehicle)).

**06 (Truck Tractor/Semi-Trailer)** is used for truck tractors with one trailer. This attribute should not be used for single-unit trucks pulling a trailer.

**07 (Truck Tractor/Double)** is used for tractor pulling two trailers.

**08 (Truck Tractor/Triple)** is used for tractor pulling three trailers.

**19 (Truck More Than 10,000 lbs., Cannot Classify)** is used when you know the vehicle meets the definition of a medium/heavy truck by GVWR/GCWR, but the above attributes **do not apply**. An example is a vehicle with one trailer, but it is unknown whether it is a tractor-trailer or a single-unit truck pulling a trailer. Other examples would include **motor homes**, construction **or farm equipment** such as a bulldozer, crane, backhoe, **combine**, farm tractor, etc.

**20 (Bus/Large Van [seats for 9-15 people, including driver])** is used for smaller van-based buses (less than 16 seats, including driver). Examples include commuter vans and van-based school buses. *This attribute would include a limousine with seating capacity in this range.* 

**21 (Bus [seats for more than 15 occupants, including driver]).** A van-based bus qualifies for this attribute if it is configured to include enough seats. A CDL is required for the driver of this bus. *This attribute would include a limousine with seating capacity in this range.* 

**99 (Unknown)** is used if the investigating officer indicates that the vehicle configuration is unknown or when the body type of the vehicle is unknown. For example, an unidentified hit-and-run vehicle would be coded as **99 (Unknown)**.

Check	IF	THEN
(4N1P)	VEHICLE CONFIGURATION does not	MOTOR CARRIER IDENTIFICATION NUMBER must not
	equal 00,	equal 00-000000000.
(4N2P)	MOTOR CARRIER IDENTIFICATION	VEHICLE CONFIGURATION must equal 00.
	NUMBER equals 00-000000000,	
(AB1P)	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE must NOT equal 22.
(ADOP)	VEHICLE CONFIGURATION equals 04, 06-	VEHICLE TRAILING must not equal 0.
	08,	
(AEOP)	VEHICLE CONFIGURATION equals 05 and	VEHICLE TRAILING must equal 0.
	CARGO BODY TYPE does not equal 12,	
(AE1P)	VEHICLE CONFIGURATION equals 05-08,	BODY TYPE must equal 66.
(AF1P)	VEHICLE CONFIGURATION equals 20, 21,	CARGO BODY TYPE must equal 22.

Check	IF	THEN
(AF2P)	VEHICLE CONFIGURATION equals 20, 21,	BODY TYPE must equal <b>12, 16,</b> 20, 21, 50-52, 55, 58, 59.
(AHOP)	VEHICLE CONFIGURATION does not equal 00, 99,	BODY TYPE should equal <b>12</b> , 15, 16, 21, 28, <b>34</b> , 40, 41, 45, 48-52, 55, <b>58-66</b> , 67, 71, 72, 78, 92, 93, or HM2 must equal 2.
(D280)	VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
(D450)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.
(V46P)	VEHICLE CONFIGURATION equals 21,	BODY TYPE must equal 21, 50-52, 55, 58, 59.
(V470)	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE should be 01-05, 07, 12, 96-98.
(V47P)	VEHICLE CONFIGURATION equals 21,	CARGO BODY TYPE must equal 22.
(V502)	GVWR/GCWR equals 0, and HM1 equals 1,	VEHICLE CONFIGURATION and CARGO BODY TYPE must equal 00.
(V503)	GVWR/GCWR equals 1,	HM2 should equal 2, or VEHICLE CONFIGURATION should equal 20.
(V50P)	BODY TYPE equals 61, 62, 67, 71, and VEHICLE CONFIGURATION does not equal 04,	GVWR/GCWR must equal 2, 9. (See <u>GVWR/GCWR</u> <u>Remarks</u> on how to use the VIN to determine GVWR.)
(V531)	BUS USE equals 01, 04-07, 98,	VEHICLE CONFIGURATION should equal 20, 21, and CARGO BODY TYPE should equal 22.
(V532)	VEHICLE CONFIGURATION equals 01, 02, 04-08, 19, 21,	GVWR/GCWR should not equal 0 or 1.
(V56P)	VEHICLE CONFIGURATION equals 10,	BODY TYPE must equal 01-22, 28-49.
(V57P)	VEHICLE CONFIGURATION equals 05,	CARGO BODY TYPE must equal 12, 96, and BODY TYPE must equal 66.
(V58P)	VEHICLE CONFIGURATION equals 04,	BODY TYPE must not equal 66.
(V59P)	VEHICLE CONFIGURATION equals 06,	BODY TYPE must equal 66, and VEHICLE TRAILING must equal 1.
(V60P)	VEHICLE CONFIGURATION equals 07,	BODY TYPE must equal 66, and VEHICLE TRAILING must equal 2.
(V61P)	VEHICLE CONFIGURATION equals 08,	BODY TYPE must equal 66, and VEHICLE TRAILING must equal 3.
(V640)	VEHICLE CONFIGURATION does not equal 00, 99,	BODY TYPE should not equal 28, <b>34</b> , 42, 45, 48, 49.
(V65P)	GVWR/GCWR equals 2, 3,	VEHICLE CONFIGURATION must not equal 00 and CARGO BODY TYPE must not equal 00.
(V790)	BODY TYPE equals 20,	VEHICLE CONFIGURATION should equal 00, and CARGO BODY TYPE should equal 00.
(V800)	BODY TYPE equals 21, 22, 28, 29,	VEHICLE CONFIGURATION should equal 00, 04, 10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.
(V810)	BODY TYPE equals 67, and VEHICLE TRAILING equals 1-4,	VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
(V840)	BODY TYPE equals 50-59,	VEHICLE CONFIGURATION should equal 21, and CARGO BODY TYPE should equal 22.

Check	IF	THEN
(V850)	BODY TYPE equals 60,	VEHICLE CONFIGURATION should equal 01, 03, 04, and CARGO BODY TYPE should equal 01.
(V860)	HIT-AND-RUN equals 0, and BODY TYPE equals 61-64,	VEHICLE CONFIGURATION should equal 01, 02, 04, and CARGO BODY TYPE should equal 01-10, 12, 96- 98.
(V870)	BODY TYPE equals 65,	VEHICLE CONFIGURATION should equal <b>19</b> , and CARGO BODY TYPE should equal <b>97</b> .
(V880)	HIT-AND-RUN equals 0, and BODY TYPE equals 66,	VEHICLE CONFIGURATION should equal 05-08, 19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
(V890)	BODY TYPE equals 71, 72,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 01-04, 08, 10, 96-98.
(V900)	BODY TYPE equals 73,	VEHICLE CONFIGURATION should equal <b>99</b> , and CARGO BODY TYPE should equal <b>99</b> .
(V910)	BODY TYPE equals 78,	VEHICLE CONFIGURATION should equal 19, and CARGO BODY TYPE should equal 98.
(V915)	BODY TYPE equals 67, and VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION should equal 01, and CARGO BODY TYPE should equal 97.
(V920)	BODY TYPE equals 79,	VEHICLE CONFIGURATION should equal 99, and CARGO BODY TYPE should equal 99.
(V930)	VEHICLE CONFIGURATION equals 00, or CARGO BODY TYPE equals 00,	BODY TYPE should not equal 50-64, 66-72, 78, 79.
(V940)	HM1 equals 2,	VEHICLE CONFIGURATION should not equal 00, 99 and CARGO BODY TYPE should not equal 00, 99.
(V981)	VEHICLE CONFIGURATION equals 00,	MOTOR CARRIER IDENTIFICATION NUMBER should equal 00-000000000.
(V982)	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000,	VEHICLE CONFIGURATION should not equal 00.
(V985)	VEHICLE TRAILING equals 5,	VEHICLE CONFIGURATION should not equal 00, 10, 19-21.
(V991)	VEHICLE TRAILING equals 0,	VEHICLE CONFIGURATION must not equal 04, 06-08.
(V992)	VEHICLE TRAILING equals 1,	VEHICLE CONFIGURATION must not equal 01, 02, 05, 07 or 08.
(V993)	VEHICLE TRAILING equals 2,	VEHICLE CONFIGURATION must not equal 01, 02, 05, 06 or 08.
(V994)	VEHICLE TRAILING equals 3,	VEHICLE CONFIGURATION must not equal 01, 02, 05-07.
(V995)	VEHICLE TRAILING equals 4,	VEHICLE CONFIGURATION must not equal 01, 02, 05-08.
(V997)	VEHICLE TRAILING equals 6,	VEHICLE CONFIGURATION must not equal 04, 06-08.
(V998)	VEHICLE TRAILING equals 9,	VEHICLE CONFIGURATION must not equal 04-07 or 08.
(VA70)	GVWR/GCWR equals 1, and HM2 equals 2,	VEHICLE CONFIGURATION must equal 10.
(VH75)	UNIT TYPE equals 4,	VEHICLE CONFIGURATION should not equal 05, 20, 21, 10.

# V20 - Cargo Body Type

#### FORMAT: 2 numeric SAS NAME: Vehicle.CARGO\_BT, Parkwork.PCARGTYP ELEMENT VALUES:

Codes	Attributes
00	Not Applicable (N/A)
01	Van/Enclosed Box
02	Cargo Tank
03	<u>Flatbed</u>
04	<u>Dump</u>
05	Concrete Mixer
06	Auto Transporter
07	Garbage/Refuse
08	Grain/Chips/Gravel
09	<u>Pole-Trailer</u>
10	Log
11	Intermodal Container Chassis
12	Vehicle Towing Another Motor Vehicle
22	Bus
96	No Cargo Body Type
97	<u>Other</u>
98	Unknown Cargo Body Type
99	<u>Unknown</u>

Definition: This element identifies the primary cargo carrying capability of this vehicle when applicable.

**Remarks:** This information should be available on the *Police Crash Report* or Truck and Bus Supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA).

You should expect to find cargo body types for the following qualifying vehicles:

- 1. Light trucks pulling a trailer with gross combination weight rating (GCWR) greater than 10,000 lbs.
- 2. Medium/Heavy Trucks: vehicles with GVWR greater than 10,000 lbs.
- 3. Vehicles with 9 or more seats (including the driver).
- 4. Light Trucks, Vans and Passenger Vehicles displaying a hazardous materials placard.

**00 (Not Applicable [N/A])** is used for automobiles, motorcycles, passenger vans (with less than 9 seats, including driver) and single-unit small trucks or vans (10,000 lbs. or less GVWR), not displaying hazardous material placard.

# **01** (Van/Enclosed Box) is a single-unit truck, truck/trailer, or tractor/semi-trailer having an enclosed body integral to the frame of the motor vehicle (e.g. enclosed trailers, enclosed cargo vans, and ambulances).

**03 (Flatbed)** is used when the available information refers to a cargo body without sides or roof, with or without readily removable stakes which may be tied together with chains/slats or panels. This includes "stake trucks."

**04 (Dump)** is used when the available information refers to a cargo body designed to be tilted to discharge its load by gravity.

**06 (Auto Transporter)** is used when the available information refers to a cargo body capable of transporting multiple, fully assembled automobiles on an "auto transporter" trailer. Do not use this code for flatbeds transporting vehicles (e.g., flatbed tow truck, or flatbed semi-trailer carrying wrecked/salvaged automobiles).

**07 (Garbage/Refuse)** is used when the available information refers to a cargo body that is specifically designed to collect and transport garbage and refuse. This includes both conventional rear-loading and over-the-top bucket loading garbage trucks. Also included are recycle trucks and roll-off style garbage trucks.

**08 (Grain/Chips/Gravel)** is used when the available information refers to trucks that discharge their loads by gravity from the bottom (i.e., belly dump).

**09** (**Pole-Trailer**) is used when the available information refers to a cargo body type that consists of a trailer designed to be attached to a towing vehicle by a reach or pole or by being boomed and secured to the towing vehicle. These are ordinarily used to carry property of a long or irregular shape, such as telephone poles. The pole trailer extends or retracts to accommodate varying lengths of cargo.

**10 (Log)** is used when the available information refers to a cargo body type with a fixed middle beam and side support posts specifically designed for carrying logs. This includes single-unit log trucks.

**09 (Pole-Trailer)** and **10 (Log)** may be listed on a *Police Crash Report* as "Pole/Log". If the trailer can telescope to carry different log lengths, then it should be considered a **09 (Pole-Trailer)**.

**11 (Intermodal Container Chassis)** is used when the available information refers to a cargo body type used for a trailer specifically designed to have a rail or ship container mounted directly on the chassis. These should not be confused with van/enclosed box cargo body types. Intermodal containers may also be mounted on a flatbed trailer, in which case <u>03 (Flatbed)</u> is the cargo body type.

**12 (Vehicle Towing Another Motor Vehicle)** is used when the available information refers to vehicles that have no cargo carrying capability but are in the act of towing another motor vehicle where the towed vehicle has at least two wheels on the ground. These are often called "drive-away, tow-aways" and will be applicable to tow trucks and specially rigged truck tractors. This includes "saddlemount" configurations. Does not apply to vehicles "towed" by being loaded on a flatbed or auto transporter.

**22 (Bus)** is a motor vehicle with seating for transporting nine or more persons, including the driver. *This attribute would include a limousine with sufficient seating capacity to qualify as a bus.* 

**96 (No Cargo Body Type)** is used for any medium heavy truck with no cargo carrying capability (bobtail); a truck chassis with a cab only (stripped chassis); and light trucks and passenger vehicles displaying a hazardous materials placard. Other examples of **96 (No Cargo Body Type)** would be Sign Trucks, Fire Trucks, Tow Trucks, *construction or farm equipment*, etc.

**97 (Other)** is used when the cargo body type is other than the body types listed above. This includes 2-axle, 6-tire pickups greater than 10,000 lbs. without a trailer. This does not include a pickup pulling a trailer (truck/trailer). Use the Cargo Body Type of the attached trailer in these situations. This attribute **would also** *include motor homes.* 

**98 (Unknown Cargo Body Type)** is used when the vehicle qualifies for this data element but the cargo body type is not known or when there is not enough information to distinguish one cargo body type from another. An example would be contradictory data on whether the truck is a van/enclosed box or a flatbed.

**99 (Unknown)** is used when the investigating officer indicates it was unknown as to cargo body type or when the body type of the vehicle is unknown. For example, an unidentified hit-and-run vehicle.

**NOTE:** For truck/trailer vehicle configurations where the power unit and trailer have different cargo body types, code the cargo body type of the power unit. For example, a dump truck pulling a flatbed trailer should be coded as <u>04 (Dump)</u>.

For truck/trailer vehicle configurations where the power unit's Cargo Body Type would be coded <u>96 (No Cargo</u> <u>Body Type</u>) or <u>97 (Other</u>), code the cargo body of the trailer. For example: a dual-rear-wheel pickup truck pulling a flatbed trailer should be coded as <u>03 (Flatbed</u>).

Check	IF	THEN
(AB1P)	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE must NOT equal 22.
(AEOP)	VEHICLE CONFIGURATION equals 05, and	VEHICLE TRAILING must equal 0.
	CARGO BODY TYPE does not equal 12,	
(AF1P)	VEHICLE CONFIGURATION equals 20, 21,	CARGO BODY TYPE must equal 22.
(AK00)	CARGO BODY TYPE equals 22, 96,	JACKKNIFE should equal 0.
(ALOP)	CARGO BODY TYPE equals 22,	BODY TYPE must equal <b>12, 16,</b> 21, 50-52, 55, 58, 59.
(AMOP)	CARGO BODY TYPE does not equal 00, 99,	BODY TYPE should equal <b>12,</b> 15, 16, 21, 28, <b>34</b> , 40, 41, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92, 93, or HM2 must equal 2.
(V470)	VEHICLE CONFIGURATION equals 01,	CARGO BODY TYPE should be 01-05, 07, 12, 96- 98.
(V47P)	VEHICLE CONFIGURATION equals 21,	CARGO BODY TYPE must equal 22.
(V502)	GVWR/GCWR equals 0, and HM1 equals 1,	VEHICLE CONFIGURATION and CARGO BODY TYPE must equal 00.
(V531)	BUS USE equals 01, 04-07, 98,	VEHICLE CONFIGURATION should equal 20, 21, and CARGO BODY TYPE should equal 22.
(V57P)	VEHICLE CONFIGURATION equals 05,	CARGO BODY TYPE must equal 12, 96, and BODY TYPE must equal 66.
(V62P)	CARGO BODY TYPE equals 01-12, 97-98, and VEHICLE IDENTIFICATION NUMBER does not equal Not Reported or Unknown,	GVWR/GCWR must equal 2, 3.
(V65P)	GVWR/GCWR equals 2, 3,	VEHICLE CONFIGURATION must not equal 00, and CARGO BODY TYPE must not equal 00.
(V660)	CARGO BODY TYPE does not equal 00, 99,	BODY TYPE should not equal 28, <b>34</b> , 42, 45, 48, 49.
(V68P)	CARGO BODY TYPE equals 12,	VEHICLE TRAILING must equal 5.
(V790)	BODY TYPE equals 20,	VEHICLE CONFIGURATION should equal 00, and CARGO BODY TYPE should equal 00.
(V800)	BODY TYPE equals 21, 22, 28, 29,	VEHICLE CONFIGURATION should equal 00, 04, 10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.
(V810)	BODY TYPE equals 67, and VEHICLE TRAILING equals 1-4,	VEHICLE CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.

Check	IF	THEN
(V840)	BODY TYPE equals 50-59,	VEHICLE CONFIGURATION should equal 21, and
		CARGO BODY TYPE should equal 22.
(V850)	BODY TYPE equals 60,	VEHICLE CONFIGURATION should equal 01, 03,
		04, and CARGO BODY TYPE should equal 01.
(V860)	HIT-AND-RUN equals 0, and BODY TYPE	VEHICLE CONFIGURATION should equal 01, 02,
	equals 61-64,	04, and CARGO BODY TYPE should equal 01-10,
		12, 96-98.
(V870)	BODY TYPE equals 65,	VEHICLE CONFIGURATION should equal 19, and
		CARGO BODY TYPE should equal <b>97</b> .
(V880)	HIT-AND-RUN equals 0, and BODY TYPE	VEHICLE CONFIGURATION should equal 05-08,
	equals 66,	19, and CARGO BODY TYPE should equal 01-04,
		06-12, 96-98.
(V890)	BODY TYPE equals 71, 72,	VEHICLE CONFIGURATION should equal 19, and
		CARGO BODY TYPE should equal 01-04, 08, 10,
		96-98.
(V900)	BODY TYPE equals 73,	VEHICLE CONFIGURATION should equal 99, and
		CARGO BODY TYPE should equal <b>99</b> .
(V910)	BODY TYPE equals 78,	VEHICLE CONFIGURATION should equal 19, and
		CARGO BODY TYPE should equal 98.
(V915)	BODY TYPE equals 67, and VEHICLE TRAILING	VEHICLE CONFIGURATION should equal 01, and
	equals 0,	CARGO BODY TYPE should equal 97.
(V920)	BODY TYPE equals 79,	VEHICLE CONFIGURATION should equal 99, and
		CARGO BODY TYPE should equal 99.
(V930)	VEHICLE CONFIGURATION equals 00, or	BODY TYPE should not equal 50-64, 66-72, 78,
	CARGO BODY TYPE equals 00,	79.
(V940)	HM1 equals 2,	VEHICLE CONFIGURATION should not equal 00,
		99 and CARGO BODY TYPE should not equal 00,
		99.
(VH80)	UNIT TYPE equals 4,	CARGO BODY TYPE should not equal 06, 07, 11,
		12, 22.

### V21 - Hazardous Materials Involvement / Placard

**FORMAT:** 1 set, 1 numeric; 1 set, 1 numeric; 1 set, 4 numeric; 1 set, 2 numeric; 1 set, 1 numeric **SAS NAME:** Vehicle.HAZ\_INV, Vehicle.HAZ\_PLAC, Vehicle.HAZ\_ID, Vehicle.HAZ\_CNO, Vehicle.HAZ\_REL, Parkwork.PHAZ\_INV, Parkwork.PHAZPLAC, Parkwork.PHAZ\_ID, Parkwork.PHAZ\_CNO,

Parkwork.PHAZ\_REL

#### **ELEMENT VALUES:**

#### **HM1: Hazardous Materials Involvement**

Codes	Attributes
1	No
2	Yes

#### HM2: Placard (Did This Motor Vehicle Display a Hazardous Material (HM) Placard?)

Codes	Attributes
0	Not Applicable
1	No
2	Yes
8	Not Reported

#### HM3: 4-digit Hazardous Material Identification Number

Codes	Attributes
0000	Not Applicable
	Actual 4-digit number
8888	Not Reported

#### HM4: 2-digit Hazardous Material Class Number

Codes	Attributes
00	Not Applicable
01-09	Actual 1-digit number (with leading zero)
88	Not Reported

#### HM5: Release of Hazardous Material from the Cargo Compartment

Codes	Attributes
0	Not Applicable
1	No
2	Yes
8	Not Reported

**Definition:** This element identifies the presence of hazardous cargo for this vehicle and records information about the hazardous cargo when present.

**Remarks:** This element must be coded for all vehicles.

Placard and Hazardous Materials Released information should be available on your **Police Crash Report** or Truck and Bus Supplement with other elements required by the Federal Motor Carrier Safety Administration (FMCSA) for commercial vehicles.

Hazardous Material is a substance or material which has been designated by the U.S. Department of Transportation, or other authorizing entity, as capable of posing an unreasonable risk to health, safety and property when transported in commerce. Any motor vehicle transporting hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity is required to display a hazardous materials placard.

- **Exclusions:**
- Fuel or oil carried by the vehicle for its own use.

**Hazardous Materials Placard:** is a sign required to be affixed to any motor vehicle transporting hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity. This placard identifies the 1-digit hazard class division number; 4-digit hazardous material identification number or name of the hazardous material being transported.

Vehicle transporting hazardous materials should have a diamond-shaped placard affixed indicating the material carried. (See Figure 12 below.)

#### **HM1– Hazardous Materials Involvement**

Definition: This element indicates whether the vehicle was carrying hazardous materials - involvement.

**1 (No)** is used when there is no indication of hazardous materials for this vehicle in the case materials. For cases involving a hit and run, the default is "1 -No" when no details are reported regarding the hit and run vehicle.

If HM1 is **1** (No), HM2-HM5 will be coded Not Applicable.

**2 (Yes)** is used when hazardous materials were indicated for this vehicle in the case materials. Examples for code **2 (Yes)**:

- 1. The officer records any information about a placard, whether or not he indicates that the vehicle was carrying hazardous materials.
- 2. The officer does not record any information about a placard, however, you know that hazardous material was involved.
- 3. Information identifying hazardous material is blank, but you know that hazardous material was released.

#### HM2 – Hazardous Materials Placard

**Definition:** This element indicates the presence of hazardous materials and whether the vehicle displayed a hazardous materials placard.

**0 (Not Applicable)** is used when there is no indication of hazardous materials for this vehicle in the case materials (HM1 equals <u>1 (No)</u>).

1 (No) is used when hazardous materials are involved, but the officer indicates there was no placard.

2 (Yes) is used when hazardous materials are involved, and the vehicle does have a placard.

**8 (Not Reported)** is used when hazardous materials are involved, but the crash report does not record any information about the presence of a placard.

#### HM3 – 4-Digit Hazardous Materials Identification Number

Definition: This element indicates the 4-digit identification number.

**0000 (Not Applicable)** – No indication of hazardous materials for this vehicle in the case materials (HM1 equals <u>1</u> (No)).

Actual 4-digit Number – Record the 4-digit Hazardous Materials Identification Number reported in the case materials.

**8888 (Not Reported)** – Hazardous materials involved, but the 4-digit number was not recorded or this field is not available on your crash report. If you are provided the name of the hazardous material on your report but not the 4-digit number, use this attribute and be sure to record the 1-digit class number if it is provided.

#### HM4 – 2-Digit Hazardous Materials Class Number

Definition: This element indicates the single-digit hazardous material class number for the vehicle.

**00 (Not Applicable)** – No indication of hazardous materials for this vehicle in the case materials (HM1 equals  $\underline{1}$  (No)).

Actual 2-digit Class Number (01-09) – Record the 1-digit Hazardous Materials Class Number recorded on your crash report with a leading zero (e.g., if the 1-digit class number is 5, enter "05"). If you were given a two-digit number with decimal point, record only the first digit with a leading zero (e.g., if the class number is "1.3" you should record "01"). See Figure 12.

**88 (Not Reported)** – Hazardous Materials involved, but the 1-digit number was not recorded or this field is not available in the crash materials.

#### HM5 – Release of Hazardous Materials from Cargo Compartment

**Definition:** This element indicates whether or not any hazardous cargo was released from the cargo tank or compartment.

**0 (Not Applicable)** – No indication of hazardous materials for this vehicle in the case materials (HM1 equals <u>1</u> (No)).

**1 (No)** – Hazardous Materials involved, and the officer indicates there was no release of the material(s) from the cargo compartment.

**2 (Yes)** – Hazardous Materials involved, and the officer indicates there was a release of the material(s) from the cargo compartment.

**8 (Not Reported)** – Hazardous Materials involved, and you can't determine from the crash materials whether or not hazardous material was released from the cargo compartment.

Do not include fuel or oil carried by the vehicle for its own use which has been released.

#### Guideline for recording multiple hazardous materials:

- If the case has a hazmat spill and you know which material was released always record that material.
- If you were to get two hazardous materials reported of different classes (1-9), report the material from DOT Hazmat Table 1 and its associated 4-digit UN number over materials in Table 2. Table 1 includes Hazard Class or Divisions: 1.1, 1.2. 1.3, 2.3, 4.3, 5.2, 6.1, 7.
- If you have two materials of the same class (e.g. both class 8 Corrosive) report the material in greatest quantity if you have the information, if not report the material that is listed first on the report.

#### Examples of Hazardous Materials are:

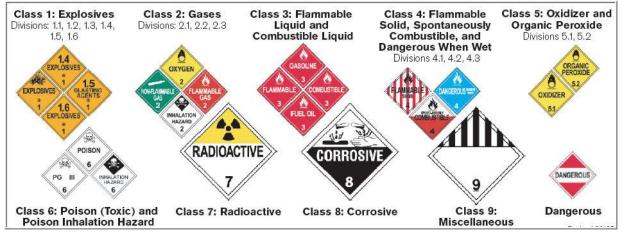
#### Any transport vehicle containing any quantity of the following classes of material must be placarded:

- Explosives (1.1, 1.2, 1.3)
- Poison Gas
- Materials Dangerous When Wet
- Poison
- Radioactive

# Any transport vehicle containing over 1,001 lbs. or more (gross weight) of the following classes of materials must be placarded:

- Explosives (1.4, 1.5, 1.6)
- Flammable and Non Flammable Gas
- Flammable/Combustible Liquid (gasoline, fuel oil)
- Flammable Solid/Spontaneously Combustible
- Oxidizer/Organic Peroxide
- Poison
- Radioactive
- Corrosive
- Other (A material which presents a hazard during transportation which is not included in any other hazard class)

#### Figure 12: Nine Classes of Hazardous Materials



Check	IF	THEN
(4N4P)	MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000,	BODY TYPE must equal <b>12, 16,</b> 21, 28, <b>34</b> , 40, 45, 48-52, 55, <b>58-66</b> , 67, 71, 72, 78, 79, 92, 93, 99, or HM2 must equal 2.
(4N5P)	BODY TYPE does not equal <b>12, 16,</b> 21, 28, <b>34</b> , 40, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92, 93, or HM2 does not equal 2,	MOTOR CARRIER IDENTIFICATION NUMBER must equal 00-000000000, 99-9999999999.
(4S1P)	BODY TYPE equals <b>80-89</b> , <b>96</b> , and HM1 does not equal 1,	COMPLIANCE WITH CDL ENDORSEMENTS MUST equal 0.
(9K0P)	HM2 equals 2,	REGISTRATION STATE must not equal 00.
(AHOP)	VEHICLE CONFIGURATION does not equal 00, 99,	BODY TYPE should equal <b>12</b> , 15, 16, 21, 28, <b>34</b> , 40, 41, 45, 48-52, 55, <b>58-66</b> , 67, 71, 72, 78, 92, 93, or HM2 must equal 2.
(AMOP)	CARGO BODY TYPE does not equal 00, 99,	BODY TYPE should equal <b>12,</b> 15, 16, 21, 28, <b>34</b> , 40, 41, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92, 93, or HM2 must equal 2.
(D270)	BODY TYPE equals 50-52, 55, 63, 66, 72, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
(D280)	VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
(D300)	HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00 or 99.
(D310)	HM2 equals 2,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 1-3.
(D440)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	BODY TYPE should not equal 50-52, 55, 63, 66, 72, and HM2 should not equal 2.
(D450)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.
(D580)	VIOLATIONS CHARGED equals 85,	HM1 should equal 2.
(V070)	HM1 equals 2,	REGISTRATION STATE should not equal 92.
(V090)	HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 06, 99.
(V502)	GVWR/GCWR equals 0, and HM1 equals 1,	VEHICLE CONFIGURATION and CARGO BODY TYPE must equal 00.
(V503)	GVWR/GCWR equals 1,	HM2 should equal 2, or VEHICLE CONFIGURATION should equal 20.
(V540)	BODY TYPE equals 42, 73, and HM1 equals 1,	GVWR/GCWR should equal 0, 9.
(V570)	HM1 equals 2,	REGISTERED VEHICLE OWNER should not equal 0, 1, 2, 4.
(V580)	HM1 equals 2,	REGISTERED VEHICLE OWNER should equal 3
(V940)	HM1 equals 2,	VEHICLE CONFIGURATION should not equal 00, 99 and CARGO BODY TYPE should not equal 00, 99.
(V980)	BODY TYPE equals 50-52, 55, <b>58-67,</b> 71, 72, 78, 93, or HM1 equals 2,	MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.

Check	IF	THEN
(VA00)	HM1 equals 1,	HM2, HM5 must equal 0, HM4 must equal 00 and HM3 must equal 000.
(VA10)	HM1 equals 2,	HM2, HM5 must not equal 0, HM4 must not equal 00 and HM3 must not equal 0000.
(VA20)	any of HM2, HM5 equals 0, or HM4 equals 00 or HM3 equals 0000,	HM1 must equal 1.
(VA30)	any of HM2, HM5 does not equal 0, or HM4 does not equal 00, or HM3 does not equal 0000,	HM1 must equal 2.
(VA40)	HM5 equals 2,	HM3 should not equal 8888, or HM4 should not equal 88.
(VA50)	HM3 equals 8888, and HM4 equals 88,	HM5 should not equal 2.
(VA60)	HM3 does not equal 0000, 8888, or HM4 does not equal 00, 88,	HM2 should equal 2.
(VA70)	GVWR/GCWR equals 1, and HM2 equals 2,	VEHICLE CONFIGURATION must equal 10.
(VA80)	HM3 – 4-Digit Hazardous Materials Identification Number must contain 4 digits.	

#### **Consistency Checks (FARS Only):**

Check	IF	THEN
(V100)	HM1 equals 2, and RELATED FACTORS-	COMMERCIAL MOTOR VEHICLE LICENSE
	DRIVER LEVEL does not equal 19,	STATUS should not equal 01, 02, 05.

### V22 - Bus Use

#### FORMAT: 2 numeric SAS NAME: Vehicle.Bus\_Use, Parkwork.PBus\_Use ELEMENT VALUES:

Codes	Attributes
00	Not a Bus
01	<u>School</u>
04	Intercity
05	<u>Charter/Tour</u>
06	Transit/ Commuter
07	<u>Shuttle</u>
08	Modified for Personal/Private Use
98	Not Reported
99	Unknown

**Definition:** This data element describes the common type of bus service this vehicle was being used for at the time of the crash or the primary use for the bus if not in service at the time of the crash.

**Remarks:** Buses are any motor vehicle with seats to transport nine (9) or more people, including the driver's seat. This element does not include vans that are owned and operated for personal use.

**00 (Not a Bus)** This should be used for vehicles with less than nine (9) seats (including the driver) and personaluse vans with nine (9) or more seats (including the driver) and also for vehicles that do not have a bus body type **AND** are not being used as a bus in the crash.

**01 (School)** is used for vehicles that meet the definition of a bus and are being used by a public or private school or district or contracted carrier operation on behalf of the entity, providing transport for school children (up to the 12th grade) to/from school (public or private) or any other school function or activity.

In most cases, the decision to use this code will be based on a reference to the vehicle as a school bus in the case materials. In this situation, assume the criteria are met unless it is otherwise stated in the case materials.

In addition, School includes buses that are not externally identifiable as a school/pupil transport vehicle. (For example, a transit bus, at the time of the crash, used exclusively [no other passengers except students] to transport students to/from the school or school-related activity.)

**04 (Intercity)** is used when a company provides for-hire, long-distance passenger transportation between cities over fixed routes with regular schedules (for example; Greyhound bus service between major cities).

**05 (Charter/Tour)** is used when a company provides transportation on a for-hire basis and demand-response basis, usually round-trip service for a tour group or outing.

**06 (Transit/Commuter)** is used for a government entity or private company which provides passenger transportation over fixed, scheduled routes, within primarily urban geographical areas. (For example; inner-city mass transit bus/van service.)

**07 (Shuttle)** is used when private companies provide transportation services for their own employees, non-governmental organizations (such as churches and non-profit groups), and non-educational units of government (such as departments of corrections). (Examples include buses/nine-passenger vans transporting people from airports, hotels, rental car companies, and business facility to facility.)

**08 (Modified for Personal/Private Use)** is used when a bus body type has been modified for personal or private use. For example, a bus with seats removed and exterior altered to allow for personal/private hauling of cargo (instead of passengers). Also includes musical groups in cross-country bus with interior remodeled with home-like conveniences.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used if the information about this vehicle is reported as Unknown.

**Note:** if the investigating officer indicates a bus was involved but not how it was being used, use **98 (Not Reported)**.

Check	IF	THEN
(AH1P)	BUS USE equals 08,	BODY TYPE must equal 21, 22, 28, 29, 50-59.
(AH2P)	BUS USE equals 06,	BODY TYPE should equal 21 or 52 or 55.
(V051)	BUS USE equals 01,	BODY TYPE should equal 21 or 50 or 55.
(V052)	BUS USE equals 04,	BODY TYPE should equal 51.
(V053)	BUS USE equals 05,	BODY TYPE should equal 12, 16, 21, 51, 55 or 58.
(V054)	BUS USE equals 07,	BODY TYPE should equal 21, 22, 29, 50-59.
(V055)	BUS USE equals 00,	BODY TYPE must not equal 50-59.
(V056)	SPECIAL USE equals 02,	BUS USE should equal 01.
(V057)	SPECIAL USE equals 03,	BUS USE should equal 04-07, 99.
(V059)	BUS USE equals 01,	SPECIAL USE must equal 02.
(V061)	BUS USE equals 04-07,	SPECIAL USE must equal 03.
(V330)	SCHOOL BUS RELATED equals 1,	BODY TYPE of at least one of the involved vehicles
		should equal 50 (School Bus), or SPECIAL USE for at
		least one involved vehicle should equal 02 - Vehicle
		Used as School Bus, or BUS USE for at least one
		vehicle should equal 01.
(V531)	BUS USE equals 01, 04-07, 98,	VEHICLE CONFIGURATION should equal 20, 21, and
		CARGO BODY TYPE should equal 22.

# V23 - Special Use

#### FORMAT: 2 numeric SAS NAME: Vehicle.Spec\_Use, Person.Spec\_Use, Parkwork.PSP\_USE ELEMENT VALUES:

Codes	Attributes
00	No Special Use
01	<u>Taxi</u>
02	Vehicle Used for School Transport
03	Vehicle Used as Other Bus
04	Military
05	Police
06	Ambulance
07	Fire Truck
08	Non-Transport Emergency Services Vehicle
13	Incident Response
98	Not Reported
99	<u>Unknown</u>

**Definition:** This data element identifies if a special use is applicable to this vehicle at the time it was involved in the crash.

**Remarks:** This data element identifies any special use associated with this motor vehicle at the time of the crash. The special function served by this motor vehicle should be coded regardless of whether the function is marked on the vehicle.

**00 (No Special Use)** is used when the available information does not indicate or imply that this vehicle was applicable to any of the special uses listed above.

**01 (Taxi)** is used when this vehicle was being used during this trip (at the time of the crash) on a "fee-for-hire" basis to transport persons. Most of these vehicles will be marked and formally registered as taxis; however, vehicles which are used as taxis, even though they are not registered (e.g., Gypsy Cabs), are included here. Passengers do not have to be present at the time of the crash. Taxis and drivers which are off-duty at the time of the crash are coded as <u>00 (No Special Use)</u>. If it is unknown whether or not the taxi is on-duty, code as **01 (Taxi)**. This attribute also applies for limousines on a "fee-for-hire" basis.

**02 (Vehicle Used for School Transport)** is used for any motor vehicle that satisfies all the following criteria:

- operated, leased, owned, or contracted by a public or private school-type institution;
- where the institution's students may range from pre-school through high school;
- whose occupants, if any, are associated with the institution; and,
- at the time of the crash the vehicle is being used for transportation to and from a school or on a schoolsponsored activity or trip

**Note:** This attribute also includes vehicles which are not externally identifiable as a school/pupil transport vehicle, but do meet all of the other criteria above. (For example, a transit bus, at the time of the crash, used exclusively [no other passengers except students] to transport students to/from the school or school-related activity).

In most cases, the decision to use this attribute will be based on a reference to the vehicle as a school bus in the available information. In this situation, assume the criteria are met unless it is otherwise stated in the available information.

**03 (Vehicle Used as Other Bus)** is used when a motor vehicle is designed for transporting nine or more persons including the driver and does not satisfy the above "school bus" criteria. For example, <u>BODY TYPE code "School Bus"</u> transporting senior citizens to an activity.

**04 (Military)** is used for any vehicle which is owned by any of the Armed Forces regardless of body type. This attribute includes:

- military police vehicles;
- military ambulances;
- military hearses; and
- military fire vehicles.

**05 (Police)** is a vehicle equipped with police emergency devices (lights and siren) that is owned or subsidized by any local, county, State or Federal government entity. The police vehicle is presumed to be in special use at all times, although not necessarily in "emergency use." Vehicles not owned by a government entity that are used by law enforcement officers (e.g., undercover) are excluded.

**06 (Ambulance)** is used for any readily identifiable (lights or markings) vehicles designed to transport sick or injured persons. The ambulance is presumed to be in special use at all times, although not necessarily in "emergency use."

**07 (Fire Truck)** is used for any readily identifiable (lights or markings) vehicles specially designed and equipped to respond to fire, hazmat, medical, and extrication incidents. This attribute includes medium and heavy vehicles such as engines, pumpers, ladder, platform aerial apparatus, heavy rescue vehicles, water tenders or tankers, brush or wilderness firefighting vehicles, etc.

**08 (Non-Transport Emergency Services Vehicle)** is used for any readily identified (lights and markings) vehicles that do not meet the criteria for <u>06 (Ambulance)</u>, <u>07 (Fire Truck)</u> or <u>13 (Incident Response)</u> and are specifically designed and equipped to respond to fire, hazmat, medical and extrication incidents. This attribute includes light vehicles such as sedans, van, SUVs, pickups, trucks, motorcycles, etc. This attribute includes vehicles that have been dispatched to an incident or have initiated operation in a non-emergency mode and are not transporting passengers, such as patients or suspects. An example of a Non-Transport Emergency Services vehicle is a fire chief's unit, commonly an SUV.

**13 (Incident Response)** is used for Government vehicles typically equipped with a variety of tools, emergency medical equipment, traffic cones and control signs, absorbent material (for responding to spills), emergency and work lighting. These multi-purpose response units are intended to assist law enforcement, fire and rescue personnel with trafficway incident management.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

- Code **98 (Not Reported)** in these two situations:
  - 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).

 A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used if the investigating officer reported special use as unknown.

Check	IF	THEN
(1D0P)	SPECIAL USE equals 01,	BODY TYPE must equal 02-09, 12, 14-21, 28, 29, 49, 99.
(1D0Q)	SPECIAL USE equals 00-03,	EMERGENCY MOTOR VEHICLE USE must equal 0.
(2D0P)	SPECIAL USE equals 02,	BODY TYPE should equal 15, 16, 19-21, 28, 29, 45, 48, 50-52, 55, 58, 59.
(3A0P)	SPECIAL USE equals 07,	BODY TYPE must equal 60-64, 66, 67, 71, 72, 78, 79, 99.
(3D0P)	SPECIAL USE for any vehicle equals 02,	SCHOOL BUS RELATED must equal 1.
(4A0P)	BODY TYPE equals <b>80-93</b> , <b>95, 96</b> ,	SPECIAL USE must not equal 01-03, 06, 07.
(4D0P)	SPECIAL USE equals 03,	BODY TYPE must equal 21, 28, 29, 50-52, 55, 58, 59.
(5D0P)	SPECIAL USE equals 04,	BODY TYPE must equal 01-12, 15-17, 19-22, <b>28-</b> <b>34</b> , 39-41, 45, 48-50, 55, 58, 59, 60-64, 66, 67, 71, 72, 78, 79, 90, 99.
(5M0G)	SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL should equal 86 or 92.
(6D0P)	SPECIAL USE equals 05,	BODY TYPE must equal 01-12, 14-17, 19-22, <b>28-</b> <b>34</b> , 39-41, 45, 48, 49, 55, 58-64, 66, 67, 71, 72, 78-82, 88-91, 94, 95, <b>96,</b> 97-99.
(7D0P)	SPECIAL USE equals 06,	BODY TYPE must equal 11, 14-17, 19, 21, 22, 28, 29, 40, 41, 45, 48, 49, 61, 62, 64, 79, 98, 99.
(8D0P)	SPECIAL USE equals 08,	BODY TYPE must not equal 60-64, 66, 67, 71, 72, 78, 79, 99.
(AROP)	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER must not equal 0, 1, 2, 4.
(U050)	UNLIKELY: SPECIAL USE equals 04, 08.	
(U080)	BODY TYPE does not equal 21, 28, 29, 50-59,	UNLIKELY: SPECIAL USE equals 02 or 03.
(U420)	UNLIKELY: SPECIAL USE equals 98.	
(V056)	SPECIAL USE equals 02,	BUS USE should equal 01.
(V057)	SPECIAL USE equals 03,	BUS USE should equal 04-07, 99.
(V058)	EMERGENCY MOTOR VEHICLE USE equals 2- 6,	SPECIAL USE should equal 04-08, 13.
(V059)	BUS USE equals 01,	SPECIAL USE must equal 02.
(V060)	SPECIAL USE equals 04,	REGISTRATION STATE should equal 94.
(V061)	BUS USE equals 04-07,	SPECIAL USE must equal 03.

Check	IF	THEN
(V330)	SCHOOL BUS RELATED equals 1,	BODY TYPE of at least one of the involved vehicles should equal 50 (School Bus), or SPECIAL USE for at least one involved vehicle should equal 02 - Vehicle Used as School Bus, <b>or</b> BUS USE for at least one vehicle should equal 01.
(V560)	SPECIAL USE equals 04,	REGISTERED VEHICLE OWNER should equal 3, and REGISTRATION STATE should equal 94.

### V24 - Emergency Motor Vehicle Use

#### FORMAT: 1 numeric SAS NAME: Vehicle.EMER\_USE, Person.EMER\_USE, Parkwork.PEM\_USE ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
2	Non-Emergency, Non-Transport
3	Non-Emergency Transport
4	Emergency Operation, Emergency Warning Equipment Not in Use
5	Emergency Operation, Emergency Warning Equipment in Use
6	Emergency Operation, Emergency Warning Equipment in Use Unknown
8	Not Reported
9	Unknown

**Definition:** Emergency Motor Vehicle Use indicates operation of any motor vehicle that is legally authorized by a government authority to respond to emergencies with or without the use of emergency warning equipment, such as a police vehicle, fire truck, or ambulance while actually engaged in such response.

**Remarks:** Emergency Use also refers to an official motor vehicle that is usually traveling with emergency signals in use while engaged in an emergency response; typically, red light blinking, siren sounding, etc. Services such as escorting a funeral procession or providing traffic control assistance at a work zone or for a motorcade or parade would not qualify as emergency uses.

If <u>Special Use</u> is <u>04 (Military)</u>, <u>05 (Police)</u>, <u>06 (Ambulance)</u>, <u>07 (Fire Truck)</u>, <u>08 (Non-Transport, Emergency</u> <u>Services Vehicle)</u>, or <u>13 (Incident Response)</u> then refer to the case materials to determine if the vehicle was on an emergency response (i.e., red lights flashing, siren sounding, on route to hospital, etc.) at the time of the crash.

**0 (Not Applicable)** is used when <u>Special Use</u> for this vehicle is coded <u>**00 (No Special Use)**</u>, <u>**01 (Taxi)**</u>, <u>**02 (Vehicle Used as School Transport)**</u>, or <u>**03 (Vehicle Used as Other Bus)**</u>.

**2 (Non-Emergency, Non-Transport)** is used when the authorized emergency vehicle has been dispatched to an incident or has initiated operation in a non-emergency mode and is not transporting passengers, such as patients or suspects. The emergency vehicle operator is not using emergency lighting, audible siren, or emergency vehicle maneuvers.

**3 (Non-Emergency Transport)** is used when the authorized emergency vehicle has been dispatched to an incident or has initiated a transport-related operation in a non-emergency mode. The emergency vehicle operator is not using emergency lighting, audible siren or emergency vehicle maneuvers. Example: transport of a suspect from one location to another or inter-facility transport of a patient in an ambulance to a nursing home.

**4 (Emergency Operation, Emergency Warning Equipment Not in Use)** is used when the authorized emergency vehicle has been dispatched to an incident or has initiated an emergency operation and has no emergency lighting or audible siren in use. The emergency vehicle operator may be using emergency vehicle maneuvers as allowed under state law. Examples: a police car in the last mile approaching a bank robbery; transport of a patient in an ambulance for which lights and sirens are not used per protocol.

**5 (Emergency Operation, Emergency Warning Equipment in Use)** is used when the authorized emergency vehicle has been dispatched to an incident or has initiated an emergency operation and is using an audible siren and/or has illuminated its emergency lighting devices. The emergency vehicle operator is using or is prepared to use emergency vehicle maneuvers as allowed by state law.

**6 (Emergency Operation, Emergency Warning Equipment in Use Unknown)** is used when the authorized emergency vehicle has been dispatched to an incident or has initiated an emergency operation and it cannot be determined if it is using an audible siren and/or has illuminated its emergency lighting devices.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

#### Examples:

- The case materials are not clear as to whether the vehicle was on an emergency response.
- The case materials are not clear as to whether the vehicle is legally authorized by a government authority to respond to emergencies.

9 (Unknown) is used if the investigating officer reported emergency use as unknown.

Check	IF	THEN
(1D0Q)	SPECIAL USE equals 00-03,	EMERGENCY MOTOR VEHICLE USE must equal 0.
(PB44)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	EMERGENCY MOTOR VEHICLE USE should equal
	PEDESTRIAN equals 240,	2-6 for at least one vehicle.
(V058)	EMERGENCY MOTOR VEHICLE USE equals 2-	SPECIAL USE should equal 04-08, 13.
	6,	

# V25 - Travel Speed

#### FORMAT: 3 numeric SAS NAME: Vehicle.TRAV\_SP ELEMENT VALUES:

Codes	Attributes
000	Stopped Motor Vehicle In-Transport
001-151	Reported Speed Up to 151 MPH
997	Greater than 151 MPH
998	Not Reported
999	Unknown

**Definition:** This element records the speed the vehicle was traveling prior to the occurrence of the crash as reported by the investigating officer.

**Remarks:** Code the Travel Speed as indicated by the investigating officer. Do not enter the <u>Speed Limit</u>. Do not use estimates by drivers or witnesses reported in the case materials. Travel Speed should be representative of the vehicle's speed associated with the pre-event movement, prior to any avoidance maneuvers. If the police calculated a speed, please be aware that this may represent the impact speed which is not necessarily the travel speed.

Code the nearest mph for this vehicle as reported on the case materials.

Examples:	
<b>Reported Speed</b>	Code
40.2mph	40
40.5mph	41

If the officer gives a range, code the median speed and, if necessary, round up to the next higher whole number. If the officer gives a minimum speed (e.g., "at least 55 mph" or "in excess of 60 mph", then use that speed (e.g., code as "55" and "60" respectively).

Examples:	
<b>Reported Speed</b>	Code
40-50mph	45
45-50mph	48

**000 (Stopped Motor Vehicle In-Transport)** is used when this vehicle is stopped on the roadway.

#### 998 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 998 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

#### Examples:

- 1. the officer did not mention Travel Speed, or
- 2. did not indicate Travel Speed within a field in the case materials.

999 (Unknown) is used when the officer indicates that Travel Speed is unknown.

Check	IF	THEN
(3B0P)	JACKKNIFE equals 2, 3,	TRAVEL SPEED must not equal 000.
(3B1P)	CRASH TYPE equals 21-23,	TRAVEL SPEED must equal 000 for this vehicle.
(A090)	NUMBER OF VEHICLE FORMS SUBMITTED is	there should be at least one vehicle with
	greater than 001,	TRAVEL SPEED of 001-151, 997-999, or blanks.
(A100)	FIRST HARMFUL EVENT is not equal to 02, 04,	there should be one vehicle with TRAVEL SPEED
	05, 10, 16, 18,	of 001-151, 997-999, or blanks.
(A240)	LAND USE AND FUNCTIONAL SYSTEM (b)	TRAVEL SPEED should not equal 005-040 for any
	equals 01, and RELATION TO JUNCTION (a)	vehicle.
	equals 0,	
(AZAO)	PRE-EVENT MOVEMENT (PRIOR TO	TRAVEL SPEED must equal 000 for this vehicle.
	<b>RECOGNITION OF CRITICAL EVENT) equals 05</b>	
	or 07,	
(VH70)	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, and
		SEQUENCE OF EVENTS must all be left blank.

# V26 - Underride/Override - FARS Only

**FORMAT:** 1 numeric **SAS NAME:** Vehicle.UNDERIDE, Parkwork.PUNDERIDE **ELEMENT VALUES:** 

Codes	Attributes	
0	No Underride or Override Noted	
1	Underriding a Motor Vehicle In-Transport, Underride, Compartment Intrusion	
2	Underriding a Motor Vehicle In-Transport, Underride, No Compartment Intrusion	
3	Underriding a Motor Vehicle In-Transport, Underride, Compartment Intrusion Unknown	
4	Underriding a Motor Vehicle Not In-Transport, Underride, Compartment Intrusion	
5	Underriding a Motor Vehicle Not In-Transport, Underride, No Compartment Intrusion	
6	Underriding a Motor Vehicle Not In-Transport, Underride, Compartment Intrusion Unknown	
7	Overriding a Motor Vehicle In-Transport	
8	Overriding a Motor Vehicle Not In-Transport	
9	Unknown if Underride or Override	

**Definition:** This element indicates whether an underride or override occurred during the crash involving this vehicle.

#### **Remarks:**

**Rationale:** Needed to identify the magnitude of crashes in which an underride or override occurs to support NHTSA rulemaking activities and motor vehicle bumper compatibility research.

For underrides and overrides, it is important to determine the vehicle performing the action. Two vehicles cannot be considered to underride and override simultaneously.

In cases in which two vehicles collide "head-on" and one vehicle ends up under the other, you must determine whether an **Underride** or **Override** has occurred.

An **Underride** refers to a vehicle sliding under another vehicle during a crash. The classic example is an automobile striking the rear end or the side of a tractor-trailer and coming to a stop under the trailer. In this example, the automobile is the underriding vehicle. We distinguish between those underriding vehicles with compartment intrusion versus those with no compartment intrusion.

Compartment intrusion indicates a breach of the passenger compartment of this underriding (striking) vehicle. For example, damage to the windshield or glass area.

No compartment intrusion means that the underridden vehicle (struck vehicle) did not directly enter the passenger compartment of this vehicle (for example, damage to the hood or front bumper). It is possible for an auto to completely underride the trailer without stopping. **Underride is not applicable to motorcycles or snowmobiles.** 

An **Override** refers to a vehicle riding up over another (including a parked vehicle). A vehicle straddling a guardrail, for example, is not coded as an override.

**0 (No Underride or Override Noted)** is used when there is no indication in the case materials that this vehicle was involved in and underride or override as defined above.

#### **Underrides and Vehicles Under Other Vehicles**

Codes "1-3" are used when **this vehicle** underrides a motor vehicle in-transport (includes those in motion outside the trafficway).

Codes "4-6" are used when **this vehicle** underrides a motor vehicle that is Not In-Transport. This includes parked/stopped off roadway motor vehicles, working motor vehicles (e.g., cherry picker, paint-striping truck).

#### **Compartment Intrusion Guidelines:**

To use Codes "1 or 4," the **Police Crash Report** should indicate that the passenger compartment of the underriding (striking) vehicle has been damaged. Sources of this information can be the **Police Crash Report** narrative and/or the vehicle damage scale. If the top of the vehicle is damaged, as noted by the vehicle damage scale, Codes "1 or 4" would apply.

Codes "2 and 5," **Underride, No Compartment Intrusion**, are used when a portion of the vehicle is under another, and it is known that there is no passenger compartment intrusion. Codes "3 and 6" are used when it is unknown if there is passenger compartment intrusion.

#### **Overrides**

**7 (Overriding a Motor Vehicle In-Transport)** is used when this vehicle overrides a motor vehicle in-transport (includes those in motion outside the trafficway).

**8 (Overriding a Motor Vehicle Not In-Transport)** is used when this vehicle overrides a motor vehicle not intransport. This includes parked/stopped off roadway motor vehicles, working motor vehicles (e.g. cherry picker, paint-striping truck).

**9 (Unknown if Underride or Override)** is used when an Underride or Override occurred but it cannot be determined which is appropriate.

Check	IF	THEN
(431P)	NUMBER OF VEHICLE FORMS SUBMITTED	UNDERRIDE/OVERRIDE for the other vehicle
	equals 002 and UNDERRIDE/OVERRIDE equals	must equal 0.
	1-8, 9 for one vehicle,	
(432P)	NUMBER OF VEHICLE FORMS SUBMITTED	UNDERRIDE/OVERRIDE must equal 0.
	equals 001,	
(6A1P)	UNDERRIDE/OVERRIDE equals 1-8,	BODY TYPE must not equal <b>80-84</b> , 88-91.
(9B3P)	UNDERRIDE/OVERRIDE equals 7,	there must be at least one vehicle with UNIT
		TYPE equal to 1.
(9B4P)	UNDERRIDE/OVERRIDE equals 8,	there must at least one vehicle with UNIT TYPE
		equal 2-4.
(9B5P)	UNIT TYPE equals 2, 3,	UNDERRIDE/OVERRIDE must equal 0.
(V750)	UNDERRIDE/OVERRIDE equals 1-3,	FIRST HARMFUL EVENT or at least one
		SEQUENCE OF EVENTS (for this vehicle) should
		equal 12, 55.
(V760)	UNDERRIDE/OVERRIDE equals 4-6,	FIRST HARMFUL EVENT or at least one
		SEQUENCE OF EVENTS (for this vehicle) should
		equal 14, 45.
(V770)	UNDERRIDE/OVERRIDE equals 7,	at least one SEQUENCE OF EVENTS (for this
		vehicle) must equal 12, 55.

Check	IF	THEN
(V780)	UNDERRIDE/OVERRIDE equals 8,	at least one SEQUENCE OF EVENTS (for this
		vehicle) must equal 14, 45.

# V27 - Rollover

# FORMAT: 1 numeric SAS NAME: Vehicle.Rollover; Person.ROLLOVER ELEMENT VALUES:

Codes	Attributes
0	No Rollover
1	Rollover, Tripped by Object/Vehicle
2	Rollover, Untripped
9	Rollover, Unknown Type

**Definition:** This element identifies whether a rollover or overturn occurred during the crash involving this vehicle.

**Remarks:** Rollover is defined as any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. Rollover can also be referred to as overturn, and can occur at any time during this vehicle's critical crash envelope.

Rollover does **not** apply to 2-wheeled motorcycles for this element (use <u>0 (No Rollover</u>)). However, in the <u>First</u> <u>Harmful Event</u>, <u>Most Harmful Event</u>, and <u>Sequence of Events</u> you may use <u>01 (Rollover/ Overturn</u>) to record that this vehicle (motorcycle) overturned.

A rollover can be used for 3- or 4-wheeled ATVs, snowmobiles, go-karts, and 3-wheeled motorcycles.

**0 (No Rollover)** is used when there is no indication that a rollover occurred.

**1 (Rollover, Tripped by Object/Vehicle)** is used when the vehicle's lateral motion is suddenly slowed or stopped by an opposing force, inducing a rollover. The opposing force may be produced by a curb, ditch, pot-hole, another vehicle, pavement or soil dug into by the vehicle's wheels. This includes instances where a vehicle impacts a fixed object (i.e., tree, barrier, pole or post) then rolls over.

**2 (Rollover, Untripped)** is used when a rollover occurs, but not as a result of a collision with an object or a vehicle or generated by any other opposing force as referred to in Rollover, Tripped by Object/Vehicle. An untripped rollover is one for which there is no obvious cause other than normal surface friction. This is usually the result of vehicle instability and there is no evidence of furrowing or gouging on the pavement, gravel, grass or dirt surface.

**9 (Rollover, Unknown Type)** is used when a rollover occurred, but there is not sufficient information to determine tripped versus untripped status.

Check	IF	THEN
(1Z2P)	any SEQUENCE OF EVENTS equals 01, and	ROLLOVER must equal 1, 2, 9.
	(BODY TYPE equals 01-79, 82, 90-99, or any	
	RELATED FACTORS-VEHICLE LEVEL equals 30),	
(5A0P)	BODY TYPE equals 80, 81, 83, <b>84,</b> 88, 89, and	ROLLOVER must equal 0.
	any RELATED FACTORS- VEHICLE LEVEL does	
	not equal 30,	

#### **Consistency Checks:**

Check	IF	THEN
(V700)	ROLLOVER equals 2,	CRASH TYPE should equal 01-10, 14, 98 or 99 for
		this vehicle.
(V74P)	UNIT TYPE equals 1, and ROLLOVER equals 1,	at least one SEQUENCE OF EVENTS must equal
	2, 9, or LOCATION OF ROLLOVER equals 1-7,	01 for this vehicle.
	9,	
(V75P)	ROLLOVER is not blank,	LOCATION OF ROLLOVER must not be blank.
(V76P)	ROLLOVER is blank,	LOCATION OF ROLLOVER must be blank.
(V77P)	ROLLOVER equals 1, 2, 9,	LOCATION OF ROLLOVER must equal 1-7, 9.
(V78P)	ROLLOVER equals 0,	LOCATION OF ROLLOVER must equal 0.
(V79P)	ROLLOVER equals 2, and FIRST HARMFUL	CRASH TYPE must equal 01-10, 14, 15 or 98 for
	EVENT equals 01,	the vehicle involved in the first harmful event.

FORMAT: 1 numeric

**ELEMENT VALUES:** 

SAS NAME: Vehicle.ROLINLOC

Codes	Attributes
0	No Rollover
1	On Roadway
2	On Shoulder
3	On Median/Separator
4	In Gore
5	On Roadside
6	Outside of Trafficway
7	In Parking Lane / Zone
9	<u>Unknown</u>

# V28 - Location of Rollover

**Definition:** This element identifies the location of the trip point or start of the vehicle's roll.

#### **Remarks:**

**1 (On Roadway)** is used when the available information indicates the vehicle tripped or began its roll on the roadway. A Roadway is that part of a trafficway designed, improved and ordinarily used for motor vehicle travel. Where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class is the roadway (i.e., travel lanes). Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. This includes continuous left-turn lanes.

**2 (On Shoulder)** is used when the available information indicates the vehicle tripped or began its roll on the shoulder. A Shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped road vehicles, and for lateral support of the roadway structure.

**3 (On Median/Separator)** is used when the available information indicates the vehicle tripped or began its roll on the median/separator. A Median is an area of a trafficway between parallel roads separating travel in opposite directions. Continuous left-turn lanes are not considered painted medians. A Separator is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road.

**4 (In Gore)** is used when the available information indicates the vehicle tripped or began its roll in the gore. The Gore is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadways, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or marked pavement, if any, between the roadways. (See Figure 10)

**5 (On Roadside)** is used when the available information indicates the vehicle tripped or began its roll on the roadside. Roadside is the outermost part of the trafficway from the property line or other boundary into the edge of the first road.

**6 (Outside of Trafficway)** is used when the available information indicates the vehicle tripped or began its roll outside the right-of-way.

**7 (In Parking Lane/Zone**) refers to an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of-roadway parking (for example, legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see <u>1 (On Roadway</u>)).

9 (Unknown) is used when the location of the trip point cannot be determined from available resources.

If <u>Relation to Trafficway</u> equals:	Then Location of Rollover should equal:
01 - On Roadway	1 - On Roadway
02 - On Shoulder	2 - On Shoulder
03 - On Median	3 - On Median/Separator
04 - On Roadside	5 - On Roadside
05 - Outside Trafficway	6 - Outside of Trafficway
06 - Off Roadway - Location Unknown	9 - Unknown
07 - In Parking Lane/Zone	7 - In Parking Lane/Zone
08 - Gore	4 - In Gore
10 - Separator	3 - On Median/Separator
11 - Continuous Left-Turn Lane	1 - On Roadway
98 - Not Reported	9 - Unknown
99 - Unknown	9 - Unknown

#### **Consistency Checks:**

Check	IF	THEN
(A380)	FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the first harmful event, and BODY TYPE does not equal <b>80</b> , <b>81</b> , <b>83</b> , <b>84</b> , <b>88</b> , <b>89</b> , for this vehicle, and RELATION TO TRAFFICWAY equals,	LOCATION OF ROLLOVER should equal respectively.
(V74P)	UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9,	at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
(V75P)	ROLLOVER is not blank,	LOCATION OF ROLLOVER must not be blank.
(V76P)	ROLLOVER is blank,	LOCATION OF ROLLOVER must be blank.
(V77P)	ROLLOVER equals 1, 2, 9,	LOCATION OF ROLLOVER must equal 1-7, 9.
(V78P)	ROLLOVER equals 0,	LOCATION OF ROLLOVER must equal 0.

# V29 - Areas of Impact – Initial Contact Point / Damaged Areas

**FORMAT:** 2 subfields: Subfield 1, 2 numeric; Subfield 2, Select all that apply **SAS NAME:** Vehicle.IMPACT1, Person.IMPACT1, Parkwork.PIMPACT1; Damage.MDAREAS **ELEMENT VALUES:** 

#### Subfield 1: Areas of Impact - Initial Contact Point

Codes	Attributes
00	Non-Collision
01-12	Clock Points
13	Тор
14	<u>Undercarriage</u>
61	<u>Left</u>
62	Left-Front Side
63	Left-Back Side
81	Right
82	Right-Front Side
83	Right-Back Side
18	Cargo/Vehicle Parts Set-In-Motion
19	Other Objects Set-In-Motion
20	Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other
98	Not Reported
99	Unknown

#### Subfield 2: Damaged Areas

Codes	Attributes
01-12	Clock Values
13	Тор
14	<u>Undercarriage</u>
15	No Damage
99	Damage Areas Unknown

**Definition (Areas of Impact - Initial Contact Point):** This subfield identifies the area on this vehicle that produced the first instance of injury to non-motorists or occupants of this vehicle, or that resulted in the first instance of damage to other property or to this vehicle.

**Definition (Damaged Areas):** This subfield identifies all the areas on this vehicle that were damaged in the crash as reflected in the case materials by the officer.

**Remarks:** If Areas of Impact- Initial Contact Point / Damaged Areas are provided on the crash report in this exact format, use the values from the report unless there are clear errors (e.g. officer switches vehicles by mistake). If these elements are not provided on the crash report in this exact format, then similar report fields, narrative or diagram information may be used to code these elements. These subfields do not refer to direction of force of the impact. They identify the area(s) on the vehicle associated with the initial contact (<u>Subfield 1</u>) and all damage to the vehicle identified in the case material (<u>Subfield 2</u>).

# Areas of Impact / Initial Contact Point (Subfield 1):

This subfield identifies the area on this vehicle that produced the first instance of injury to non-motorists or occupants of this vehicle, or that resulted in the first instance of damage to other property or to this vehicle. The event that produced the Initial Contact Point for this vehicle may or may not be the first harmful event for the **crash**. This data is derived from the <u>Crash Events</u> Table and will always be the first recorded Area(s) of Impact element value for each vehicle in the Crash Events Table.

\*Note the same element values from Areas of Impact – Initial Contact Point are used to complete the Areas of Impact (AOI) fields in the <u>Crash Events</u> Table for all harmful events.

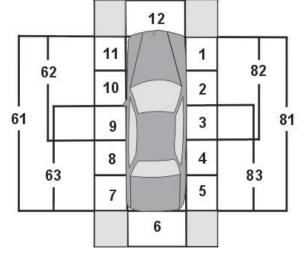


Figure 13: Areas of Impact – Initial Contact Point Element Values Diagram

# 00 (Non Collision [Initial Contact Point])

If the first harmful event involving this vehicle in the Crash Events Table is a non-collision event, then Initial Contact Point will be **00 (Non-Collision).** 

**"01-12"** refer to the points on a clock. (See <u>Figure 13</u>). The sides of the vehicle are divided into 5 equal segments, 01 through 05 for the right side and 07 through 11 for the left side. The front (12), back (06), top (13) and undercarriage (14) complete the outside surfaces of the vehicle. Use the diagrams in <u>Figure 15</u> for examples of how the 5 equal side segments are created on several vehicle types.

As procedure, start by looking for one of the "clock" values 01-12 or specific situation values 00, 13, 14, 18. If sufficient detail is not available to choose one of these values, move out to the next set of values to try to identify the appropriate codes (i.e., **62-63, 82-83,** then **61, 81**). (See <u>Figure 13</u>) Lastly, for missing information pertaining to known harmful events, a <u>98 (Not Reported)</u> attribute is available.

# 61-63 and 81-83:

Codes, 62-63 and 82-83 are used when there is not sufficient detail available in the case materials to identify a more specific area of impact, 01-05 and 07-11, but one of the quadrants can be identified (i.e., **62 (Left-Front Side), 63 (Left-Back Side), 82 (Right-Front Side),** or **83 (Right-Back Side)**). Also, use these attributes if the case materials indicate that the damage area is "between" or overlapping two known clock points. (e.g., if the damage area is midway between or overlapping clock points 10 and 11, use **62 (Left-Front Side)**).

Codes 61 and 81 are used when there is not sufficient detail available in the case materials to identify a more specific area of impact, 62-63 or 82-83, but one of the sides can be identified (i.e., **61 (Left)** or **81 (Right)**).

#### **Guideline for Resolving Ambiguous Information**

If the language in the narrative is ambiguous **AND** the diagram or other case information don't provide resolution, use the area indicated **first in the narrative wording** to select the Area of Impact to code. See examples table below.

#### **Examples:**

Description	Coding
Front, left	12
Left, front	62
Front, corner	12
Right, rear	83
Back, right side	06

It is important to note that area of impact refers mainly to the area of the vehicle that sustained the damage and does not depend upon the attitude of the vehicle (e.g., damage to a grille is still damage at 12 o-clock even if it was caused by sliding sideways past a utility pole).

However, **13 (Top)** may raise questions. The front and rear windows of some vehicles may also be viewed from the top. It may also be difficult to code impacts to the hood and rear deck of a vehicle.

With **13 (Top)** the direction of force sometimes has to be considered. The following are guidelines for using **13 (Top)**.

- 1. If the area was damaged by an impact that was received horizontally to an upright vehicle, use one of the codes "01 to 12, 61-63, 81-83."
- 2. If the area was damaged by an impact that was received from a vertical direction above the upright vehicle, use **13 (Top)**.
- 3. If the impact was received or direction of force was at an angle of less than 15 degrees above the horizontal, it is considered horizontal.
- 4. With a vehicle in other than upright attitudes, remember, it is the area of the vehicle which was damaged that is important.

**14 (Undercarriage)** refers to non-horizontal impacts to the undercarriage or swiping or snagging of undercarriage components (axles, exhaust system, etc.). Tire/Wheel impacts are coded to the AREA OF IMPACT (01-12, 61-63, 81-83). If a vehicle impacts the side plane of a tractor/trailer, and the AOI for the tractor/trailer is listed as undercarriage on the Police Crash Report, code the tractor/trailer's AOI - Initial Contact clock point involved in the impact rather than 14 (Undercarriage).

#### **Special Instructions Involving Motorcycles:**

For cases involving a motorcycle where the area of initial contact is described as "front tire/wheel" or "front end" code as **12 (Front)** or "rear tire/wheel" or "rear end" code as **06 (Back)** if the impact was received on a horizontal plane.

If the only event for a vehicle is a non-collision event, the Area of Impact - Initial is coded <u>00 (Non-Collision)</u>. If following a non-collision event, a vehicle has a collision event; Area of Impact, Initial Contact Point is still coded **00 (Non-Collision)**.

Hitting the ground during a non-collision crash is not considered an "impact" for this subfield.

#### **Set-In-Motion Attributes:**

"Loads" of a vehicle includes persons or property upon or set-in-motion by the vehicle, persons boarding or alighting from the vehicle, and persons or property attached to and in position to move with the vehicle. A vehicle *associated with a harmful event produced by a load being separated from or propelled by the vehicle should have one of the three set-in-motion AOI values for this event. These set-in-motion values identify that* only the load has made contact with the *other vehicle*, person, or other property *in that event*.

#### Important Notes:

- A load separated from, or an object propelled by, a vehicle should not receive a <u>Sequence of Events</u> 63 (Ran Off Roadway-Right), 64 (Ran Off Roadway-Left), 65 (Cross Median), 68 (Cross Centerline), or 69 (Reentering Roadway) associated with the movement of the load because these events apply to the vehicle itself and not to the load or object that was propelled. For example, if logs fall from a truck and only the logs (load of the truck) cross the centerline, this crossing of the centerline by the load would NOT receive a 68 (Cross Centerline) event.
- If debris set in motion as the result of a vehicle to vehicle collision produces a subsequent harmful event (e.g. strikes a third vehicle) and you cannot reasonably determine which vehicle the debris came from, use the lowest vehicle number of the MVIT(s) involved in the vehicle to vehicle event that produced the debris.
- The in -transport vehicle setting the object in motion and the object set in motion are coded under VEHICLE NUMBER (THIS VEHICLE) and AOI (This Vehicle).
- The only time AOI (This Vehicle) and AOI (Other Vehicle) are both coded 18 (Cargo/Vehicle Parts Set-In-Motion), 19 (Other Objects Set-In-Motion), or 20 (Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other) is if the impact is between objects set in motion by both in-transport motor vehicles.

**18 (Cargo/Vehicle Parts Set-In-Motion)** is selected when the harmful event involves an impact between a fixed/non-fixed object or vehicle and cargo or parts from an in-transport motor vehicle which are set-in-motion. That is, use this code when the object set-in-motion is cargo (e.g., mattress, logs, tools, unsecured objects on the in-transport motor vehicle) or a part of an in-transport motor vehicle (e.g., hubcap or mirror).

# Examples:

Vehicle 1 (log truck) swerves to avoid a braking vehicle (Vehicle 2). A log becomes dislodged from Vehicle 1 and lands on Vehicle 2's top.

- Vehicle 1 Area of Impact, Initial Contact Point would be coded as **18 (Cargo/Vehicle Parts Set-In-Motion)**.
- Vehicle 2 Area of Impact, Initial Contact Point would be coded as **<u>13 (Top)</u>**.

**19 (Other Objects Set-In-Motion)** is used when the harmful event involves an object set-in-motion by an intransport motor vehicle which is **NOT** cargo or part of the in-transport motor vehicle (e.g., kicked-up stone, motorcycle rider, parked vehicle, stop sign).

# Examples:

Vehicle 1 kicks up a stone which impacts Vehicle 2's windshield.

- Vehicle 1 Area of Impact, Initial Contact Point would be coded as 19 (Other Objects Set-In-Motion).
- Vehicle 2 Area of Impact, Initial Contact Point would be coded as **12 (Front)**.

20 (Object Set in Motion, Unknown if Cargo/Vehicle Parts or Other) is used when it is UNKNOWN whether the object was the cargo or a part of an in-transport motor vehicle (<u>18 – Cargo/Vehicle Parts Set-in-Motion</u>) or some other object (<u>19 – Other Objects Set-In-Motion</u>).

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

#### Areas of Impact - Initial Contact Point Examples of Not Reported:

- The case materials lack the detail to identify the initial contact point at all (e.g., narrative only states the vehicle departed the roadway and impacted a tree).
- The case materials lack the detail to identify the initial contact point among a number of possible choices for the first harmful event for the vehicle (e.g., crash report field indicates front and right side damage from separate impacts and does not clarify which area is associated with the initial impact).

99 (Unknown) is used if the investigating officer reported that the Initial Contact Point was unknown.

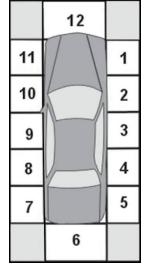
# Areas of Impact - Damaged Areas (Subfield 2):

This subfield identifies all the areas on this vehicle that were damaged in the crash as reflected in the case materials. For trailers that become separated from the power unit at the onset of the unstabilized situation or during the crash, treat the entire combination as one unit when recording Damaged Areas. Please see the Clockpoint Diagrams in <u>Figure 15</u> to establish damage areas for the combination vehicles.

Vehicles noted as "totaled":

This element is identifying the vehicle planes that were damaged so do not make the assumption that a vehicle noted in the case materials as "totaled" translates to all areas being damaged. This term is often referring to the cost to repair the damage not the areas damaged.

# Figure 14: Damaged Areas Element Values Diagram



\*Note: When entering the data there are three short cut selections in MDE for identifying multiple areas. Those selections are:

- 1. All Areas this will select all values 01-12, 13 (Top), and 14 (Undercarriage)
- 2. Left Side this will select all values 07-11.
- 3. Right Side this will select all values **01-05**.

**01-12 (Clock Values)** refer to the points on a clock (see Figure 14) to identify areas on the vehicle that were damaged in the crash. This subfield includes induced damage identified in the report. For example, the *case materials* show an impact centered at 03 (AOI – Initial Contact) that produced damage in 02, 03, 04. The sides of the vehicle are divided into 5 equal segments, 01 through 05 for the right side and 07 through 11 for the left side. The front (12), back (06), top (13), and undercarriage (14) complete the outside surfaces of the vehicle. Use the diagrams in Figure 15 for examples of how the 5 equal side segments are created on several vehicle types.

13 (Top) includes damage to the hood, windshield, roof, rear window, and trunk deck.

14 (Undercarriage) includes damage to the tires/wheels, axles, exhaust system, etc.

**15 (No Damage)** is used for vehicles that experience harmful events but the events do not produce physical damage to the vehicle itself.

#### **Examples include:**

- Vehicles that have the <u>non-collision harmful events</u> of gas inhalation, injured in vehicle, fell/jumped from vehicle, or other non-collision.
- Vehicles that have a collision event but the event does not produce damage to the vehicle such as; running over a pedestrian lying in the roadway, striking a bicyclist, striking another vehicle where only the struck vehicle is damaged, or when the only collision event is cargo falling from this vehicle that lands on another vehicle or person.

**99 (Damage Areas Unknown)** is used when the case materials do not indicate which area or areas received damage or when the information *in* the *case materials* is confusing or inadequate for the purposes of this determination.

#### Handling of known events with unknown damage areas:

For situations where you have known damage areas associated with a specific event(s) and additional harmful events without knowing specific damage areas for the additional events, code only the known damage areas in this subfield. For example, if the **Police Crash Report** narrative only states that "V1 departed the roadway striking several trees" with the only indication of damage given as the initial front contact, and a **Police Crash Report** hox marked 'Totaled', code only 12 for the known damage to the front of the vehicle.

#### Handling of non-collision harmful events that produce vehicle damage:

For situations where a vehicle is involved in the following <u>non-collision harmful events</u>: (01) Rollover/Overturn, (02) Fire/Explosion, (03) Immersion or Partial Immersion, (16) Thrown or Falling Object, (44) Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.), (51) Jackknife (harmful to this vehicle), or (72) Cargo/Equipment Loss or Shift (harmful to this vehicle), code only the damage areas reflected in the case materials by the officer.

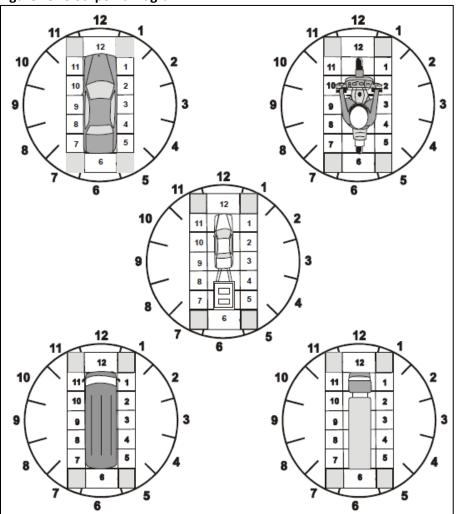
For example, the investigating officer may indicate damaged locations that translate to:

- 01-12, 13, 14 for a vehicle that was consumed by a fire or immersed in a river.
- 01-05, 13 for a vehicle that rolls onto its right side and then roof.
- 13 for a vehicle that only has damage to the hood from a fire.

- 13 for a vehicle that has a tree fall on its roof.
- 14 for a vehicle that strikes a pothole on its undercarriage.

Do not record damage at these locations for these non-collision harmful events unless so indicated by the case materials.

If a vehicle that experiences only these non-collision events and has only "non-collision" reflected in the case materials by the officer for its damaged areas, then use <u>99 (Damage Areas Unknown)</u>.



#### Figure 15: Clockpoint Diagram

#### **Consistency Checks:**

Check	IF	THEN
(2U0Q)	BODY TYPE equals <b>80-84</b> , 88, 89,	AREAS OF IMPACT - INITIAL CONTACT POINT should not equal 14.
(3B2P)	CRASH TYPE equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 12 for this vehicle.
(3B3P)	CRASH TYPE equals 21-23, 25-27, 29-31, 35, 37, 39 or 41,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 6 for this vehicle.

Check	IF	THEN
(3B6P)	CRASH TYPE equals 87,	AREAS OF IMPACT-INITIAL CONTACT POINT must
		equal 01-05, 81-83 for this vehicle.
(3B7P)	CRASH TYPE equals 89,	AREAS OF IMPACT-INITIAL CONTACT POINT must
		equal 07-11, 61-63 for this vehicle.
(3CA0)	EXTENT OF DAMAGE for this vehicle equals 0,	DAMAGED AREAS must equal 15.
(420P)	MANNER OF COLLISION equals 07, 08,	there must be at least two vehicle forms with AREAS OF IMPACT-INITIAL CONTACT POINT equal to 01-05, 07-11, 61-63, 81-83, 98, 99.
(421P)	MANNER OF COLLISION equals 01,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 06.
(422P)	MANNER OF COLLISION equals 02,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 12.
(423P)	MANNER OF COLLISION equals 06,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event must equal 01, 11, 12, 98, 99, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event must equal 01-05, 07-11, 61-63, 81-83, 98, 99.
(424P)	MANNER OF COLLISION equals 09,	AREAS OF IMPACT-INITIAL CONTACT POINT for one vehicle in the first harmful event should equal 06, and AREAS OF IMPACT-INITIAL CONTACT POINT for the other vehicle in the first harmful event should equal 01-05, 07-11, 61-63, 81-83, 98, 99.
(425P)	MANNER OF COLLISION equals 10,	AREAS OF IMPACT- INITIAL CONTACT POINT for one vehicle in the first harmful event should equal 06, and AREAS OF IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event should equal 06, 98, 99.
(8L8Q)	AREAS OF IMPACT (THIS VEHICLE) equals	the corresponding event in that row must not equal
	18, 19, or 20 in the CRASH EVENTS,	12 or 55.
(8L8R)	the CRASH EVENTS event equals 54,	AREAS OF IMPACT (THIS VEHICLE) must equal 18,
. ,		19, or 20 in that row.
(8L8S)	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the corresponding event in that row equals 14, 45 or 54,	RELATED FACTORS-CRASH LEVEL must equal 14.

Check	IF	THEN
(8L8T)	RELATED FACTORS-CRASH LEVEL equals	there must exist at least one event in the CRASH
	14,	EVENTS where AREAS OF IMPACT (THIS VEHICLE or
		OTHER VEHICLE) equals 18, 19, or 20 and the
		corresponding event in that row equals 14, 45 or
		54.
(8L8U)	AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, <i>or 20</i> in the CRASH EVENTS and	RELATED FACTORS-CRASH LEVEL must equal 15.
	the corresponding event in that row	
	equals 08, 09, 15, 49,	
(8L8V)	RELATED FACTORS-CRASH LEVEL equals	there must exist at least one event in the CRASH
	15,	EVENTS where AREAS OF IMPACT (THIS VEHICLE)
		equals 18, 19, or 20, and the corresponding event
		in that row equals 08-10, 15, 18, 49, or 91.
(8L8W)	SEQUENCE OF EVENTS is not equal to 45,	AREAS OF IMPACT (OTHER VEHICLE) should not equal 18 or 19.
(8L8X)	AREAS OF IMPACT (THIS VEHICLE) equals	there should be a previous event involving that
	18,	vehicle where the CRASH EVENTS event equals 60.
(8L8Y)	SEQUENCE OF EVENTS is equal to 45	AREAS OF IMPACT (THIS VEHICLE) and AREAS OF
	(Working Motor Vehicle),	IMPACT (OTHER VEHICLE) should not both equal 18
		or 19 in that same event row.
(8L9P)	BODY TYPE does not equal <b>80-84</b> , 88-91,	there should be a previous event with CRASH
	and the CRASH EVENTS event equals 54,	EVENTS event equal to 18, 73, or 91 involving that
	and the corresponding AREAS OF IMPACT	vehicle.
	(THIS VEHICLE) equals 19 <i>or 20</i> in that	
(BZ10)	row, CRITICAL EVENT – PRECRASH (EVENT)	AREAS OF IMPACT-INITIAL CONTACT POINT should
(6210)	equals 53,	not equal 12 for this vehicle.
(BZ20)	CRITICAL EVENT – PRECRASH (EVENT)	AREAS OF IMPACT-INITIAL CONTACT POINT should
(0220)	equals 51, 52,	not equal 06 for this vehicle.
(FP1F)	AREAS OF IMPACT – INITIAL CONTACT	
(	POINT equals blank, case status is flawed.	
(VH81)	any DAMAGED AREAS equals 15 or 99,	only that one values must be coded.
(VH82)	EXTENT OF DAMAGE for this vehicle	DAMAGED AREAS must not equal 15.
	equals 2, 4, 6,	
(VH83)	the only harmful SEQUENCE OF EVENTS	DAMAGED AREAS should equal 15.
	for this vehicle equals 04-06,	
(VH84)	the only harmful SEQUENCE OF EVENTS	DAMAGED AREAS should not equal 15.
	for this vehicle equals 01-03, 16, 44, 51,	
	72,	
(VH85)	AREAS OF IMPACT-INITIAL CONTACT	DAMAGED AREAS should include at least one of the
() () )	POINT equals 61-63,	codes 07-11, or DAMAGED AREAS should equal 15.
(VH86)	AREAS OF IMPACT-INITIAL CONTACT	DAMAGED AREAS should include at least one of the
	POINT equals 81-83,	codes 01-05, or DAMAGED AREAS should equal 15.
(VH87)	HIT-AND-RUN equals 0, and AREAS OF	the corresponding code should be included in
	IMPACT-INITIAL CONTACT POINT equals	DAMAGED AREAS, or DAMAGED AREAS should
	01-14,	equal 15.

# V30 - Extent of Damage

# FORMAT: 1 numeric SAS NAME: Vehicle.DEFORMED, Parkwork.PVEH\_SEV ELEMENT VALUES:

Codes	Attributes
0	No Damage
2	Minor Damage
4	Functional Damage
6	Disabling Damage
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element indicates the amount of damage sustained by this vehicle in this crash as indicated in the case materials based on an operational damage scale.

#### **Remarks:**

0 (No Damage) is used when there is no damage indicated in the available information for this vehicle.

**2 (Minor Damage)** is damage that does not disable or affect the operation of the motor vehicle. This attribute is used when the case materials indicate damage to the vehicle to be Minor or less than Functional and the vehicle is not towed due to damage.

Examples of **2** (Minor Damage) include: dented or bent fenders, bumpers, grills, body panels, and destroyed hubcaps.

**4 (Functional Damage)** is damage that is not disabling, but affects the operation of the motor vehicle or its parts. This attribute is used when the available information specifically indicates the damage is moderate or functional.

Examples of 4 (Functional Damage) include:

- doors, windows, hood and trunk lids that will not operate properly;
- broken glass that obscures vision;
- damage that would prevent the motor vehicle from passing an official motor vehicle inspection;
- tire damage even though the tire may have been changed at the scene;
- bumpers that are loose;
- headlamp or taillight damage that would make night driving hazardous but would not affect daytime driving; and,
- damage to turn signals, horn or windshield wipers, that makes them inoperative.

**6** (Disabling Damage) is damage that precludes departure of the motor vehicle from the crash scene in its usual daylight-operating manner after simple repairs. As a result, the motor vehicle would have had to have been towed, or carried from the crash scene, or assisted by an emergency motor vehicle. This attribute should be used when the available information specifically indicates disabling or severe damage. This attribute is also used when the damage is indicated to be of greater magnitude than Functional (moderate), e.g., major, extensive, totaled and the vehicle was towed from the scene.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when the available information specifically indicated the damage severity to be unknown.

**Note:** There is a distinction between the cost to repair the damage and the degree to which the damage affects the vehicle's operability (totaled, under/over monetary threshold). Operational damage is recorded here. For example, if the available information indicates that the vehicle was totaled and the vehicle was towed away, use <u>6 (Disabling Damage)</u>. However, if the available information indicates that the vehicles that the vehicle was totaled, but the vehicle was driven away, use <u>4 (Functional Damage)</u>.

#### **Consistency Checks:**

Check	IF	THEN
(3C0P)	UNIT TYPE equals 1, and EXTENT OF DAMAGE	VEHICLE REMOVAL should equal 2, 8, 9.
	equals 6,	
(3C1P)	EXTENT OF DAMAGE equals 0, 2,	VEHICLE REMOVAL must not equal 2.
(3C1Q)	EXTENT OF DAMAGE equals 0, 2,	VEHICLE REMOVAL should equal 3 or 5.
(3C2P)	VEHICLE REMOVAL equals 2,	EXTENT OF DAMAGE must equal 6, 8, 9.
(3C3P)	EXTENT OF DAMAGE equals 6,	VEHICLE REMOVAL must not equal 3.
(3CA0)	EXTENT OF DAMAGE for this vehicle equals 0,	DAMAGED AREAS must equal 15.
(VH82)	EXTENT OF DAMAGE for this vehicle equals 2,	DAMAGED AREAS must not equal 15.
	4, 6,	

#### Consistency Check (FARS ONLY):

Check	Language
(U370)	UNLIKELY: EXTENT OF DAMAGE equals 8 if STATE NUMBER does not equal 17, 34, 48, 49, or 53.

# V31 - Vehicle Removal

FORMAT: 1 numeric SAS NAME: Vehicle.TOWED, Parkwork.PTOWED ELEMENT VALUES:

Codes	Attributes
2	Towed Due to Disabling Damage
3	Towed Not Due to Disabling Damage
5	Not Towed
8	Not Reported
9	<u>Unknown</u>

**Definition:** This data element describes the mode in which the vehicle left the scene of the crash.

**Remarks:** This data element describes the mode in which the vehicle left the scene of the crash. Towing includes vehicles carried from the scene on a flatbed tow truck.

If the vehicle is a combination vehicle (power unit and at least one trailer), the power unit and/or trailer(s) are considered when determining tow status. If the available information indicates the power unit, or trailer of a combination unit, sustained enough damage to require towing, consider this vehicle as towed due to damage.

**2 (Towed Due to Disabling Damage)** is used for any towing which is due to disabling damage caused by this crash which prohibits vehicle movement under its own power. Towed due to disabling damage includes any towing when the reason for towing is unknown. In other words, if a vehicle is reported in the case materials as towed but it cannot be determined whether it was due to disabling damage or for other reasons, then the **default assumption** is that this vehicle was towed due to disabling damage - the data element <u>Extent of Damage</u> can still be <u>8 (Not Reported)</u> or <u>9 (Unknown)</u>.

If a vehicle was pushed by hand or by another vehicle after the crash because it was not drivable, then use **2** (Towed Due to Disabling Damage).

If a vehicle was towed due to damage **AND** for other reasons such as driver arrest, then code this vehicle as **2 (Towed Due to Disabling Damage)**.

**3 (Towed Not Due to Disabling Damage)** is used when the vehicle has been towed but the towing results from other than disabling damage (e.g., minor damage, functional damage, mired vehicles, driver arrested, injured driver, etc.).

**5 (Not Towed)** is used when it is specifically indicated in the available information that the vehicle was not towed or when the preponderance of the information available indicates that the vehicle was driven away or was not towed. Not Towed is also used when preponderance of the information available indicates that the vehicle remained at the scene unless the damage severity for the vehicle is noted as disabling on the *Police Crash Report*. If the preponderance of the information available indicates that the vehicle remained at the scene and the damage severity for the vehicle is noted as disabling on the *Police Crash Report*, then use <u>2</u> (Towed Due to Disabling Damage).

**NOTE:** The *Police Crash Report* narrative may be used to supersede and/or clarify the above information.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**9 (Unknown)** is used when the investigating officer indicates it was unknown as to how the vehicle was removed.

Consistency	Checks:
consistence	

Check	IF	THEN
(3C0P)	UNIT TYPE equals 1, and EXTENT OF	VEHICLE REMOVAL should equal 2, 8, 9.
	DAMAGE equals 6,	
(3C1P)	EXTENT OF DAMAGE equals 0, 2,	VEHICLE REMOVAL must not equal 2.
(3C1Q)	EXTENT OF DAMAGE equals 0, 2,	VEHICLE REMOVAL should equal 3 or 5.
(3C2P)	VEHICLE REMOVAL equals 2,	EXTENT OF DAMAGE must equal 6, 8, 9.
(3C3P)	EXTENT OF DAMAGE equals 6,	VEHICLE REMOVAL must not equal 3.
(U430)	UNLIKELY: VEHICLE REMOVAL equals 8.	

# V32 - Sequence of Events

# FORMAT: Read Only SAS NAME: Cevent.SOE; Vevent.SOE ELEMENT VALUES:

#### Non-Harmful Events:

Codes	Attributes
61	Equipment Failure (blown tire, brake failure, etc.)
62	Separation of Units
63	Ran Off Roadway-Right
64	Ran Off Roadway-Left
79	Ran off Roadway - Direction Unknown
71	End Departure
65	Cross Median
68	Cross Centerline
66	Downhill Runaway
67	Vehicle Went Airborne
69	Re-entering Roadway
70	Non-harmful, Swaying Trailer/Jackknife
60	Cargo/Equipment Loss or Shift (non-harmful)

#### **Non-Collision Harmful Events:**

Codes	Attributes
01	Rollover/Overturn
02	<u>Fire/Explosion</u>
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision
72	Cargo/Equipment Loss or Shift (harmful to this vehicle)
16	Thrown or Falling Object
05	Fell/Jumped from Vehicle

#### **Collision with Motor Vehicle In-Transport:**

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set-in-Motion
	from/by Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

#### **Collision with Object Not Fixed:**

Codes	Attributes
08	Pedestrian
09	Pedalcyclist
10	Railway Vehicle

Codes	Attributes
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal-Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	Unknown Object Not Fixed

# **Collision with Fixed Object:**

Codes	Attributes
17	<u>Boulder</u>
19	Building
58	Ground
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	<u>Curb</u>
34	<u>Ditch</u>
35	<u>Embankment</u>
38	<u>Fence</u>
39	<u>Wall</u>
40	<u>Fire Hydrant</u>
41	<u>Shrubbery</u>
42	Tree (Standing Only)
48	Snow Bank
53	Mail Box
43	Other Fixed Object
93	Unknown Fixed Object

# <u>Unknown</u>

Code	Attribute
99	<u>Unknown</u>

**Definition:** The events in sequence related to this motor vehicle, regardless of injury and/or property damage. Code each event for this vehicle in the order in which they occur, time wise, from *Police Crash Report* narrative and diagram.

**Remarks:** This data element is derived from the <u>Crash Events</u> Table. Recording of Crash Events ends at the last harmful event of the entire crash. Therefore, a non-harmful event (e.g., Crossing the Centerline) that occurs following the last harmful event of the crash will not be included. *Prior to selecting an unknown value, the case materials should be thoroughly evaluated to identify if a specific attribute can be applied.* 

Correction to the Sequence Events order must be made by revision to the Crash Events Table.

# **Non-Harmful Events:**

**61 (Equipment Failure)** (blown tire, brake, etc.) Examples of equipment failure include blown tires, brake failures, etc. *This attribute should not be used to describe damage resulting from a collision event.* 

**62 (Separation of Units)** is used when a trailing unit separates from its power unit or another trailing unit(s). This applies to truck tractors with trailer(s), single-unit trucks with a trailer and other vehicles pulling a trailer (e.g., car pulling a boat or motor home).

**63 (Ran Off Roadway-Right)** is used if *any part of* the vehicle runs off the right side of the roadway. Identification of running off roadway can be determined from the case materials. This attribute can be used anytime in the event sequence before or after any harmful events. This attribute does not apply to the "load" in cases involving Areas of Impact <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u> or <u>19 (Other Objects Set-In-Motion)</u>.

**64 (Ran Off Roadway-Left)** is used if *any part of* the vehicle runs off the left side of the roadway. Identification of running off roadway can be determined from the case materials. This attribute can be used anytime in the event sequence before or after any harmful events. This attribute does not apply to the "load" in cases involving Areas of Impact <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u> or <u>19 (Other Objects Set-In-Motion)</u>.





**79 (Ran off Roadway-Direction Unknown)** is used when *any part of the vehicle ran off the roadway but it* cannot be determined from the case materials, and there are no witness statements available to determine, whether right or left.

#### Figure 16: Ran Off Roadway Examples

# Coding Guidelines for Running Off Roadway (Right or Left)

#### For Divided Highways:

On a divided highway, a vehicle can run off the roadway by leaving the roadway and entering the median. When this occurs involving a vehicle on the correct side of a divided highway, the proper "Ran Off Roadway" attribute is always <u>64 (Ran Off Roadway - Left)</u>. In situations where a vehicle departs the roadway into the median, traverses the median, and continues across the opposing roadway, code **64 (Ran Off Roadway - Left)** followed by <u>65 (Cross Median)</u>.

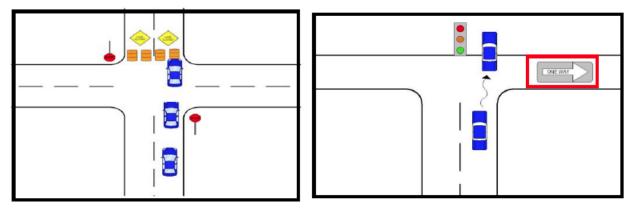
#### For vehicles turning at "T-intersections":

For "T-intersections" when the vehicle loses control when in a turn, choose right or left based upon the direction of travel for the vehicle's proper travel lane for their intended travel path. For vehicles traveling straight through "T-Intersections" use **71 (End Departure).** See <u>Figure 17</u> below.

**71 (End Departure)** is used if the vehicle leaves the roadway by traveling straight through the top of a "T-intersection" of a two-way trafficway or top of an intersecting one-way roadway. This code should also apply to vehicles traveling off the end of dead end roadways or into the barrier of a closed trafficway. See Figure 17 below.

#### Figure 17: End Departure Examples





**65 (Cross Median)** is used when a vehicle departs its roadway and traverses the median and enters the shoulder or travel lanes on the opposite side of a divided highway. This attribute does not apply to the "load" in cases involving Areas of Impact <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u> or <u>19 (Other Objects Set-In-Motion)</u>.

**68 (Cross Centerline)** is used when a vehicle crosses over the centerline of a two-way, undivided highway. The centerline must be delineated with paint or raised markers. This is also used for unstabilized situations involving vehicles that depart from their initial travel lane(s) and enter the continuous left-turn lane, having a harmful event that is located within the marked boundaries of the continuous left-turn lane. This attribute also applies to vehicles that traverse the continuous left-turn lane area, having a harmful event that is located in the opposing travel lane(s). This attribute does not apply to the "load" in cases involving Areas of Impact <u>18</u> (Cargo/Vehicle Parts Set-In-Motion) or <u>19 (Other Objects Set-In-Motion)</u>.

66 (Downhill Runaway) refers to any vehicle that cannot decelerate on a downhill grade. *This does not apply to a vehicle that cannot slow down due to lack of surface friction (e.g. due to ice, snow, etc.).* 

**67 (Vehicle Went Airborne)** must only be used if the officer indicates by narrative or diagram that the vehicle left the ground (excludes vehicles leaving the ground during a rollover event). Examples: the vehicle drove off a cliff, the vehicle was launched into the air after striking another vehicle or after traversing a berm.

**69 (Re-entering Roadway)** is used when a vehicle that departed the roadway portion of the trafficway returns to **the same roadway** (e.g., a motor vehicle in transport runs off the roadway right, strikes the guardrail face, then re-enters the roadway and collides with another motor vehicle in transport). This attribute does not apply to the "load" in cases involving Areas of Impact <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u> or <u>19 (Other Objects Set-In-Motion)</u>.

**70 (Non-harmful, Swaying Trailer/Jackknife)** applies to a condition that occurs to an articulated vehicle, (any vehicle with a trailing unit(s) connected by a hitch; e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit.

**60 (Cargo/Equipment Loss or Shift [non-harmful])** refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, and not to the vehicle, its parts or trailing unit, itself. This attribute should never be used:

- 1. to refer to a "collision" event (see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons</u> <u>or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport</u>))
- 2. to a harmful event related to the loss or shift of cargo in/on a vehicle causing damage to that vehicle, its cargo, or injury to its occupants (see <u>72 (Cargo/Equipment Loss or Shift [harmful to this vehicle])</u>).

# Examples:

- A load of logs on a tractor semi-trailer shifts as the truck rounds a curve resulting in an overturn. The shift of the load of logs would be a **60 (Cargo/Equipment Loss or Shift [non-harmful])**
- A spare tire falls from a vehicle. The loss of the spare tire would be a 60 (Cargo/ Equipment Loss or Shift [non-harmful])
- An axle on a vehicle breaks and the wheel then separates from the vehicle would be a (<u>61 (Equipment Failure</u>)).

# Non-Collision events involving motorcycles and vehicles with a "load":

Non-Collision events may occur before or after a collision event. They should not be coded as a separate event if they occur as part of a collision event.

Examples:

- A motorcycle strikes a deer, overturns and the rider becomes separated from the vehicle. Code the collision event, not the non-collision "<u>Rollover/Overturn</u>" and "<u>Fell/Jumped from Vehicle</u>" that occur as part of the collision event.
- One tractor/trailer rear-ends another tractor/trailer. The impact pushes the lead vehicle's load into the back of the tractor cab with part falling onto the roadway. Code the collision event, not the non-collision "cargo-loss or shift" that occurred as part of the collision event.

# **Non-Collision Harmful Events:**

**01 (Rollover/Overturn)** is used when a motor vehicle rotates (rollover) at least one quarter turn onto its side or end.

# NOTES regarding 01 (Rollover/Overturn):

- For motorcycles, laying the motorcycle down on its side is sufficient to use attribute 01
  (Rollover/Overturn) as a harmful event if damage or injury is produced, even though the data element
  <u>Rollover</u> is not applicable to motorcycles.
- Every vehicle that overturns will have contact with the ground. The collision event <u>58 (Ground)</u> should not be used in describing a non-collision **01 (Rollover/Overturn)** event. For example: A vehicle's tires furrow into soft soil causing the vehicle to roll. The harmful event is **01 (Rollover/Overturn)**. If the report identifies the vehicle "struck" the ground, and that harmful collision event caused the vehicle to roll, the events are <u>58 (Ground)</u>, **01 (Overturn/Rollover)**. Note this will give you a Level 2 edit check. If overriding the edit check, be specific in your override remarks.
- The only instances <u>67 (Airborne)</u> should be used immediately prior or immediately after **01** (Rollover/Overturn) is if the officer identifies "airborne" as defined in this element. Note this will give you a Level 2 edit check. If overriding the edit check, be specific in your override remarks.
- A vehicle rolls over 3 quarter turns. This is one rollover event involving 3 quarter turns.
- If there is a **01 (Rollover/Overturn)** that begins in another location but involves a ditch or embankment in the case (e.g., "rolled through the ditch", "rolled down the embankment", "came to rest against the embankment"), then the rule applies where if there is no damage associated with an impact with the fixed object during the rollover, it is not included in the Crash Events. If there is indication that damage resulted from an impact with the fixed object, it is included in the Crash Events. This follows the same logic as striking a tree or another vehicle during an overturn.
- For a vehicle that rolls over, impacts a fence and continues to rollover. Only two events would be coded for that circumstance. The first event would be the rollover followed by an impact with the fence. In order for more than one rollover event to appear in a vehicles sequence of events, the vehicle must return to its wheels, and track for a period of time before experiencing a separate rollover event. This would be a rare occurrence and must be clearly identified in the case materials.

**Note:** For medium/heavy trucks with attached trailers by fixed linkage, when either the power unit or the trailer rolls over, the entire vehicle will be considered a rollover.

**02 (Fire/Explosion)** is used for a vehicle fire or explosion that occurs during the crash sequence or as a result of the crash.

As it pertains to the occurrence of **02 (Fire/Explosion)**, the crash circumstances are not considered stabilized until the threat of damage to this vehicle, or injury consequences to this vehicle's occupants, has ceased. Therefore, the crash sequence is not considered stabilized until all occupants have exited the vehicle and the scene has been declared safe by police or other authority. Fires that occur at a later time to vehicles abandoned at the scene (e.g., in open fields, on hillsides, etc.) or to vehicles removed from the scene to another location (tow yard, curbside, etc.) are not considered part of the crash sequence.

**03 (Immersion or Partial Immersion)** is used when an in-transport motor vehicle enters a body of water and results in injury or damage. This code would also be used if the vehicle came to rest in water and the depth cannot be ascertained from case materials. NOTE: In immersion fatalities, the injury to the person may be noted as "drowning".

**04 (Gas Inhalation)** includes injury or death as a result of toxic fumes, such as carbon monoxide fumes leaking from a motor vehicle in-transport.

**51** (Jackknife [harmful to this vehicle]) applies to a condition that occurs to an articulated vehicle, (any vehicle with a trailing unit(s) connected by a hitch; e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit, striking the power unit, causing damage to the power unit or trailer. Jackknife should only be coded as a harmful event if there is clear indication of damage to the jackknifed vehicle or injury to its occupants caused by the jackknife.

**06 (Injured in Vehicle [Non-Collision])** is used when an occupant is injured during an unstabilized situation without a collision, excluding cargo/equipment loss or shift. Examples: Driver slams on brake, causing an unrestrained passenger to be injured. Driver makes a sharp turn causing driver to strike head on side window, knocking driver unconscious.

**44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.])** is used when the pavement surface irregularity is on a paved surface. Other examples include indication of contact with a dip, depression, low spot, trough, etc.) If the impact is with a surface irregularity (e.g. ruts, potholes) not on a paved surface use the <u>58 (Ground)</u>. For a vehicle that "bottoms out" on the paved surface (causing damage) due to speed but not because of a pavement surface irregularity, use attribute **07 (Other Non-Collision)**.

**07 (Other Non-Collision)**. Non-collision not captured in the listed non-collision attributes. **Examples:** 

- Damage to the vehicle produced by its own dislodged vehicle parts (including hood flying up and contacting the windshield).
- A vehicle "bottoms out" on the roadway (causing damage) due to speed but not because of a pavement surface irregularity. For impacts on the roadway due to pavement surface irregularities should be coded 44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.]).

**16 (Thrown or Falling Object)** is used when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor vehicle. If a tree limb falls from a tree and is contacted by a car, enter **16 (Thrown or Falling Object)**. If a person maliciously throws an object off an overpass into traffic below, enter **16 (Thrown or Falling Object)**. This excludes contacts made by loads or objects set in-motion by a motor vehicle (see <u>54 (Motor Vehicle In-Transport Strikes or is</u> <u>Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport</u>).

**72 (Cargo/Equipment Loss or Shift [harmful to this vehicle])** refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, and not to the vehicle, its parts or trailing unit, itself. This attribute is only used when the injury- or damage-producing event in the crash is the loss or shift of cargo in/on a vehicle causing damage to that vehicle, its cargo, or injury to its occupants. This attribute should never be used to refer to a "collision" event (see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport])</u>

# Example:

A pickup truck brakes rapidly to avoid a collision. This causes a piece of lumber in the pickup bed to smash through the rear window.

**05 (Fell/Jumped from Vehicle)** is used when an occupant of this vehicle falls or jumps (not suicide) from the vehicle causing injury. For example, an occupant of a motor vehicle in-transport leans against the car door, it opens and the occupant falls out; or a person riding on a vehicle's exterior (hood, roof, running board, etc.) falls or jumps, and is injured by the fall. If an occupant falls or jumps from a vehicle and is struck by that vehicle, use this attribute.

# **Collision with Motor Vehicle In-Transport:**

**12 (Motor Vehicle In-Transport)** is used when the injury- or damage-producing event is two motor vehicles intransport making contact within the trafficway boundaries. In-transport means that the motor vehicle is inmotion or on the roadway portion of a trafficway.

54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport) is used when the injury- or damage-producing event is two motor vehicles in-transport making contact by something set-in-motion by one *or both* of the vehicles. In these circumstances, both vehicles will have this attribute extracted and included in their SEQUENCE OF EVENTS.

In crashes involving harmful events caused by objects set-in-motion by a motor vehicle in-transport, remember that a vehicle's load is considered to be part of the vehicle.

#### Examples:

- If cargo falls from a truck (in-transport) and strikes another motor vehicle in-transport, this is treated as a two-vehicle crash. Therefore, the proper code for both vehicles is 54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u>.
- If an in-transport\_vehicle strikes an at-rest object in the roadway that was previously cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is <u>73 (Object That Had</u> <u>Fallen from Motor Vehicle In-Transport)</u>. If that object is then propelled into another motor vehicle intransport, the proper SEQUENCE OF EVENTS attribute for this next event is <u>54 (Motor Vehicle In-</u> Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport) and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>19 (Other Objects Set-</u> <u>In-Motion)</u>.
- If an in-transport vehicle strikes an at-rest object in the roadway that was not cargo or part of another motor vehicle in-transport, the SEQUENCE OF EVENTS for that event is <u>18 (Other Object [Not Fixed]</u>). If that object is then propelled into another motor vehicle in-transport, the proper SEQUENCE OF EVENTS code for this next event is <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in- Motion from/by Another Motor Vehicle In-Transport</u>) and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>19 (Other Objects Set-In-Motion</u>).

This attribute does not apply when the cargo, persons, or objects set-in-motion by an in-transport motor vehicle strikes something other than another in-transport motor vehicle. In this case, use the applicable "collision with non-fixed object", or "collision with fixed object" code for the object struck by the cargo, person, or object set-in-motion.

Examples:

- If cargo falls from a truck (in-transport) and strikes another vehicle that is not in-transport, the proper SEQUENCE OF EVENTS attribute is <u>14 (Parked Motor Vehicle)</u> or <u>45 (Working Motor Vehicle)</u> depending on which type of not in-transport vehicle was contacted by the load and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>18 (Cargo/Vehicle Parts Set-In-Motion)</u>.
- If cargo falls from a truck (in-transport) and strikes a pedestrian, the proper SEQUENCE OF EVENTS attribute would be <u>08 (Pedestrian)</u> and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>18</u> (Cargo/Vehicle Parts Set-In-Motion).

 If a pedestrian is struck by an at-rest object propelled by an in-transport vehicle (e.g., parked motor vehicle, stop sign, etc.), the proper SEQUENCE OF EVENTS attribute for this harmful event is <u>08</u> (<u>Pedestrian</u>) and the AREA OF IMPACT (THIS VEHICLE) column is coded <u>19 (Other Objects Set-In-Motion</u>).

**55 (Motor Vehicle in Motion Outside the Trafficway)** is used when the injury- or damage-producing event is two motor vehicles in-transport making contact outside the trafficway boundaries in a motor vehicle traffic crash.

#### Example:

A vehicle loses control attempting to turn into a gas station and strikes another vehicle pulling away from the pump in the station lot.

# **Collision with Object Not Fixed:**

**08 (Pedestrian)** is used for all those not on a personal conveyance. A person pushing a vehicle should be coded **08 (Pedestrian)**. A person being carried by another person should also be considered a **08 (Pedestrian)**.

**09 (Pedalcyclist)** is used for any person on a non-motorized other road vehicle propelled by pedaling. Examples include a bicycle, tricycle, unicycle, or pedal car.

**10 (Railway Vehicle)** is any land vehicle that is (1) designed primarily for, or in use for, moving persons or property from one place to another on rails and (2) not in use on a land way other than a railway.

- Inclusions: Railway Trains, Street car/trolley on private way
- Exclusions: Street car/trolley operating on trafficway

74 (Road Vehicle on Rails) is any land vehicle on rails operating in a trafficway.

- Inclusions: Street car/trolley operating on trafficway
- Exclusions: Railway Trains, Street car/trolley on private way, Street car/trolley or electric bus operating on tires.

**11 (Live Animal)** is used for collisions with live animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device (see <u>ANSI D16.1</u>). Default to **11 (Live Animal)** if it cannot be determined if the struck animal is alive, dead, or if it was being ridden or drawing a transport device.

**49 (Ridden Animal or Animal-Drawn Conveyance)** *is used* for ridden animals and animals drawing transport devices. See **18 (Other Object [Not Fixed])** for an animal carcass.

**18 (Other Object [Not Fixed])** is used when a motor vehicle in-transport strikes a non-fixed object that is known NOT to have been the cargo or part of another motor vehicle in-transport or when it is UNKNOWN whether the object was the cargo or part of another motor vehicle in-transport (i.e., refers to objects such as a dead body, animal carcass, construction cones or barrels, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, or debris from a prior crash). For objects that have become separated from a motor vehicle in-transport not as a result of a prior crash, use attribute <u>73 (Object That Had Fallen from Motor Vehicle In-Transport)</u>.

**15 (Non-Motorist on Personal Conveyance)** is used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

- 1. Rideable toys
  - a. Roller Skates, in-line skates
  - b. Skateboards
  - c. Skates
  - d. Baby carriage
  - e. Scooters
  - f. Toy Wagons
- 2. Motorized rideable toys
  - a. Motorized skateboard
  - b. Motorized toy car
- 3. Devices for personal mobility assistance
  - a. Segway-style devices
  - b. Motorized and non-motorized wheelchair
  - c. Handicapped scooters

# Exclusions:

- 1. Golf cart
- 2. Low Speed Vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped

**14 (Parked Motor Vehicle)** is used when the impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in-transport.

**45 (Working Motor Vehicle)** is used to indicate the motor vehicle contacted was in the act of performing construction, maintenance, or utility work related to the trafficway when it became an involved unit. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles, tow trucks, etc.

# Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker", performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A state, county, or privately owned snow plow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.

8. A law enforcement vehicle which is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling or calming influence.

# FARS SPECIAL INSTRUCTION:

**NOTE:** *Code* "45" excludes working activities other than highway construction, maintenance, or utility vehicles (e.g., garbage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, etc. These are considered motor vehicles In-transport). Use Related Factors-Vehicle Level code **42 (Other Working Vehicle [Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle]) to identify these vehicles.** 

A question may arise when a police, fire or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, or as traffic control. The question becomes, "has its function changed from being a motor vehicle in-transport to a working vehicle?" The answer is "no." Treat these situations as a motor vehicle in-transport striking another motor vehicle in-transport. Use Related Factors-Vehicle Level code **41 (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities)** to identify that this vehicle was struck while performing these work activities.

**73 (Object That Had Fallen from Motor Vehicle In-Transport)** is used when a motor vehicle in- transport impacts a non-fixed object at rest that is known to have been the cargo or part of another motor vehicle in-transport. Do not use this attribute for debris from a prior crash. This attribute does not include vehicle occupants that are ejected or fall from a motor vehicle in-transport. (Example: Motorcycle operator falling from a motor vehicle see non-collision event <u>05 (Fell/Jumped From Vehicle)</u>. For impacts involving two motor vehicles in transport resulting from cargo, persons or objects set in motion see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons, or Objects Set-in-Motion from/by another Motor Vehicle In-Transport</u>].

For example, if cargo that fell from a vehicle and was at rest in the roadway is struck this attribute would apply. If the cargo was at rest in the roadway as a result of a prior accident, use attribute <u>18 (Other Object</u> [Not Fixed]).

# 91 (Unknown Object Not Fixed) is used when the event involves an object that is known to be not fixed but the case materials do not identify the specific object.

# **Collision with Fixed Object:**

The attributes <u>58 (Ground)</u>, <u>33 (Curb)</u>, <u>34 (Ditch)</u> and <u>35 (Embankment)</u> are grouped under the Collision with Fixed Object subset because they are intended to be harmful events in the crash (i.e. – they are associated with an impact that produces injury or damage).

When coding these events there must be fields on the *Police Crash Report* or verbiage in the narrative such as "struck," "hit," "impacted," etc. that identify these as harmful.

For cases where the indication of the harmful event came from the narrative, there may not be a corresponding indication of damage in any *Police Crash Report* field. In these instances, code the harmful event as stated in the narrative and include the corresponding attribute under <u>Areas of Impact</u>.

If there is no indication of damage from contact with the fixed object in fields on the **Police Crash Report** and the narrative language does not identify it as a harmful event (e.g., "came to rest on the embankment" or

"drove through" or "drove across" the ditch and/or the embankment, or "drove over" the curb do not code <u>33</u> (Curb), <u>34 (Ditch)</u>, or <u>35 (Embankment)</u> in the Sequence of Events.

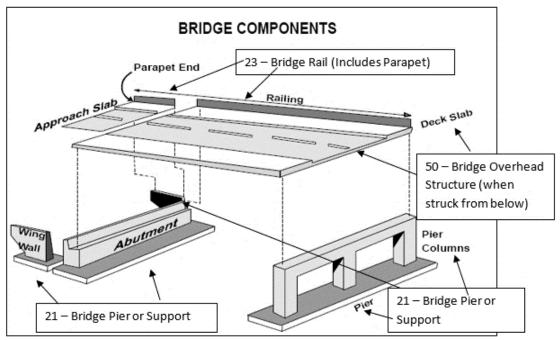
**17 (Boulder)** is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact.

**19 (Building)** is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.

**58 (Ground)** is used when the impact is with an earthen or paved surface off of the roadway. **58 (Ground)** is not to be entered when the harmful event is <u>01 (Rollover/Overturn)</u>.

Indication of furrowing, gouging, or digging in of the tires/wheels is not sufficient to code the collision event 58 (Ground). For example, if the *Police Crash Report* narrative states; "the trucks tires dug into the turf causing the vehicle to rollover" the harmful event should be <u>01 (Rollover/Overturn)</u>.

**20 (Impact Attenuator/Crash Cushion)** is a device for controlling the absorption of energy released during vehicle collision (crash cushion). Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.



#### Figure 18: Bridge Components Diagram

**50 (Bridge Overhead Structure)** is used when striking the bottom of a bridge while traveling on a trafficway underneath it. See Figure 18.

**21 (Bridge Pier or Support)** is a square or round column of stone, concrete, brick, steel or wood for supporting a bridge between abutments. This attribute includes the bridge abutments which are supporting the ends of a bridge. Abutments are generally designed for retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick or wood (includes the wing-walls). See <u>Figure 18</u>.

**23 (Bridge Rail [Includes Parapet])** is a wooden, brick, stone, concrete, or metal fence-like structure which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet. Balustrade is often used synonymously with parapet. See Figure 18

• Bridges do not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

**24 (Guardrail Face)** is a low barrier that has the primary longitudinal structure composed of metal (plates, mesh, box beam, etc.). A guardrail is differentiated from <u>25 (Concrete Traffic Barrier)</u> by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete (including concrete rails). If the crash report does not differentiate between guardrail face and end, default to guardrail face.

Guardrails, which serve as bridge rails, should be coded as 23 (Bridge Rail [Includes Parapet]).

**52 (Guardrail End)** is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

**25 (Concrete Traffic Barrier)** refers to the longitudinal traffic barriers constructed of concrete. This includes all temporary concrete barriers regardless of location (i.e., temporary Jersey Barrier on a bridge being used to control traffic during bridge repair/construction). Concrete walls (vertical side surfaces) do not apply here; see <u>39 (Wall)</u>.

**57 (Cable Barrier)** refers to a flexible barrier system which uses several cables typically supported by steel posts. These barriers are designed to help lessen impact or keep vehicles within the confines of the road.

26 (Other Traffic Barrier) is used for all other longitudinal barriers such as wood or rock.

**59 (Traffic Sign Support)** is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in-transport. This includes mile marker posts and signs above the trafficway.

**46 (Traffic Signal Support)** is used when the post supporting a traffic signal, or the signal itself, is hit by a motor vehicle in-transport.

**30 (Utility Pole/Light Support)** refers to supports for highway lighting systems, not including other private lighting systems (e.g., parking lot lights). **30 (Utility Pole/Light Support)** is used for electrical, telephone, cable & other utility pole-type supports.

**31 (Other Post, Other Pole, or Other Supports)** is used for posts other than highway signs, utility poles, or light supports (e.g., reflectors on poles alongside of roadway, parking meters, flag poles, etc.). For mail box posts, use **53 (Mail Box)**. For fence posts, use **38 (Fence)**.

32 (Culvert) is a man-made drain or channel crossing under a road, sidewalk, etc.

**33 (Curb)** is a concrete or asphalt structure that borders the paved surface. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Ensure that the *Police Crash Report* provides some indication that damage has occurred when a vehicle strikes a curb. This attribute includes collisions with curbing that forms raised islands, medians, or separators. For example, if the report identifies the vehicle struck/collided with a traffic island, channelizing island, raised median, or separator use **33 (Curb)** not <u>43</u> (Other Fixed Object).

**34 (Ditch)** includes any man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert. Reference to a "ditchbank", "embankment of the ditch", or "ditch embankment" should be coded under **34 (Ditch)**.

**35 (Embankment)** is a raised structure to hold back water, to carry a roadway or the result of excavation or washout (including erosion) which may be faced with earth (or rock, stone or concrete). A **35 (Embankment)** can usually be differentiated from a <u>39 (Wall)</u> by its incline whereas a wall is usually vertical. However, there are exceptions to this; such as a retaining wall that may be inclined or a vertical embankment that is caused by a natural event such as a washout.

In crashes involving a field approach or driveway crossing, use attribute **35 (Embankment)** when no specific components (e.g., culverts or ditches) are identified.

38 (Fence) includes the fence posts. A Fence can be made of wood, chain link, stone, etc.

**39 (Wall)** is a primarily vertical structure composed of concrete, metal, timber or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also included as a **39 (Wall)** are headwalls (or endwalls) that are sometimes provided on culvert ends principally to protect the sides of the embankment around the culvert opening against erosion. This does not include wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wingwalls should be coded as **21 (Bridge Pier or Support)**.

**40 (Fire Hydrant)** refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fire plugs or fire stand pipes in some areas.

**41 (Shrubbery)** refers to vegetation which is usually of a woody multi-stemmed variety and in most instances, is low growing rather than tall. May also be called bushes. Some common examples are boxwood, hawthorn, and mountain laurel.

**42 (Tree [Standing Only])** is used when a vehicle strikes a standing tree. This includes impacts from overhanging branches, tree stumps or large cactus (Saguaro). If a vehicle strikes a fallen tree, use <u>18 (Other Object [Not Fixed]</u>). If a tree falls on a vehicle as it is passing by, use <u>16 (Thrown or Falling Object)</u>.

**48 (Snow Bank)** is used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

**53 (Mail Box)** refers to a private residence mail/newspaper box including the post. A cluster of private mailboxes is included in this attribute. This element does not include U.S. Mailbox, which are typically blue and are for general public use. Code a U.S. Mailbox as <u>43 (Other Fixed Object)</u>.

**43 (Other Fixed Object)** is used when the object is fixed (considered a permanent structure) and is not described by any of the other fixed object attributes. This attribute excludes collisions with curbing that forms raised islands, medians, or separators (See also <u>33 (Curb)</u>.)

Examples:

- Bus shelters
- Pedestrian walkways
- Toll booths
- Guy wires supporting utility poles
- U. S. Mailbox for public use

Other examples would include property damage to standing crops, yards and other vegetation (excluding: 41 (Shrubbery), 42 (Tree [Standing Only]), and 58 (Ground)) if noted on the crash report.

When the case materials identify a non-specific object impact, apply the following guidelines. If the case materials only identify the harmful event as:

- "Fixed Object", then use 43 (Other Fixed Object) •
- "Sign", then use 59 (Traffic Sign Support)
- "Post", then use 31 (Other Post, Other Pole or Other Supports) •
- "Sign Post", then use 59 (Traffic Sign Support) •
- "Bridge", then use 23 (Bridge Rail [Includes Parapet]) when the vehicle is on top of the bridge, when the vehicle is going under the bridge, then use 21 (Bridge Pier or Support)
- "Barrier", then use 26 (Other Traffic Barrier)

# 93 (Unknown Fixed Object) is used when the event involves an object that is known to be fixed but the case materials do not identify the specific object.

#### Unknown

99 (Unknown) is used when police indicate unknown.

#### **Consistency Checks:**

Check	IF	THEN
(1Z0N)	SEQUENCE OF EVENTS for this vehicle should	
	not include more than one occurrence of 01.	
	Please see SEQUENCE OF EVENTS remarks	
	for <u>01 (Rollover/Overturn)</u> to confirm coding.	
(1Z1N)	SEQUENCE OF EVENTS for this vehicle should	
	not equal 01, 67 consecutively or 67, 01 consecutively.	
(1Z1P)	any SEQUENCE OF EVENTS equals 66,	ROADWAY GRADE should equal 6 for this vehicle.
(1Z2P)	any SEQUENCE OF EVENTS equals 01, and	ROLLOVER must equal 1, 2, 9.
	(BODY TYPE equals 01-79, 82, 90-99, or any	
	RELATED FACTORS-VEHICLE LEVEL equals	
	30),	
(2Z0F)	any SEQUENCE OF EVENTS equals 12, 14, 45,	NUMBER OF VEHICLE FORMS SUBMITTED must
	54, 55,	be greater than 001.
(4Z0P)	SEQUENCE OF EVENTS equals 02,	FIRE OCCURRENCE for this vehicle must equal 1.
(4Z1P)	UNIT TYPE equals 1 and FIRE OCCURRENCE equals 1,	at least one SEQUENCE OF EVENTS must equal 02.
(5Z0F)	SEQUENCE OF EVENTS equals 08,	at least one person must have PERSON TYPE
		equal to 05, 10.
(671F)	the only harmful event in the SEQUENCE OF	CRITICAL EVENT – PRECRASH (EVENT) must
	EVENTS for this vehicle equals 02 or 04,	equal 98.
(6Z0F)	SEQUENCE OF EVENTS equals 09,	at least one person must have PERSON TYPE equal to 06, 07.
(7Z0F)	any SEQUENCE OF EVENTS equals 05, 06,	at least one occupant of this vehicle (PERSON
		TYPES 01, 02, 09) must have INJURY SEVERITY
		equal to 1-5, or blank.

Check	IF	THEN
(8L8Q)	AREAS OF IMPACT (THIS VEHICLE) equals 18,	the corresponding event in that row must not
-	19, or 20 in the CRASH EVENTS,	equal 12 or 55.
(8L8R)	the CRASH EVENTS event equals 54,	AREAS OF IMPACT (THIS VEHICLE) must equal 18,
		19 <i>, or 20</i> in that row.
(8L8S)	AREAS OF IMPACT (THIS VEHICLE) equals 18,	RELATED FACTORS-CRASH LEVEL must equal 14.
	19, or 20 in the CRASH EVENTS and the	
	corresponding event in that row equals 14,	
	45 or 54,	
(8L8T)	RELATED FACTORS-CRASH LEVEL equals 14,	there must exist at least one event in the CRASH
. ,		EVENTS where AREAS OF IMPACT (THIS VEHICLE
		or OTHER VEHICLE) equals 18, 19, or 20 and the
		corresponding event in that row equals 14, 45 or
		54.
(8L8U)	AREAS OF IMPACT (THIS VEHICLE) equals 18,	RELATED FACTORS-CRASH LEVEL must equal 15.
	19, or 20 in the CRASH EVENTS and the	
	corresponding event in that row equals 08,	
	09, 15, 49,	
(8L8V)	RELATED FACTORS-CRASH LEVEL equals 15,	there must exist at least one event in the CRASH
		EVENTS where AREAS OF IMPACT (THIS VEHICLE)
		equals 18, 19, or 20, and the corresponding
		event in that row equals 08-10, 15, 18, 49, or 91.
(8L8W)	SEQUENCE OF EVENTS is not equal to 45,	AREAS OF IMPACT (OTHER VEHICLE) should not
		equal 18 or 19.
(8L8X)	AREAS OF IMPACT (THIS VEHICLE) equals 18,	there should be a previous event involving that
		vehicle where the CRASH EVENTS event equals
		60.
(8L8Y)	SEQUENCE OF EVENTS is equal to 45	AREAS OF IMPACT (THIS VEHICLE) and AREAS OF
	(Working Motor Vehicle),	IMPACT (OTHER VEHICLE) should not both equal
		18 or 19 in that same event row.
(8L9P)	BODY TYPE does not equal <b>80-84</b> , 88-91, and	there should be a previous event with CRASH
	the CRASH EVENTS event equals 54, and the	EVENTS event equal to 18, 73, or 91 involving
	corresponding AREAS OF IMPACT (THIS	that vehicle.
(0705)	VEHICLE) equals 19 <i>or 20</i> in that row,	
(8Z0F)	any SEQUENCE OF EVENTS equals 15,	at least one Person Level (Not a MV Occupant)
(0000)		form must have a PERSON TYPE code of 08.
(9B9P)	any SEQUENCE OF EVENTS equals 55,	there must be at least one other vehicle with
(		UNIT TYPE equal to 1.
(A041)	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT,
		MOST HARMFUL EVENT should not equal 48.
(A043)	SEQUENCE OF EVENTS for the last event in	
	the CRASH EVENTS TABLE must not equal	
(1222)	60-71, 79.	
(A230)	SEQUENCE OF EVENTS equals 10,	LAND USE AND FUNCTIONAL SYSTEM (b) should
		not equal 01-03.
(A520)	SEQUENCE OF EVENTS equals 10,	TRAFFIC CONTROL DEVICE should not equal 01-
		09, 20-29, 40-50, 98.

Check	IF	THEN
(A521)	any SEQUENCE OF EVENTS equals 46,	SPEED LIMIT should equal 05-50, 98 or 99 for
		this vehicle.
(A495)	TRAFFICWAY DESCRIPTION equals 0,	the first event in SEQUENCES OF EVENTS for this
		vehicle should not equal 63, 64, 69 or 71.
(A612)	PERSON TYPE equals 04, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	10, 49, or 74 for that vehicle number in the
	NON-MOTORIST equals,	CRASH EVENTS table.
(A613)	PERSON TYPE equals 05, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	08 for that vehicle number in the CRASH EVENTS
	NON-MOTORIST equals,	table.
(A614)	PERSON TYPE equals 06, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	09 for that vehicle number in the CRASH EVENTS
	NON-MOTORIST equals,	table.
(A615)	PERSON TYPE equals 07, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	09 for that vehicle number in the CRASH EVENTS
	NON-MOTORIST equals,	table.
(A616)	PERSON TYPE equals 08, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	15 for that vehicle number in the CRASH EVENTS
	NON-MOTORIST equals,	table.
(A617)	PERSON TYPE equals 10, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	08 for that vehicle number in the CRASH EVENTS
	NON-MOTORIST equals,	table.
(A618)	PERSON TYPE equals 19, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	99 for that vehicle number in the CRASH EVENTS
	NON-MOTORIST equals,	table.
(A619)	the total count of <i>persons with</i> PERSON TYPE	the number of events equal to 08 for that
	equal to 05 that have the same VEHICLE	<i>vehicle</i> in the CRASH EVENTS table should equal
	NUMBER OF MOTOR VEHICLE STRIKING	·
	NON-MOTORIST is,	
(A61A)	the total count of PERSON TYPES is equal to	the number of events equal to 15 in the CRASH
	08 for the vehicle in <b>VEHICLE</b> NUMBER OF	EVENTS table should equal for that vehicle.
	MOTOR VEHICLE STRIKING NON-MOTORIST	
	is,	
(A61B)	the total count of PERSON TYPES is equal to	the number of events equal to 08 in the CRASH
	10 for the vehicle in <b>VEHICLE</b> NUMBER OF	EVENTS table should equal for that vehicle.
	MOTOR VEHICLE STRIKING NON-MOTORIST	
	is,	
(AL1P)	SEQUENCE OF EVENTS equals 51, 62, 70,	VEHICLE TRAILING must not equal 0.
(AL2P)	SEQUENCE OF EVENTS equals 45,	WORK ZONE should equal 1-4.
(AL5P)	If UNIT TYPE equals 1,	at least one event in the SEQUENCE OF EVENTS
		must equal the MOST HARMFUL EVENT.
(AL8P)	SEQUENCE OF EVENTS equals 51, 70,	JACKKNIFE must equal 2, 3.
(AM1P)	FIRST HARMFUL EVENT equals 54, or	one RELATED FACTORS-CRASH LEVEL must equal
	SEQUENCE OF EVENTS equals 54 for any	14.
	vehicle,	
(AM2P)	any SEQUENCE OF EVENTS equals 25 or 57,	TRAFFICWAY DESCRIPTION should equal 3, 6.

Check	IF	THEN
(BZ40)	CRITICAL EVENT - PRECRASH (EVENT) equals 01,	at least one SEQUENCE OF EVENTS must equal 61 for this vehicle.
(BZ50)	CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
(BZ60)	CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.
(BZ70)	CRITICAL EVENT - PRECRASH (EVENT) equals 14,	at least one SEQUENCE OF EVENTS must equal 71 for this vehicle.
(BZ90)	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the first harmful event must equal 63.
(BZ91)	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the first harmful event must equal 64.
(PB00)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 110-910,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.
(PB02)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 111-980,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 09.
(U651)	UNLIKELY: SEQUENCE OF EVENTS equals 62, 60 consecutively.	
(U652)	UNLIKELY: SEQUENCE OF EVENTS equals 01, 58 or 58, 01 consecutively.	
(U653)	UNLIKELY: SEQUENCE OF EVENTS equals 65, 69 consecutively.	
(V74P)	UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals 1-7, 9,	at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
(V750)	UNDERRIDE/OVERRIDE equals 1-3,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 12, 55.
(V760)	UNDERRIDE/OVERRIDE equals 4-6,	FIRST HARMFUL EVENT or at least one SEQUENCE OF EVENTS (for this vehicle) should equal 14, 45.
(V770)	UNDERRIDE/OVERRIDE equals 7,	at least one SEQUENCE OF EVENTS (for this vehicle) must equal 12, 55.
(V780)	UNDERRIDE/OVERRIDE equals 8,	at least one SEQUENCE OF EVENTS (for this vehicle) must equal 14, 45.
(V990)	any SEQUENCE OF EVENTS equals 61,	CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE should not equal 00.
(VH70)	UNIT TYPE equals 2-4,	elements JACKKNIFE, TRAVEL SPEED, and SEQUENCE OF EVENTS must all be left blank.
(VH83)	the only harmful SEQUENCE OF EVENTS for this vehicle equals 04-06,	DAMAGED AREAS should equal 15.
(VH84)	the only harmful SEQUENCE OF EVENTS for this vehicle equals 01-03, 16, 44, 51, 72,	DAMAGED AREAS should not equal 15.

### V33 - Most Harmful Event

### **FORMAT:** 2 numeric **SAS NAME:** Vehicle.M\_HARM; parkwork.PM\_HARM **ELEMENT VALUES:**

### **Non-Collision Most Harmful Events:**

Codes	Attributes
01	Rollover/Overturn
02	Fire/Explosion
03	Immersion or Partial Immersion
04	Gas Inhalation
51	Jackknife (harmful to this vehicle)
06	Injured in Vehicle (Non-Collision)
44	Pavement Surface Irregularity (Ruts, Potholes, Grates, etc.)
07	Other Non-Collision
16	Thrown or Falling Object
72	Cargo/Equipment Loss or Shift (harmful to this vehicle)
05	Fell/Jumped from Vehicle

### **Collision with Motor Vehicle In-Transport:**

Codes	Attributes
12	Motor Vehicle In-Transport
54	Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by
	Another Motor Vehicle In-Transport
55	Motor Vehicle in Motion Outside the Trafficway

### **Collision with Object Not Fixed:**

Codes	Attributes
08	Pedestrian
09	Pedalcyclist
10	Railway Vehicle
74	Road Vehicle on Rails
11	Live Animal
49	Ridden Animal or Animal Drawn Conveyance
18	Other Object (Not Fixed)
15	Non-Motorist on Personal Conveyance
14	Parked Motor Vehicle
45	Working Motor Vehicle
73	Object That Had Fallen from Motor Vehicle In-Transport
91	Unknown Object Not Fixed

### **Collision with Fixed Object:**

Codes	Attributes
17	Boulder
19	Building
58	Ground

Codes	Attributes
20	Impact Attenuator/Crash Cushion
50	Bridge Overhead Structure
21	Bridge Pier or Support
23	Bridge Rail (Includes Parapet)
24	Guardrail Face
52	Guardrail End
25	Concrete Traffic Barrier
57	Cable Barrier
26	Other Traffic Barrier
59	Traffic Sign Support
46	Traffic Signal Support
30	Utility Pole/Light Support
31	Other Post, Other Pole, or Other Supports
32	<u>Culvert</u>
33	Curb
34	Ditch
35	<u>Embankment</u>
38	<u>Fence</u>
39	<u>Wall</u>
40	<u>Fire Hydrant</u>
41	<u>Shrubbery</u>
42	Tree (Standing Only)
48	Snow Bank
53	Mail Box
43	Other Fixed Object
<i>93</i>	Unknown Fixed Object

#### <u>Unknown</u>

Code	Attribute
99	Unknown

**Definition:** This element identifies the event that resulted in the most severe injury or, if no injury, the greatest property damage involving this motor vehicle.

**Remarks:** Must be the major event **FOR THIS VEHICLE**, even if different from the <u>FIRST HARMFUL EVENT</u>. **Code for each vehicle. May be different for each vehicle.** 

### Code using the following hierarchy:

- A. FATALITIES take precedence over INJURIES.
  - 1. If this vehicle is involved in more than one event which causes fatality to its own occupants or to persons not in a motor vehicle, choose the event which causes the greatest number of fatalities to occupants of this vehicle or to persons not in a motor vehicle (not occupants of other vehicles).
  - 2. If this vehicle is involved in more than one event that causes fatality to its own occupants or to persons not in a motor vehicle; and if there are an equal number of fatalities in each such event, choose the fatal event that is worst with respect to other injuries and property damage.
  - 3. As last resort, choose the fatal event that occurred first, time-wise.
- B. INJURIES take precedence over PROPERTY DAMAGE.

- 1. If the vehicle is not involved in events that cause fatality to its occupants or to persons not in a motor vehicle, choose the event that produces the worst injury.
- 2. If in doubt, choose the event with the greatest number of injuries.
- 3. If in doubt, choose the event that occurred first, time-wise.

### C. If only PROPERTY DAMAGE results for this vehicle:

- 1. Choose the event causing the most damage.
- 2. If in doubt, choose the event that happened first, time-wise.

### **Non-Collision Most Harmful Events:**

### Non-Collision events involving motorcycles and vehicles with a "load":

Non-Collision events may occur before or after a collision event. They should not be coded as a separate event if they occur as part of a collision event.

**Examples:** 

- A motorcycle strikes a deer, overturns and the rider becomes separated from the vehicle. Code the collision event, not the non-collision "Rollover/Overturn" and "Fell/Jumped from Vehicle" that occur as part of the collision event.
- One tractor/trailer rear-ends another tractor/trailer. The impact pushes the lead vehicle's load into the back of the tractor cab with part falling onto the roadway. Code the collision event, not the non-collision "cargo-loss or shift" that occurred as part of the collision event.

### Most Harmful Event Coding Procedures for Parked and Working Motor Vehicles

- 1. If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with a motor vehicle intransport, use **12 (Motor Vehicle In-Transport)**.
  - a. Example: A parked motor vehicle (V2) is struck by an in-transport motor vehicle (V1) and this is the most harmful event for the parked motor vehicle (V2). The MOST HARMFUL EVENT for the parked motor vehicle (V2) is **12** (Motor Vehicle In-Transport).
- 2. If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with something after it has been set-in-motion, code that other thing.
  - Example: In a chain reaction crash, an in-transport motor vehicle (V1) strikes a parked motor vehicle (V2) injuring the person sitting in the driver's seat of V2. The parked motor vehicle (V2) is pushed into an unoccupied motor vehicle (V3) and the parked motor vehicle (V3) strikes and kills a pedestrian. The MOST HARMFUL EVENT for parked motor vehicle (V3) is <u>08 (Pedestrian)</u>.
- If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with anything set-inmotion except another parked or working motor vehicle, see attribute <u>12 (Motor Vehicle In-Transport)</u>.
- If the MOST HARMFUL EVENT for a parked/working motor vehicle is an impact with another parked or working motor vehicle which has been set-in-motion, use <u>14 (Parked Motor Vehicle)</u> or <u>45 (Working</u> <u>Motor Vehicle)</u>, whichever describes the object set-in-motion.
- The MOST HARMFUL EVENT for a parked/working motor vehicle can be a non-collision harmful event not recorded in the events list. For example, if a parked vehicle rolls over after an impact with an intransport motor vehicle and the MOST HARMFUL EVENT is the rollover, then use code <u>01</u> (Rollover/Overturn).
  - a. Example: A parked motor vehicle (V2) is struck by an in-transport vehicle (V1). Parked motor vehicle (V2) is pushed down an embankment and rolls over. The case materials indicate the most

harmful event for parked motor vehicle (V2) is the rollover. MOST HARMFUL EVENT for parked motor vehicle (V2) is **01 (Rollover/ Overturn)**.

**01 (Rollover/Overturn)** is used when a motor vehicle rotates (rollover) at least one quarter turn onto its side or end. For motorcycles, laying the motorcycle down on its side is sufficient to code **01 (Rollover/ Overturn)** as a harmful event if damage or injury is produced, even though the data element <u>Rollover</u> is not applicable to motorcycles.

If there is a **01 (Rollover/Overturn)** that begins in another location but involves a ditch or embankment in the case (e.g., "rolled through the ditch", "rolled down the embankment", "came to rest against the embankment"), then the rule applies where if there is no damage associated with an impact with the fixed object during the rollover, it is not included in the Crash Events. If there is indication that damage resulted from an impact with the fixed object, it is included in the Crash Events. This follows the same logic as striking a tree or another vehicle during an overturn.

**Note:** For medium/heavy trucks with attached trailers by fixed linkage, when either the power unit or the trailer rolls over, the entire vehicle will be considered a rollover.

**02 (Fire/Explosion)** is used for a vehicle fire or explosion that occurs during the crash sequence or as a result of the crash.

As it pertains to the occurrence of **02 (Fire/Explosion)**, the crash circumstances are not considered stabilized until the threat of damage to this vehicle, or injury consequences to this vehicle's occupants, has ceased. Therefore, the crash sequence is not considered stabilized until all occupants have exited the vehicle and the scene has been declared safe by police or other authority. Fires that occur at a later time to vehicles abandoned at the scene (e.g., in open fields, on hillsides, etc.) or to vehicles removed from the scene to another location (tow yard, curbside, etc.) are not considered part of the crash sequence.

**03 (Immersion or Partial Immersion)** is used when an in-transport motor vehicle enters a body of water and results in injury or damage. This code would also be used if the vehicle came to rest in water and the depth cannot be ascertained from case materials. **NOTE:** In immersion fatalities, the injury to the person may be noted as "drowning".

**04 (Gas Inhalation)** includes injury or death as a result of toxic fumes, such as carbon monoxide fumes leaking from a motor vehicle in-transport.

**51** (Jackknife [harmful to this vehicle]) applies to a condition that occurs to an articulated vehicle, (any vehicle with a trailing unit(s) connected by a hitch; e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.) while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer(s) yaws from its normal straight-line path behind the power unit, striking the power unit, causing damage to the power unit or trailer. Jackknife should only be coded as a harmful event if there is clear indication of damage to the jackknifed vehicle or injury to its occupants caused by the jackknife.

**06 (Injured in Vehicle [Non-Collision])** is used when an occupant is injured during an unstabilized situation without a collision, excluding cargo/equipment loss or shift. Examples: Driver slams on brake, causing an unrestrained passenger to be injured. Driver makes a sharp turn causing driver to strike head on side window, knocking driver unconscious.

**44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.])** is used when the pavement surface irregularity is on a paved surface. Other examples include indication of contact with a dip, depression, low spot, trough, etc.) If the impact is with a surface irregularity (e.g. ruts, potholes) not on a paved surface, use the <u>58 (Ground)</u>. For a vehicle that "bottoms out" on the paved surface (causing damage) due to speed but not because of a pavement surface irregularity, use attribute **07 (Other Non-Collision)**.

**07 (Other Non-Collision)**. Non-collision not captured in the listed non-collision attributes.

- Examples:
- Damage to the vehicle produced by its own dislodged vehicle parts (including hood flying up and contacting the windshield).
- A vehicle "bottoms out" on the roadway (causing damage) due to speed but not because of a pavement surface irregularity. For impacts on the roadway due to pavement surface irregularities should be coded 44 (Pavement Surface Irregularity [ruts, potholes, grates, etc.]).

**16 (Thrown or Falling Object)** is used when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor vehicle. If a tree limb falls from a tree and is contacted by a car, enter **16 (Thrown or Falling Object)**. If a person maliciously throws an object off an overpass into traffic below, enter **16 (Thrown or Falling Object)**. This excludes contacts made by loads or objects set in-motion by a motor vehicle (see <u>54 (Motor Vehicle In-Transport Strikes or is</u> <u>Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport</u>).

**72 (Cargo/Equipment Loss or Shift [harmful to this vehicle))** refers specifically to the loss or shift of items carried on or in a motor vehicle or its trailing unit, and not to the vehicle, its parts or trailing unit, itself. This attribute is only used when the injury- or damage-producing event in the crash is the loss or shift of cargo in/on a vehicle causing damage to that vehicle, its cargo, or injury to its occupants. This attribute should never be used to refer to a "collision" event (see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport]).</u>

### Example:

A pickup truck brakes rapidly to avoid a collision. This causes a piece of lumber in the pickup bed to smash through the rear window.

**05 (Fell/Jumped from Vehicle)** is used when an occupant of this vehicle falls or jumps (not suicide) from the vehicle causing injury. For example, an occupant of a motor vehicle in-transport leans against the car door, it opens and the occupant falls out; or a person riding on a vehicle's exterior (hood, roof, running board, etc.) falls or jumps, and is injured by the fall. If an occupant falls or jumps from a vehicle and is struck by that vehicle, use this attribute.

### **Collision with Motor Vehicle In-Transport:**

**12 (Motor Vehicle In-Transport)** is used when the most injury- or damage-producing event is two motor vehicles in-transport making contact within the trafficway boundaries.

### Parked and Working Motor Vehicles:

This attribute is used for parked and working motor vehicles when their most harmful event is an impact with a motor vehicle in-transport.

This attribute also applies to parked and working motor vehicles when their most harmful event is an impact with any object set-in-motion other than another parked or working motor vehicle. Set-in-motion objects include cargo, persons, stone, stop sign, tire tread and debris from a previous impact. If the object set-in-

motion is another parked or working motor vehicle use <u>14 (Parked Motor Vehicle)</u> or <u>45 (Working Motor</u> <u>Vehicle)</u>, whichever describes the object set-in-motion.

### **Examples:**

- If the MOST HARMFUL EVENT for V1 (a motor vehicle in-transport) is when V1 impacts V2 (another motor vehicle in-transport) within the trafficway boundaries, then the most harmful event for V1 is <u>12</u> (Motor Vehicle In-Transport).
- If the most harmful event for V2 (a parked motor vehicle) is when V2 is struck by V1 (a motor vehicle in-transport), then the MOST HARMFUL EVENT for V2 is <u>12 (Motor Vehicle In-Transport)</u>.
- If the MOST HARMFUL EVENT for V2 (a parked motor vehicle) is when V2 is struck by a stop sign set-inmotion by V1 (a motor vehicle in-transport), then the MOST HARMFUL EVENT for V2 is <u>12 (Motor</u> <u>Vehicle In-Transport)</u>.
- If V1 (a motor vehicle in-transport) strikes V2 (a parked motor vehicle) and V2 then strikes V3 (a parked motor vehicle), then the MOST HARMFUL EVENT for V3 is <u>14 (Parked Motor Vehicle)</u>.

54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport) applies only to events involving two in-transport motor vehicles. It is used in two situations: 1) The most harmful injury- or damage-producing event for an in-transport motor vehicle is when something it sets in motion (cargo, person, object) strikes another in-transport motor vehicle. 2) The most harmful injury- or damage-producing event for an in-transport motor vehicle. 2) The most persons or objects set-in-motion by another in-transport motor vehicle.

### Example:

Cargo which fell from an in-transport motor vehicle (V1) is involved in an impact with V2, another intransport motor vehicle. The case materials indicate this is the most harmful event for both V1 and V2. MOST HARMFUL EVENT is **54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport)** for both V1 and V2.

When selecting the MOST HARMFUL EVENT, **54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by Another Motor Vehicle In-Transport)** does not have to be the MOST HARMFUL EVENT for both vehicles.

### Example:

Cargo which fell from an in-transport motor vehicle (V1) is involved in an impact with V2, another intransport motor vehicle. This event is the only event for V1. Thus, **54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in- Motion from/by Another Motor Vehicle In-Transport)** is the MOST HARMFUL EVENT for V1. The case material identifies a subsequent impact by V2 with a tree on the roadside as the MOST HARMFUL EVENT for V2. Thus, <u>42 (Tree [Standing Only])</u> is the MOST HARMFUL EVENT for V2.

This attribute does not apply when the most harmful event for an **in-transport motor vehicle** is an impact between cargo, a person, or object it set-in-motion and something other than a motor vehicle in transport. In this case, use the "collision with non-fixed object", or "collision with fixed object" code that is applicable.

### Examples:

- If the MOST HARMFUL EVENT for an in-transport motor vehicle is when cargo which fell off its trailer strikes a pedestrian, code <u>08 (Pedestrian)</u>.
- If the MOST HARMFUL EVENT for an in-transport motor vehicle is when a parked motor vehicle it set-inmotion strikes a pedestrian, code <u>08 (Pedestrian)</u>.
- If the MOST HARMFUL EVENT for an in-transport motor vehicle is when cargo which fell off its trailer strikes a parked motor vehicle, code **14 (Parked Motor Vehicle)**.

**55 (Motor Vehicle in Motion Outside the Trafficway)** is used when the injury- or damage-producing event is two motor vehicles in-transport making contact outside the trafficway boundaries in a motor vehicle traffic crash.

### Example:

A vehicle loses control attempting to turn into a gas station and strikes another vehicle pulling away from the pump in the station lot.

### **Collision with Object Not Fixed:**

**08 (Pedestrian)** is used for all those not on a personal conveyance. A person pushing a vehicle should be coded **08 (Pedestrian)**. A person being carried by another person should also be considered a **08 (Pedestrian)**.

**09** (**Pedalcyclist**) is used for any person on a non-motorized other road vehicle propelled by pedaling. Examples include a bicycle, tricycle, unicycle, or pedal car.

**10 (Railway Vehicle)** is any land vehicle that is (1) designed primarily for, or in use for, moving persons or property from one place to another on rails and (2) not in use on a land way other than a railway.

- Inclusions: Railway Trains, Street car/trolley on private way
- **Exclusions:** Street car/trolley operating on trafficway

74 (Road Vehicle on Rails) is any land vehicle on rails operating in a trafficway.

- Inclusions: Street car/trolley operating on trafficway
- **Exclusions:** Railway Trains, Street car/trolley on private way, Streetcar/trolle or electric bus operating on tires

**11 (Live Animal)** is used for collisions with live animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device (see <u>ANSI D16.1</u>). Default to **11 (Live Animal)** if it cannot be determined if the struck animal is alive, dead or if it was being ridden or drawing a transport device.

**49 (Ridden Animal or Animal-Drawn Conveyance)** *is used* for ridden animals and animals drawing transport devices. See **18 (Other Object [Not Fixed])** for an animal carcass.

**18 (Other Object [Not Fixed])** is used when a motor vehicle in-transport strikes a non-fixed object that is known NOT to have been the cargo or part of another motor vehicle in-transport or when it is UNKNOWN whether the object was the cargo or part of another motor vehicle in-transport (i.e., refers to objects such as a dead body, animal carcass, construction cones or barrels, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, or debris from a prior crash). For objects that have become separated from a motor vehicle in-transport not as a result of a prior crash, use attribute <u>73 (Object That Had Fallen from Motor Vehicle In-Transport)</u>.

**15 (Non-Motorist on Personal Conveyance)** is used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling. **Inclusions:** 

### nclusions:

- 1. Rideable toys
  - a. Roller Skates, in-line skates
  - b. Skateboards
  - c. Skates
  - d. Baby carriage

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- e. Scooters
- f. Toy Wagons
- 2. Motorized rideable toys
  - a. Motorized skateboard
  - b. Motorized toy car
- 3. Devices for personal mobility assistance
  - a. Segway-style devices
  - b. Motorized and non-motorized wheelchair
  - c. Handicapped scooters

### Exclusions:

- 1. Golf cart
- 2. Low Speed Vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped

**14 (Parked Motor Vehicle)** is used when the impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion. A vehicle stopped off the roadway, its door open over a roadway, is not in-transport. This attribute would also apply for a parked vehicle struck by another parked vehicle. For example, if a motor vehicle in-transport hits a parked vehicle and pushes it into a second parked vehicle (the only event for the second parked vehicle), the most harmful event for the second parked vehicle is **14 (Parked Motor Vehicle)**.

**45 (Working Motor Vehicle)** is used to indicate the motor vehicle contacted was in the act of performing construction, maintenance or utility work related to the trafficway when it became an involved unit. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside the trafficway boundaries. This code does not include private construction/maintenance vehicles, or vehicles such as garbage trucks, delivery trucks, taxis, emergency vehicles, tow trucks, etc.

### Examples:

- 1. Asphalt/steam roller working in a highway construction zone paving the roadway or flattening dirt.
- 2. State highway maintenance crew painting lane lines on the road, mowing grass on the roadside or median, repairing potholes, removing debris from the roadway, etc.
- 3. Utility truck or a "cherry picker", performing maintenance on power lines along the roadway or maintaining a traffic signal.
- 4. A private excavating company contracted by the State digging the foundation for a new overpass.
- 5. A state, county, or privately owned snow plow, plowing ice/snow as part of a highway maintenance activity.
- 6. Street sweeper sweeping the street.
- 7. A vehicle in a mobile work convoy displaying arrow boards or other signaling devices warning motorists of the work activity.
- 8. A law enforcement vehicle which is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling or calming influence.

**NOTE:** *Code* "45" excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garbage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, etc. These are considered motor vehicles In-transport). Use <u>Related Factors-Vehicle Level</u>

code <u>42 (Other Working Vehicle [Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle]</u>) to identify these vehicles.

A question may arise when a police, fire or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, or as traffic control. The question becomes, "has its function changed from being a motor vehicle in-transport to a working vehicle?" The answer is "no." Treat these situations as a motor vehicle in-transport striking another motor vehicle in-transport. Use Related Factors-Vehicle Level code <u>41 (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities</u>) to identify that this vehicle was struck while performing these work activities.

**73 (Object That Had Fallen from Motor Vehicle In-Transport)** is used when a motor vehicle in- transport impacts a non-fixed object at rest that is known to have been the cargo or part of another motor vehicle in-transport. Do not use this attribute for debris from a prior crash. This attribute does not include vehicle occupants that are ejected or fall from a motor vehicle in-transport. (Example: Motorcycle operator falling from a motor vehicle see non-collision event <u>05 (Fell/Jumped From Vehicle)</u>. For impacts involving two motor vehicles in transport resulting from cargo, persons or objects set in motion see <u>54 (Motor Vehicle In-Transport Strikes or is Struck by Cargo, Persons or Objects Set-in-Motion from/by another Motor Vehicle In-Transport</u>].

For example, if cargo that fell from a vehicle and was at rest in the roadway is struck this attribute would apply. If the cargo was at rest in the roadway as a result of a prior accident, use attribute **<u>18 (Other Object</u> [Not Fixed])**.

## 91 (Unknown Object Not Fixed) is used when the event involves an object that is known to be not fixed but the case materials do not identify the specific object.

### **Collision with Fixed Object:**

The attributes <u>58 (Ground)</u>, <u>33 (Curb)</u>, <u>34 (Ditch)</u> and <u>35 (Embankment)</u> are grouped under the Collision with Fixed Object subset because they are intended to be harmful events in the crash (i.e. – they are associated with an impact that produces injury or damage).

When coding these events there must be fields on the *Police Crash Report* or verbiage in the narrative such as "struck", "hit", "impacted", etc. that identify these as harmful.

For cases where the indication of the harmful event came from the narrative, there may not be a corresponding indication of damage in any *Police Crash Report* field. In these instances, code the harmful event as stated in the narrative and include the corresponding attribute under <u>Areas of Impact</u>.

If there is no indication of damage from contact with the fixed object in fields on the **Police Crash Report** and the narrative language does not identify it as a harmful event (e.g., "came to rest on the embankment" or "drove through" or "drove across" the ditch and/or the embankment, or "drove over" the curb do not code **33** (Curb), **34** (Ditch), or **35** (Embankment) in the Sequence of Events.

**17 (Boulder)** is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

**19 (Building)** is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.

**58 (Ground)** is used when the impact is with an earthen or paved surface off of the roadway. **58 (Ground)** is not to be entered when the harmful event is <u>01 (Rollover/Overturn)</u>.

Indication of furrowing, gouging, or digging in of the tires/wheels is not sufficient to code the collision event **58 (Ground).** For example, if the **Police Crash Report** narrative states; "the trucks tires dug into the turf causing the vehicle to roll over" the harmful event should be <u>01 (Rollover/Overturn)</u>.

**20 (Impact Attenuator/Crash Cushion)** is a device for controlling the absorption of energy released during vehicle collision (crash cushion). Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

**50 (Bridge Overhead Structure)** is used when striking the bottom of a bridge while traveling on a trafficway underneath it. See <u>Figure 18</u> for a diagram of Bridge Components.

**21 (Bridge Pier or Support)** is a square or round column of stone, concrete, brick, steel or wood for supporting a bridge between abutments. This attribute includes the bridge abutments which are supporting the ends of a bridge. Abutments are generally designed for retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick or wood (includes the wing-walls). See See <u>Figure 18</u> for a diagram of Bridge Components.

**23 (Bridge Rail [Includes Parapet])** is a wooden, brick, stone, concrete or metal fence-like structure which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet. Balustrade is often used synonymously with parapet. See <u>Figure 18</u> for a diagram of Bridge Components.

• Bridges do not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

**24 (Guardrail Face)** is a low barrier that has the primary longitudinal structure composed of metal (plates, mesh, box beam, etc.). A guardrail is differentiated from <u>25 (Concrete Traffic Barrier)</u> by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete (including concrete rails). If the crash report does not differentiate between guardrail face and end, default to guardrail face.

Guardrails, which serve as bridge rails, should be coded as 23 (Bridge Rails [Includes Parapet]).

**52 (Guardrail End)** is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

**25 (Concrete Traffic Barrier)** refers to the longitudinal traffic barriers constructed of concrete. This includes all temporary concrete barriers regardless of location (i.e., temporary Jersey Barrier on a bridge being used to control traffic during bridge repair/construction). Concrete walls (vertical side surfaces) do not apply here; see <u>39 (Wall)</u>.

**57 (Cable Barrier)** refers to a flexible barrier system which uses several cables typically supported by steel posts. These barriers are designed to help lessen impact or keep vehicles within the confines of the road.

26 (Other Traffic Barrier) is used for all other longitudinal barriers such as wood or rock.

**59 (Traffic Sign Support)** is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in-transport. This includes mile marker posts and signs above the trafficway.

**46 (Traffic Signal Support)** is used when the post supporting a traffic signal, or the signal itself, is hit by a motor vehicle in-transport.

**30 (Utility Pole/Light Support)** refers to supports for highway lighting systems, not including other private lighting systems (e.g., parking lot lights). **30 (Utility Pole/Light Support)** is used for electrical, telephone, cable, and other utility pole-type supports.

**31 (Other Post, Other Pole or Other Supports)** is used for posts other than highway signs, utility poles, or light supports. (e.g., reflectors on poles alongside of roadway, parking meters, flag poles, etc.). For mail box posts, use **53 (Mail Box)**. For fence posts, use **38 (Fence)**.

32 (Culvert) is a man-made drain or channel crossing under a road, sidewalk, etc.

**33 (Curb)** is a concrete or asphalt structure that borders the paved surface. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Ensure that the *Police Crash Report* provides some indication that damage has occurred when a vehicle strikes a curb. This attribute includes collisions with curbing that forms raised islands, medians, or separators. For example, if the report identifies the vehicle struck/collided with a traffic island, channelizing island, raised median or separator use **33 (Curb)** not <u>43</u> (Other Fixed Object).

**34 (Ditch)** includes any man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert. Reference to a "ditchbank", "embankment of the ditch", or "ditch embankment" should be coded under **34 (Ditch)**.

**35 (Embankment)** is a raised structure to hold back water, to carry a roadway or the result of excavation or washout (including erosion) which may be faced with earth (or rock, stone, or concrete). A **35 (Embankment)** can usually be differentiated from a <u>39 (Wall)</u> by its incline whereas a wall is usually vertical. However, there are exceptions to this; such as a retaining wall that may be inclined or a vertical embankment that is caused by a natural event such as a washout.

In crashes involving a field approach or driveway crossing, use attribute **35 (Embankment)** when no specific components (e.g., culverts or ditches) are identified.

38 (Fence) includes the fence posts. A Fence can be made of wood, chain link, stone, etc.

**39 (Wall)** is a primarily vertical structure composed of concrete, metal, timber or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas (but not for containment as in the primary function of a fence). Also included as a **39 (Wall)** are headwalls (or endwalls) that are sometimes provided on culvert ends principally to protect the sides of the embankment around the culvert opening against erosion. This does not include wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wingwalls should be coded as **21 (Bridge Pier or Support)**.

**40 (Fire Hydrant)** refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fire plugs or fire stand pipes in some areas.

**41 (Shrubbery)** refers to vegetation which is usually of a woody multi-stemmed variety and in most instances, is low growing rather than tall. May also be called bushes. Some common examples are boxwood, hawthorn, and mountain laurel.

**42 (Tree [Standing Only])** is used when a vehicle strikes a standing tree. This includes impacts from overhanging branches, tree stumps or large cactus (Saguaro). If a vehicle strikes a fallen tree, use <u>18 (Other Object [Not Fixed]</u>). If a tree falls on a vehicle as it is passing by, use <u>16 (Thrown or Falling Object)</u>.

**48 (Snow Bank)** is used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

**53 (Mail Box)** refers to a private residence mail/newspaper box including the post. A cluster of private mailboxes is included in this attribute. This element does not include U.S. Mailbox, which are typically blue and are for general public use. Code a U.S. Mailbox as **43 (Other Fixed Object)**.

**43 (Other Fixed Object)** is used when the object is fixed (considered a permanent structure) and is not described by any of the other fixed object attributes. This attribute excludes collisions with curbing that forms raised islands, medians, or separators (See also <u>33 (Curb)</u>.)

Examples:

- Bus shelters
- Pedestrian walkways
- Toll booths
- Guy wires supporting utility poles
- U. S. Mailbox for public use

Other examples would include property damage to standing crops, yards, and other vegetation (excluding: <u>41 (Shrubbery)</u>, <u>42 (Tree [Standing Only]</u>), and <u>58 (Ground)</u>) if noted on the crash report.

When the case materials identify a non-specific object impact, apply the following guidelines. If the case materials only identify the harmful event as:

- "Fixed Object", then use 43 (Other Fixed Object)
- "Sign", then use 59 (Traffic Sign Support)
- "Post", then use 31 (Other Post, Other Pole or Other Supports)
- "Sign Post", then use 59 (Traffic Sign Support)
- "Bridge", then use 23 (Bridge Rail [Includes Parapet]) when the vehicle is on top of the bridge, when the vehicle is going under the bridge, then use 21 (Bridge Pier or Support)
- "Barrier", then use 26 (Other Traffic Barrier)

93 (Unknown Fixed Object) is used when the event involves an object that is known to be fixed but the case materials do not identify the specific object.

### Unknown

99 (Unknown) is only used if the Most Harmful Event is an event where the <u>Sequence of Events</u> is <u>99</u> (Unknown).

### **Consistency Checks:**

Check	IF	THEN
(A041)	CRASH MONTH equals 05-09,	SEQUENCE OF EVENTS, FIRST HARMFUL EVENT,
		MOST HARMFUL EVENT should not equal 48.
(AL3P)	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT must not equal 54 for
		this vehicle.
(AL5P)	UNIT TYPE equals 1,	at least one event in the SEQUENCE OF EVENTS
		must equal the MOST HARMFUL EVENT.
(AL7P)	UNIT TYPE equals 2-4,	MOST HARMFUL EVENT should not equal 04-07,
		16, 51, 72.
(AL9P)	there is one and only one parked vehicle	MOST HARMFUL EVENT for the parked vehicle
	(UNIT TYPE equals 2 or 3) in the crash,	must not equal 14.

### V34 - Related Factors – Vehicle Level

FORMAT: 2 numeric occurring 2 times

SAS NAME: Vehicle.VEH\_SC1; Vehicle.VEH\_SC2. parkwork.PVEH\_SC1, parkwork.PVEH\_SC2 **ELEMENT VALUES:** 

Codes	Attributes
00	None

### **Special Vehicle Flags:**

Codes	Attributes	
30	Multi-Wheeled Motorcycle Conversion	
*32	Vehicle Registration for Handicapped	
33	Vehicle Being Pushed by Non-Motorist	
35	Reconstructed/Altered Vehicle	
*37	Transporting Children to/from Head Start/Day Care	
39	Highway Construction, Maintenance or Utility Vehicle, In-Transport (Inside or Outside Work Zone)	
40	Highway Incident Response Vehicle	
41	Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic	
	Control Activities	
42	Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle)	
44	Adaptive Equipment	
99	Unknown	
*FARS ON		

FARS ONLY ATTRIBUTES

**Definition:** This element identifies factors related to this vehicle expressed by the investigating officer.

**Remarks:** Code information provided by the investigating officer in the narrative, contributing factors/circumstances field or citations/violations section on the crash report.

CODING HIERARCHY: When more than two attributes apply, select the attributes that cannot be captured under other elements

Vehicle conditions include manufacturer defects, driver's changes that are defective and maintenance conditions. RELATED FACTORS-DRIVER LEVEL 24 (Operating Without Required Equipment) can be coded in conjunction with vehicle level conditions.

**00 (None)** is used when no applicable related factors are noted in the case materials. Zero-fill all fields. Also, use 00 (None) to complete the remaining fields when you will be recording less than two vehicle related factors. DO NOT leave any remaining fields blank.

Attributes 30-44 are flags used to identify this vehicle as one with special circumstances. They do not necessarily imply that this circumstance caused the crash.

30 (Multi-Wheeled Motorcycle Conversion) is used when the case materials identify this vehicle is a motorcycle that is converted to a multi-wheeled configuration from a 2-wheeled OEM motorcycle. These vehicles will not have a body type attribute 82 (Three-Wheeled Motorcycle [2 Rear Wheels]) available in the manufacturer's Make/Model/Model Year/Body Type table.

**\*32 (Vehicle Registration for Handicapped)** is used when the case materials identify this vehicle is registered and/or specially equipped for a handicapped individual. This information can be derived from the vehicle registration. This excludes placards which are usually hung from the rear-view mirror and can be moved from one vehicle to the other.

**33 (Vehicle Being Pushed by Non-Motorist)** is used when the case materials identify this vehicle is being pushed by a non-motorist with or without a driver at the controls.

**35 (Reconstructed/Altered Vehicle)** is used when the case materials identify this vehicle is a home-made vehicle constructed from vehicle components or is significantly altered in some way. These vehicles may have standard VIN or the State may issue a number in place of the VIN for their registration.

### Examples include:

- The addition of enhanced performance engine chips or accessories.
- Significant altering of suspension system (e.g., "monster trucks," "low riders," etc.).
- Hydraulic systems or tilted/canted wheels.

**\*37 (Transporting Children to/from Head Start/Day Care)** is used when the case materials identify this vehicle is used to transport children to Day Care/Head Start in vehicles arranged, operated or owned by Head Start or Day Care Program. This attribute is not intended for children being transported to daycare by family/friends in personal vehicles.

**39** (Highway Construction, Maintenance or Utility Vehicle, In-Transport [Inside or Outside Work Zone]) is used when the case materials identify this vehicle is a highway construction, maintenance, or utility vehicle that is intransport at the time it became involved in the crash. Note: This is **only** used when the vehicle is considered to not be a working motor vehicle and is "**in-transport**." For example, while moving from one job site to another job site or returning to the depot after concluding work activities. This attribute refers to vehicles owned by a local, county, state, or federal agency. Private vehicles are excluded.

**40 (Highway Incident Response Vehicle)** is used when the case materials identify this vehicle is a state government-owned vehicle whose function is to drive the major highways to assist motorists with flat tires, provide gas, etc.

### **Examples include:**

- DOT Help
- Good Samaritans
- Courtesy Patrol
- Motorist Assist Vehicle

**41 (Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities)** is used when the case materials identify this vehicle is a police car, fire truck, or ambulance performing some work function related to working at the scene of an emergency or acting as traffic control.

### **Examples include:**

- Police car, fire truck, or ambulance at the scene of a crash.
- Fire truck at the scene of a fire.
- Police car leading or trailing a convoy for a funeral.
- Police car blocking the entrance to a parade route.
- Police car at a check point.

**42 (Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle)** is used when the case materials identify this vehicle is performing some other work activity at the time it was involved in the crash and that activity is somehow associated with the crash.

### Examples include:

- Garbage truck picking up trash.
- Personal pickup with a snow blade plowing.
- UPS or postal vehicle stopped in the roadway while making a delivery.
- Food delivery truck making a delivery.

**44 (Adaptive Equipment)** is used when the case materials identify this vehicle is equipped with adaptive equipment for handicapped operator(s).

Examples include:

- Extended brake/gas pedals
- Special steering apparatus
- Hand brakes or accelerator, etc.

**99 (Unknown)** is used when "unknown" is reported for the vehicle condition in the Police *Crash* Report itself and none of the special circumstances exist. In these circumstances, nine-fill all fields. If **99 (Unknown)** is used for any field, **ALL** fields must be **99 (Unknown)**. DO NOT leave any remaining fields blank. Also use this attribute for Hit-and-Run vehicles and drivers when no factors are identified or reported by the officer for this vehicle or driver.

Check	IF	THEN
(1G0P)	one RELATED FACTORS-VEHICLE LEVEL equals 99,	both factors must equal 99.
(1Z2P)	any SEQUENCE OF EVENTS equals 01, and (BODY TYPE equals 01-79, 82, 90-99, or any RELATED FACTORS-VEHICLE LEVEL equals 30),	ROLLOVER must equal 1, 2, 9.
(2G0P)	either RELATED FACTORS-VEHICLE LEVEL equals blanks,	the other factor must also equal blanks.
(3G0P)	the first RELATED FACTORS-VEHICLE LEVEL equals 00,	the other factor must also equal 00.
(4G0P)	A RELATED FACTORS-VEHICLE LEVEL between 30 and 44 can be used only once per vehicle form.	
(5A0P)	BODY TYPE equals 80, 81, 83, <i>84,</i> 88, 89, and any RELATED FACTORS - VEHICLE LEVEL does not equal 30,	ROLLOVER must equal 0.
(6G0Q)	any RELATED FACTORS - VEHICLE LEVEL equals 30,	BODY TYPE must equal 80 for this vehicle.
(9C1P)	UNIT TYPE equals 4,	RELATED FACTORS-VEHICLE LEVEL must not equal 39.
(ASOP)	RELATED FACTORS-VEHICLE LEVEL equals 32,	REGISTERED VEHICLE OWNER must not equal 0.
(VH06)	BODY TYPE equals 82,	RELATED FACTORS-VEHICLE LEVEL must not equal 30.
(V031)	RELATED FACTORS-VEHICLE LEVEL equals 39,	BODY TYPE should not equal 01, 12, 13, 32, 33, 42, 50-52, 55, 58,59, 65, 73, 80-83, 88-92.

Check	IF	THEN
(V032)	RELATED FACTORS-VEHICLE LEVEL equals 40,	BODY TYPE should not equal 01, 12, 13, 32, 33, 42, 50-52, 55, 58,59, 60-67, 71-73, 78, 80-83, 88-93.

### **Consistency Checks (FARS Only):**

Check	IF	THEN
(6G0P)	RELATED FACTORS-VEHICLE LEVEL equals 32,	REGISTRATION STATE must not equal 00, 92.
(V590)	RELATED FACTORS-VEHICLE LEVEL equals 32,	REGISTERED VEHICLE OWNER should equal 1-3.
(V592)	RELATED FACTORS-VEHICLE LEVEL equals 37,	REGISTRATION STATE should not equal 00, 92.
(V593)	RELATED FACTORS-VEHICLE LEVEL equals 37,	REGISTERED VEHICLE OWNER should not equal
		0.

### V35 - Fire Occurrence

### **FORMAT:** 1 numeric **SAS NAME:** Vehicle.FIRE\_EXP, Person.FIRE\_EXP, Parkwork.PFIRE **ELEMENT VALUES:**

Codes	Attributes
0	No or Not Reported
1	Yes

**Definition:** This element identifies whether or not a fire in any way related to the crash occurred in this vehicle.

**Remarks:** For the purposes of this element, "vehicle" is defined to mean the power unit plus any and all trailing units associated with the power unit.

If it cannot be determined that a fire occurred in the vehicle during the crash, use **0** (No or Not Reported).

**1** (Yes) is used when the case materials indicate that this vehicle sustained fire damage.

In a multi-vehicle crash where a fire occurs, only the vehicles sustaining fire damage should be coded as **1** (Yes).

Fires that begin in a vehicle before the first impact may be counted. If fire damage is produced, <u>02</u> (Fire/Explosion) would be the First Harmful Event.

If the <u>Most Harmful Event</u> for this vehicle is <u>02 (Fire/Explosion)</u>, or a fire in the vehicle is produced by damage in the crash, use **1 (Yes)**. The involved vehicles may be at rest for a short period of time.

If the vehicles are at rest long enough to raise a question about the fire's relationship to the crash's damageproducing events, use **0** (No or Not Reported).

	Examples	Code
1.	Car (V#1) strikes tank truck (V#2) in rear, the car catches on fire with no fire occurring for the tank truck.	<ul> <li>V#1 – 1 (Yes)</li> <li>V#2 – 0 (No or Not Reported)</li> </ul>
2.	Vehicle #1 catches fire, causing driver to strike vehicle #2.	<ul> <li>V#1 – 1 (Yes)</li> <li>V#2 – 0 (No or Not Reported)</li> </ul>
3.	Vehicle #1 catches fire, causing driver to stop vehicle in roadway and all occupants exit vehicle. Two minutes later, a second car (V#2) rear-ends the stopped car and its driver is killed from collision. (Attributes reflect the second crash.)	<ul> <li>V#1 – 0 (No or Not Reported)</li> <li>V#2 – 0 (No or Not Reported)</li> </ul>

#### **Examples for Fire Occurrence:**

#### **Consistency Checks:**

Check	IF	THEN
(4Z0P)	SEQUENCE OF EVENTS equals 02,	FIRE OCCURRENCE for this vehicle must equal 1.
(4Z1P)	UNIT TYPE equals 1, and FIRE OCCURRENCE	at least one SEQUENCE OF EVENTS must equal
	equals 1,	02.
(540F)	FIRST HARMFUL EVENT equals 02,	the vehicle involved in the first harmful event
		must have FIRE OCCURRENCE equal to 1.

# **Driver Level Data Elements**

- D1 State Number FARS Only
- D2 Consecutive Number FARS Only
- D3 Vehicle Number Driver Level
- <u>D4 Driver Presence</u>
- D5 Driver's License State FARS Only
- D6 Driver's Zip Code
- D7 Non-CDL License Type/Status FARS Only
- D8 Commercial Motor Vehicle License Status FARS Only
- <u>D9 Compliance with CDL Endorsements FARS Only</u>
- D10 License Compliance with Class of Vehicle FARS Only
- D11 Compliance with License Restrictions FARS Only
- D12 Driver Height FARS Only
- D13 Driver Weight FARS Only
- D14, D15, D16, D17, D18 Driver Level Counters FARS Only
- D19, D20 Date of First and Last Crash, Suspension, Conviction FARS Only
- **D21 Violations Charged**
- D22 Speeding Related
- D23 Condition (Impairment) at Time of Crash
- D24 Related Factors Driver Level

### D3 - Vehicle Number – Driver Level

### FORMAT: 3 numeric SAS NAME: Vehicle.Veh\_No ELEMENT VALUES:

• 000-999

**Definition:** This element identifies the vehicle number associated with this driver.

#### **Remarks:**

- Must be coded on an original submission
- System-Generated (MDE System Only)
- See <u>Vehicle Number-Vehicle Level</u> for assignments numbers.
- FOR DRIVERLESS, PARKED/STOPPED OFF ROADWAY/WORKING MOTOR VEHICLES, AND MOTOR VEHICLES IN MOTION OUTSIDE THE TRAFFICWAY, ONLY CODE <u>DRIVER PRESENCE (D4)</u> AND <u>RELATED</u> <u>FACTORS-DRIVER LEVEL (D24)</u>.

### **Consistency Check:**

Check	Language
(CSI2)	There must be exactly one Driver Level form corresponding to each Vehicle Level form.

### **D4 - Driver Presence**

### FORMAT: 1 numeric SAS NAME: Vehicle.Dr\_Pres ELEMENT VALUES:

Codes	Attributes
0	No Driver Present / Not Applicable
1	Yes
9	Unknown

**Definition:** This element identifies whether or not a driver was present in this vehicle at the onset of the unstabilized situation.

### Remarks:

**0 (No Driver Present/Not Applicable)** is used when there is no person who was controlling this vehicle at the time of the crash.

Also, use **0 (No Driver Present/Not Applicable)** when <u>Unit Type</u> for this vehicle is not a motor vehicle intransport (<u>Unit Type</u> attributes "2, 3, 4"). Use this attribute regardless of the presence of an occupant in the driver's seat.

**1 (Yes)** is used when there is a person who is physically controlling the vehicle at the onset of the unstabilized situation for this crash. Do not use this attribute for a child sitting in the driver's seat unless the case materials indicate the child was in control of the vehicle. Hit-and-run drivers are included in this attribute. A driver under medical distress would be included. This attribute includes when it is known there was a driver but it is unknown which occupant was the driver at the time of the crash.

9 (Unknown) is used when it is unknown if there was a driver present in the vehicle at the time of the crash.

If coded **0 (No Driver Present/Not Applicable)** or **9 (Unknown**), all other elements on the Driver Level except <u>RELATED FACTORS-DRIVER LEVEL</u> must be left blank. A Person Level - Occupant of a Motor Vehicle form with <u>PERSON TYPE</u> equal to **01 (Driver of a Motor Vehicle In-Transport)** must not be submitted for that vehicle.

If coded **0** (No Driver Present/Not Applicable) or **9** (Unknown), <u>Related Factors-Driver Level</u> are coded "00" unless <u>UNIT TYPE</u> is equal to 1 (Motor Vehicle In-Transport [Inside or Outside the Trafficway]). In such a case, only select <u>RELATED FACTORS-DRIVER LEVEL</u> that are applicable.

Check	IF	THEN
(1H0F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS SPEEDING CONVICTIONS must be
		blank.
(1H2F)	DRIVER PRESENCE equals 0, 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE
		must be blank.
(1H3F)	DRIVER PRESENCE equals 0, 9,	NON-CDL LICENSE STATUS and COMMERCIAL
		MOTOR VEHICLE LICENSE STATUS must be blank.
(1H4F)	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE RESTRICTIONS must
		be blank.
(1H6F)	DRIVER PRESENCE equals 0, 9,	VIOLATIONS CHARGED must be blank.

### **Consistency Checks:**

Check	IF	THEN
(1H7F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS RECORDED CRASHES must be blank.
(1H8F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS RECORDED SUSPENSIONS must be blank.
(1H9F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS DWI CONVICTIONS must be blank.
(1HAF)	DRIVER PRESENCE equals 0, 9,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS must be blank.
(1HBF)	DRIVER PRESENCE equals 0, 9,	DATE OF LAST CRASH, SUSPENSION, CONVICTION must be blank.
(1HCF)	DRIVER PRESENCE equals 0, 9,	DATE OF FIRST CRASH, SUSPENSION, CONVICTION must be blank.
(1HDF)	DRIVER PRESENCE equals 0, 9,	DRIVER HEIGHT (feet and inches) must equal blank.
(1HEF)	DRIVER PRESENCE equals 0, 9,	DRIVER WEIGHT must equal blank.
(1HFF)	DRIVER PRESENCE equals 0, 9,	SPEEDING RELATED must be blank.
(1HJF)	DRIVER'S VISION OBSCURED BY equals 95,	DRIVER PRESENCE must equal 0 or 9.
(2F0F)	NUMBER OF OCCUPANTS equals 00,	DRIVER PRESENCE must equal 0.
(2H0F)	DRIVER PRESENCE equals 0, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 04, 08, 12, 13, 15, 16, 19, 52, 53, 58, 59, 73, 74, 77-88.
(2H1F)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER'S VISION OBSCURED BY must equal 95.
(3BAP)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0,	CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93 or 98.
(3BGP)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	DRIVER PRESENCE must equal 0 or 9.
(3H0F)	DRIVER PRESENCE equals 1,	there must be one and only one Person Level form for that vehicle with PERSON TYPE equal to 01, or there must be no Person Level form for that vehicle with PERSON TYPE equal to 01 and at least two Person Level forms for that vehicle with PERSON TYPE equal to 09.
(4H0F)	DRIVER PRESENCE equals 0, 9,	there must not be a Person Level form for that vehicle with PERSON TYPE equal to 01.
(5L0F)	RELATED FACTORS-DRIVER LEVEL equals 20,	DRIVER PRESENCE must not equal 1, 9.
(5L1F)	RELATED FACTORS-DRIVER LEVEL equals 04, 08, 12, 13, 15, 16, 19, 52, 53, 58, 59, 73, 74, 77-88,	DRIVER PRESENCE must not equal 0 or 9.
(6H0P)	DRIVER PRESENCE equals 0, 9,	DRIVER'S ZIP CODE must be blank.
(6H1P)	DRIVER PRESENCE equals 0, 9,	CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) must be blank.
(7B0F)	JACKKNIFE equals 2, 3,	DRIVER PRESENCE must equal 1.
(9A3P)	UNIT TYPE equals 2-4,	DRIVER PRESENCE must equal 0.
(9C4P)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER MANEUVERED TO AVOID must only equal 95.
	equals 0 or 9,	55.

Check	IF	THEN
(A080)	DRIVER PRESENCE equals 0, and FIRST	one RELATED FACTORS-DRIVER LEVEL should
	HARMFUL EVENT equals 12, and NUMBER	equal 20.
	OF VEHICLE FORMS SUBMITTED equals 002,	
(AZ20)	UNIT TYPE equals 1, and DRIVER PRESENCE	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION
	equals 0 or 9,	OF CRITICAL EVENT) must equal 00.
(BJOP)	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE ENDORSEMENTS
		must be blank.
(BJ1P)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER DISTRACTED BY must equal 16.
	equals 0 or 9,	
(BJ2P)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER DISTRACTED BY must not equal 16 or
	equals 1,	blank.
(BJ3P)	UNIT TYPE equals 1, and DRIVER	DRIVER PRESENCE must equal 0 or 9.
	DISTRACTED BY equals 16,	
(BJ5P)	If UNIT TYPE equals 1 and HIT AND RUN	then DRIVER PRESENCE should not equal 0.
	equals 1,	
(BNOP)	DRIVER PRESENCE equals 0, 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS
		must be blank.
(CBOP)	REGISTERED VEHICLE OWNER equals 6,	DRIVER PRESENCE must equal 0.
(D330)	DRIVER PRESENCE equals 0, and	REGISTERED VEHICLE OWNER should equal 3-6.
	REGISTRATION STATE is not equal to 00, 92,	
	99,	
(FD0F)	DRIVER PRESENCE is blank; case status is	
	flawed.	
(PB30)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one DRIVER PRESENCE must equal 0 for
	PEDESTRIAN equals 220,	the vehicle number identified in this person's
		VEHICLE NUMBER OF MOTOR VEHICLE STRIKING
		NON-MOTORIST.
(PB60)	PERSON TYPE equals 05 or 08, and DRIVER	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	PRESENCE equals 0 for the motor vehicle	PEDESTRIAN should equal 220.
	which strikes the non-motorist,	
(PB61)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	DRIVER PRESENCE should equal 0 for the motor
	PEDESTRIAN equals 220,	vehicle striking the non-motorist.

### Consistency Check (FARS Only):

Check	IF	THEN
(1H1F)	DRIVER PRESENCE equals 0, 9,	DRIVER'S LICENSE STATE must be blank.

### D5 - Driver's License State – FARS Only

FORMAT: 2 numeric SAS NAME: Vehicle.L\_STATE ELEMENT VALUES:

Codes	Attributes
01	Alabama
02	Alaska
03	American Samoa
04	Arizona
05	Arkansas
06	California
08	Colorado
09	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
14	Guam
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	Iowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana
31	Nebraska
32	Nevada

Codes	Attributes
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
43	Puerto Rico
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
52	Virgin Islands
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming
93	Indian Nation
94	U.S. Government
95	Canada
96	Mexico
97	Other Foreign Country
98	Not Reported
99	Unknown

**Definition:** This element identifies the state of issue for the license held by this driver.

**Remarks:** If no license is required or driver is not licensed, use the resident State of the driver. U.S. Government is used to indicate the license was issued by the U.S. Government, such as military or State Department Foreign Service.

### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

Check	IF	THEN
(1H1F)	DRIVER PRESENCE equals 0, 9,	DRIVER'S LICENSE STATE must be blank.
(1IOP)	DRIVER'S LICENSE STATE equals 99,	NON-CDL LICENSE STATUS must not equal 0-4, 6,
		and COMMERCIAL MOTOR VEHICLE LICENSE STATUS
		must not equal 00-08.
(1KOP)	DRIVER'S LICENSE STATE equals 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must
		not equal 0-3.
(210P)	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS must not
		equal 0-3.
(3I1P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS RECORDED
		CRASHES must equal 99.
(3I2P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS RECORDED
		SUSPENSIONS AND REVOCATIONS must equal 99.
(3I3P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS DWI
		CONVICTIONS must equal 99.
(3I4P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS SPEEDING
		CONVICTIONS must equal 99.
(3I5P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS OTHER
		MOVING VIOLATION CONVICTIONS must equal 99.
(BIOP)	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not
		equal 1, 2.
(CJ00)	PREVIOUS RECORDED CRASHES equals 98,	DRIVER'S LICENSE STATE should equal 09, 13, 28, 30,
		35, 49.
(D010)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS RECORDED CRASHES should equal 99.
(D020)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS RECORDED SUSPENSIONS AND
		REVOCATIONS should equal 99.
(D030)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS DWI CONVICTIONS should equal 99.
(D040)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS SPEEDING CONVICTIONS should equal 99.

### Consistency Checks (FARS Only):

Check	IF	THEN
(D050)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS OTHER MOVING VIOLATION
		CONVICTIONS should equal 99.
(D170)	DRIVER'S LICENSE STATE does not equal	DRIVER'S ZIP CODE should not equal 99999.
	93-99,	
(D180)	DRIVER LICENSE STATE equals 95-97,	DRIVER ZIP CODE should not equal 99999.
(D320)	DRIVER'S LICENSE STATE does not equal	DRIVER'S ZIP CODE should equal 99999 or be a valid
	93-99,	zip code for DRIVER'S LICENSE STATE.
(D480)	DRIVER'S LICENSE STATE equals 09, 13, 28,	PREVIOUS RECORDED CRASHES should equal 98.
	30, 35, 49,	
(D710)	DRIVER'S LICENSE STATE equals 02, 04, 09,	NON-CDL LICENSE TYPE should not equal 2.
	15, 20, 30, 38, 40,	
(U410)	UNLIKELY: DRIVER'S LICENSE STATE equals	
	98 if HIT AND RUN does not equal 1.	

### D6 - Driver's Zip Code

### FORMAT: 5 numeric SAS NAME: Vehicle.DR\_Zip ELEMENT VALUES:

Codes	Attributes
00000	Not a Resident of U.S. or Territories
nnnnn	Actual Value
99999	<u>Unknown</u>

**Definition:** This element identifies the zip code of this driver's area of residence.

### **Remarks:**

Code only the first five digits of nine-digit zip codes.

**00000 (Not Resident of US or Territories)** is used when the address found *in* the *case materials* indicates that the driver resides at an address which has not been assigned a ZIP code by the US Post Office.

**99999 (Unknown)** is used whenever the Zip code cannot be determined. For example, use this attribute when no information is provided on the *Police Crash Report* about the driver (e.g., hit-and-run). In addition, use this code if the driver, licensed or not, has no permanent address. For example, the driver could be living out of his/her vehicle (camper, motor home, etc.) or the driver could be "homeless."

If a ZIP CODE is listed on the Police Crash Report but it is not a valid number use attribute 99999 (Unknown).

### FARS SPECIAL INSTRUCTION:

Use the following guidelines to resolve discrepancies between the Police *Crash* Report and Driver License File:

- If the street address is the same on both sources but the zip codes differ, use the zip code from the License File.
- If you have internet access available, you may use the USPS Zip Code Look Up web site to confirm you have the correct address.
- If the street addresses on the two sources differ, then use the zip code for the address reported on the *Police Crash Report*.
- If you have both a residence address and a different mailing address (e.g., a P.O. Box) use the zip code for the residence address.

If the **Police Crash Report** indicates an address in-state and a driver's license from another state is recorded (with a different residence address), attempt to determine the most current address for the driver. If the most current address cannot be determined, use the zip code that corresponds to the address from the <u>DRIVER'S</u> <u>LICENSE STATE</u>.

### **CRSS SPECIAL INSTRUCTION:**

For the purposes of this variable, a driver is considered to reside at the address listed on the Police **Crash** Report. This address was most likely taken from the driver's license given to the police officer and/or from the licensing state's driver license file.

If the driver's address is present and the Zip code is missing or not available, then determine the correct Zip code by using the National Five Digit Zip Code & Post Office Directory.

### **Consistency Checks:**

Check	IF	THEN
(6H0P)	DRIVER PRESENCE equals 0, 9,	DRIVER'S ZIP CODE must be blank.
(BYOP)	DRIVER'S ZIP CODE must be a valid code,	
	blanks, 00000 or 99999.	
(D160)	NON-CDL LICENSE STATUS does not equal 9, or	DRIVER'S ZIP CODE should not equal 99999.
	COMMERCIAL MOTOR VEHICLE LICENSE	
	STATUS does not equal 99,	

### Consistency Checks (FARS Only):

Check	IF	THEN
(D170)	DRIVER'S LICENSE STATE does not equal 93-99,	DRIVER'S ZIP CODE should not equal 99999.
(D180)	DRIVER LICENSE STATE equals 95-97,	DRIVER ZIP CODE should not equal 99999.
(D320)	DRIVER'S LICENSE STATE does not equal 93-99,	DRIVER'S ZIP CODE should equal 99999 or be a
		valid zip code for DRIVER'S LICENSE STATE.

### D7 - Non-CDL License Type/Status – FARS Only

**FORMAT:** 1 numeric occurring 2 times. **SAS NAME:** Vehicle.L\_TYPE; Vehicle.L\_STATUS **ELEMENT VALUES:** 

#### Type

Codes	Attributes
0	Not Licensed
1	Full Driver License
2	Intermediate Driver License
7	Learner's Permit
8	Temporary License
9	Unknown License Type

#### <u>Status</u>

Codes	Attributes
0	Not Licensed
1	Suspended
2	Revoked
3	Expired
4	Canceled or Denied
6	Valid
9	Unknown License Status

**Definition:** This element identifies in two subfields the type of license held by this driver and the status of the license at the time of the crash.

**Source:** Official driver record and police report. Official driver records take precedence over police-reported information.

#### **Remarks:**

This element is used to establish the driver's license type and status for all license classes except the commercial driver's license (CDL). It also captures the type and status of the NON-CDL driving privilege for drivers with CDLs.

The NON-CDL License Type/Status is coded for all drivers, including drivers with a CDL.

Use the "<u>Type</u>" field to record whether the driver has a full driver's license, intermediate driver's license, learner's permit, temporary license, or is not licensed. Use the "<u>Status</u>" field to record if the license is valid, suspended, revoked, expired, canceled, or denied.

#### Note About Involved Drivers in the Military:

When involved drivers are in the military, the analyst should be cautious because some States automatically (without driver application) renew drivers' licenses or extend the license until the individual is discharged. Each state analyst should be familiar with their state's policy on military personnel and code these license variables accordingly. In addition, when out-of-state driver requests are made the analyst requesting the data should note that the driver is in the military.

**0** (Not Licensed) (for both Type and Status). **0** (Not Licensed) should be used only when it has been reasonably established that the driver is not licensed (anywhere). Takes precedence over all other NON-CDL License Type/Status attributes. Drivers who have a license but fail to have their license with them at the time of the crash should be coded according to the type (class) of license they possess and the validity of the license. If the police report indicates that the driver has "no license," the analyst should first determine whether this means that the person was not in possession of his/her license at the time of the crash, or that the driver is not a registered motor vehicle operator. A review of the violations cited section of the police report may yield some clues in this matter. If the person is cited for not possessing his/her license or for not having one, then code this information in variables D21 Violations Charged and D24 Related Factors-Driver Level. If the analyst is uncertain as to whether or not the person possesses a license, then code <u>Unknown</u> should be used.

### Non-CDL License Type Remarks:

**1 (Full Driver License)** is used for unlimited driving privileges (with no GDL restrictions). This is based on your state's eligibility guidelines.

**7 (Learner's Permit)** and **2 (Intermediate Driver License)** are the first two stages of a tiered licensing process that allows young drivers to obtain full driver license privileges through safe driving practices. Typical restrictions include minimum age requirements, passing vision/ knowledge tests, and supervision by adult driver over the age of 21. Other requirements may include limiting the number of passengers in the vehicle, occupants must wear seatbelts, zero alcohol tolerance, and no at-fault crashes or convictions for a period of time.

**NOTE:** *If* **7** (Learner's Permit) or **2** (Intermediate Driver License) has expired, code Type as **2** (Intermediate Driver License) or **7** (Learner's Permit) and Status as **3** (Expired).

**NOTE:** It is important that you know your state's Graduated Driver License restrictions. GDL program restrictions vary from state-to-state.

**2 (Intermediate Driver License)** is the second stage of obtaining a full license privilege. It is typically for drivers between the ages of 16 and 17, and does not require total supervision during daylight hours (e.g., adult supervision during the hours of midnight to 5 am). A **2 (Intermediate Driver License)** may be suspended or revoked under certain violations. Other conditions may include conviction-free performance, seat-belt use for occupants, and some age restrictions for passengers. If any restriction is violated, this GDL restriction period can be extended.

**NOTE: 2 (Intermediate Driver License)** does not apply for states that do not have a GDL program. However, your state may have a Learner's Permit. Also, your state may not use the name "Intermediate Driver License" and may call it something else.

**NOTE: 7 (Learner's Permit)** is the first stage of obtaining a full license privilege. It is typically for drivers between 14 and 16 years of age, and typically requires total adult supervision, seat-belt use for occupants, and conviction-free performance. If any restriction is violated, this GDL restriction period can be extended.

**8 (Temporary License)** includes any type of non-permanent license issued for a period of time less than that for a permanent license (e.g., temporary license to drive within a resort area; temporary license issued to foreign nationals). Short-term permanent licenses are not temporary (e.g., license issued to elderly drivers requiring frequent re-testing).

7 (Learner's Permit) and 2 (Intermediate Driver License) held by young drivers awaiting a 1 (Full Driver's License) are not to be coded 8 (Temporary License).

**9 (Unknown License Type)** should be used when the type of the license is unknown. **9 (Unknown License Type)** is also used when it is unknown whether the driver had a license or not (e.g., hit-and-run).

### **Non-CDL License Status Remarks:**

**0** (Not Licensed) should be used only when it has been reasonably established that the driver is not registered (anywhere). **0** (Not Licensed) takes precedence over all other Non-CDL License Status attributes. Drivers who have a license but fail to have their license with them at the time of the crash should be coded according to the type (class) of license they possess and the validity of the license. If the police report indicates that the driver has "no license," the analyst should first determine whether this means that the person was not in possession of his/her license at the time of the crash, or that the driver is not a registered motor vehicle operator. A review of the violations cited section of the police report may yield some clues in this matter. If the person is cited for not possessing his/her license or for not having one, then code this information in variables D21 Violations Charged and D24 Related Factors-Driver Level. If the analyst is uncertain as to whether or not the person possesses a license, then code <u>9</u> (Unknown) should be used.

**1 (Suspended), 2 (Revoked)** or **3 (Expired)** are used if a **1 (Full Driver License)** \* is suspended, revoked, or expired. A **2 (Intermediate Driver License)** may be **1 (Suspended)** or **2 (Revoked)** under certain violations. If **7 (Learner's Permit)** or **2 (Intermediate Driver License)** has expired, then code **3 (Expired)**.

### **Examples:**

If a **1 (Full Driver License)** is revoked or suspended but limited driving is permitted (e.g., to and from work), use the following criteria:

- a. If the crash occurs during permitted times of driving, code Non-CDL License Type as 1 (Full Driver License) and Status as 6 (Valid), code <u>Compliance with License Restrictions</u> as 1 (Restrictions Complied with), and code Related Factors-Driver Level as <u>19 (Legally Driving on Suspended or Revoked License)</u>.
- b. If the crash occurs during invalid times for driving, code Non-CDL License Type as 1 (Full Driver License) and Status as 1 (Suspended) or 2 (Revoked), code <u>Compliance with License Restrictions</u> as 2 (Restriction Not Complied with), and do NOT use Related Factors-Driver Level as 19 (Legally Driving on Suspended or Revoked License).

1 (Suspended) takes precedence over all other License Status attributes except 0 (Not Licensed).

**4 (Canceled or Denied)** is used whenever the driver's official driver record indicates the driver's license\* (1) was canceled; or (2) the driver's request for license, or an extension of one, was denied.

**6 (Valid)** refers to any license held by the driver that is valid for a class of vehicle\*. If the driver is in violation of some aspect of his/her license (e.g., one of the restrictions) do not consider the license as being not valid. Record the restriction on element <u>Compliance with License Restrictions</u> if applicable. If the police cite the driver for the violation, then the information would be recorded under elements <u>D21 Violations Charged</u> and/or <u>D24</u> <u>Related Factors-Driver Level</u>.

**9 (Unknown License Status)** should be used when the status of the license is unknown. **9 (Unknown License Status)** is also used when it is unknown whether the driver had a license or not (e.g., hit-and-run).

<u>See Cross Reference table for coding elements D7 and D10</u>, following the remarks section of element <u>D10</u> <u>License Compliance with Class of Vehicle</u>.

### \* NON-CDL privilege only

### **IMPORTANT NOTE:**

In distinguishing license requirements from restrictions, focus upon whether or not all drivers possessing the type of license are mandated to obey the requirement. If they are, then the requirement is not a restriction, but rather part of the definition of the license. Restrictions, on the other hand, are requirements specific to individual drivers.

### **Consistency Checks:**

Check	IF	THEN				
(1H3F)	DRIVER PRESENCE equals 0, 9,	NON-CDL LICENSE STATUS and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.				
(1IOP)	DRIVER'S LICENSE STATE equals 99,	NON-CDL LICENSE STATUS must not equal 0-4, 6, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must not equal 00-08.				
(5IOP)	NON-CDL LICENSE STATUS equals 0,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.				
(5I1P)	NON-CDL LICENSE STATUS for this person equals 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 99.				
(6IOP)	NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.				
(7IOP)	COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 19,	NON-CDL LICENSE STATUS must equal 6.				
(7KOP)	any VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.				
(8IOP)	NON-CDL LICENSE STATUS equals 0-4, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 19.				
(8J0P)	NON-CDL LICENSE TYPE equals 0,	NON-CDL LICENSE STATUS must equal 0.				
(8J1P)	NON-CDL LICENSE STATUS equals 0,	NON-CDL LICENSE TYPE must equal 0.				
(D060)	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.				
(D100)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS RECORDED CRASHES should equal 99.				
(D110)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.				
(D120)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS DWI CONVICTIONS should equal 99.				
(D130)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS SPEEDING CONVICTIONS should equal 99.				
(D140)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.				

Check	IF	THEN				
(D160)	NON-CDL LICENSE STATUS does not equal 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS does not equal 99,	DRIVER'S ZIP CODE should not equal 99999.				
(D260)	NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.				
(D340)	NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.				
(D350)	VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS should not equal 0, 3, 6, 9.				
(D380)	NON-CDL LICENSE STATUS equals 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should equal 1, 9.				
(D390)	NON-CDL LICENSE STATUS equals 0,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 2, 3, 8, 9.				
(D400)	NON-CDL LICENSE STATUS equals 0-4,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 3, 8, 9.				
(D620)	NON-CDL LICENSE TYPE equals 7,	AGE (for the driver) should equal 014-016.				
(D630)	NON-CDL LICENSE TYPE equals 2,	AGE (for the driver) should equal 015-017.				
(D640)	AGE equals 014-017, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 2, 7.				
(D650)	AGE equals 018-120, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 1.				
(D680)	NON-CDL LICENSE TYPE does not equal 0, 9,	NON-CDL LICENSE STATUS should not equal 0, 9.				
(D690)	NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal 73, 74.				
(D700)	NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal 74.				
(D710)	DRIVER'S LICENSE STATE equals 02, 04, 09, 15, 20, 30, 38, 40,	NON-CDL LICENSE TYPE should not equal 2.				
(D730)	RELATED FACTORS-DRIVER LEVEL equals 73,	COMPLIANCE WITH LICENSE RESTRICTIONS should equal 2, and NON-CDL LICENSE TYPE should equal 2, 7.				

See the following tables for additional guidance for coding Non-CDL License Type/Status for young drivers with GDL License (7 (Learner's Permit) and 2 (Intermediate Driver Licenses)) and CDL Drivers:

No.	<b>Coding Scenarios for CDL Licenses</b>	<u>D7</u>	<u>D7</u>	<u>D8</u>	<u>D10</u>	<u>D11</u>
		Non-CDL	Non-CDL	<u>CMV</u>	<u>Comp</u>	Comp w/
		<u>Type</u>	<u>Status</u>	<u>Status</u>	w/ Class	Restriction
1.	CDL w/no endorsement valid, driving a CDL	1	6	6	3	0
	vehicle (no endorsement required). Non-CDL					
	License Type/Status is Full License/Valid.					
2.	CDL w/hazardous material endorsement,	1	6	6	3	1
	valid driving CDL vehicle w/hazardous cargo.					
	Non-CDL License Type/Status is Full					
	License/Valid.					
3.	CDL w/hazardous material endorsement,	1	6	6	3	0
	valid driving non-CDL vehicle. Non-CDL					
	License Type/Status is Full License/Valid.					
4.	CDL w/ no endorsements suspended, driving	1	6	1	2	2
	a CDL (double bottom) vehicle. Non-CDL					
	License Type/Status is Full License/Valid.					
5.	CDL w/tanker endorsement, disqualified,	1	1	5	2	1
	driving a tanker. Non-CDL License					
	Type/Status is Full License/Suspended.					
6.	CDL w/tanker endorsement suspended,	1	6	1	3	0
	driving a non-CDL vehicle. Non-CDL License					
	Type/Status is Full License/Valid.					
7.	Non-CDL license driving CDL 24 passenger	1	6	0	2	2
	bus. Non-CDL License Type/Status is Full					
	License/Valid.					
8.	Non-CDL license driving 24 passenger bus.	1	1	0	2	2
	Non-CDL License Type/Status is Full					
	License/Suspended.			6		
9.	*CDL w/no endorsements valid, driving CDL	1	1	6	8	9
	vehicle (endorsement requirement					
	unknown). Non-CDL License Type/Status is					
10	Full License/Suspended.			6	2	0
10.	*CDL w/no endorsements *CDL w/tanker	1	1	6	2	0
	endorsements valid, driving non-CDL vehicle. Non-CDL License Type/Status is Full					
	· · ·					
11	License/Suspended.	1	1	6	2	0
11.	*CDL w/tanker endorsements valid, driving non-CDL vehicle. Non-CDL License	L 1	L 1	O	2	U
	Type/Status is Full License/Suspended.					

### **Coding Scenarios for CDL Licenses**

\* possible, but unlikely situation

No.	Coding Scenarios for Graduated Driver's Licensing Program	D7 Non-CDL Type	D7 Non-CDL Status	D11 Comp. w/ Restriction	D24 Related Factors- Driver Level
1.	A 16-year-old driver with a valid Intermediate License driving a vehicle during prohibited driving hours without corrective lenses.	2	6	2	73, 74
2.	A 15-year-old with a valid Learner's Permit driving alone (adult supervision required).	7	6	2	73
3.	A 16-year-old with a valid Intermediate License not complying with seat-belt requirement during permitted daytime driving hours.	2	6	2	73
4.	A 17-year-old driver with a valid Intermediate License. The officer reported there was a 19-year-old non-family passenger, in violation of the state's GDL requirements.	2	6	2	73
5.	An 18-year-old driver with an expired Learner's Permit driving with no violations of GDL restrictions.	7	3	1	00
6.	A 15-year-old with a suspended Learner's Permit is driving without required prescription lenses, and is complying with all GDL restrictions.	7	1	2	74
7.	A driver with a suspended Intermediate Driver's License complying with all GDL restrictions.	2	1	1	00
8.	A 19-year-old with a valid Intermediate License which was extended due to prior GDL violations is driving a truck greater than 26,000 lbs. requiring a CDL during prohibited hours.	2	6	2	73
9.	A driver with a valid Full Driver's License driving without required corrective lenses.	1	6	2	74

### **D8 - Commercial Motor Vehicle License Status – FARS Only**

FORMAT: 2 numeric SAS NAME: Vehicle.CDL\_STAT ELEMENT VALUES:

Codes	Attributes
00	No (CDL)
01	Suspended
02	Revoked
03	Expired
04	Canceled or Denied
05	Disqualified
06	Valid
07	Learner's Permit
08	Other - Not Valid
99	Unknown License Status

Definition: This element indicates the status for a driver's Commercial Driver's License (CDL) if applicable.

Remarks: This element indicates the status for a driver's Commercial Driver's License (CDL).

As of April 1, 1992, all states require a driver to have a CDL for driving a **commercial motor vehicle in excess of 26,000 pounds**; or for transporting hazardous materials in sufficient amounts to be placarded; or for transporting 16 or more passengers, including the driver.

See the <u>Coding Scenarios for CDL Licenses table</u> for guidance on coding this element and related driver status elements.

**05 (Disqualified)** is used for commercial drivers who have their CDL privilege taken away for violations against the federal regulations. Although similar to suspension, the reasons for "disqualification" of a CDL may differ from state suspension reasons.

**08 (Other - Not Valid)** should be used when a CDL is surrendered or not valid due to the lack of medical clearance.

**99 (Unknown License Status)** should be used when the status of the CDL license is unknown or when it is unknown whether the driver had a CDL license or not (e.g., hit-and-run).

Check	IF	THEN	
(1H3F)	DRIVER PRESENCE equals 0, 9,	NON-CDL LICENSE STATUS and COMMERCIAL MOTOR	
		VEHICLE LICENSE STATUS must be blank.	
(1IOP)	DRIVER'S LICENSE STATE equals 99,	NON-CDL LICENSE STATUS must not equal 0-4, 6, and	
		COMMERCIAL MOTOR VEHICLE LICENSE STATUS must	
		not 00-08.	
(5I1P)	NON-CDL LICENSE STATUS for this person	COMMERCIAL MOTOR VEHICLE LICENSE STATUS	
	equals 9,	should equal 99.	

#### Consistency Checks:

Check	IF	THEN			
(6IOP)	NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.			
(7KOP)	STATUS equals 00, any VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS mus equal 01, 02, 05.			
(BNOP)	DRIVER PRESENCE equals 0, 9,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.			
(CCOP)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1.			
(D060)	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.			
(D160)	NON-CDL LICENSE STATUS does not equal 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS does not equal 99,	DRIVER'S ZIP CODE should not equal 99999.			
(D260)	NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.			
(D270)	BODY TYPE equals 50-52, 55, 63, 66, 72, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.			
(D280)	VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.			
(D300)	HM2 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00 or 99.			
(D340)	NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.			
(D420)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH CDL ENDORSE-MENTS should not equal 1-3.			
(D430)	COMPLIANCE WITH CDL ENDORSEMENTS equals 1-3,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.			
(D440)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	BODY TYPE should not equal 50-52, 55, 63, 66, 72, and HM2 should not equal 2.			
(D450)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	VEHICLE CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.			
(D460)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 0, 3, 9.			
(V090)	HM1 equals 2,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 06, 99.			
(V100)	HM1 equals 2, and RELATED FACTORS- DRIVER LEVEL does not equal 19,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.			

### **D9 - Compliance With CDL Endorsements – FARS Only**

#### FORMAT: 1 numeric SAS NAME: Vehicle.L\_ENDORS ELEMENT VALUES:

Codes	Attributes
0	No Endorsement(s) Required for the vehicle
1	Endorsement(s) Required, complied with
2	Endorsement(s) Required, not complied with
3	Endorsement(s) Required, compliance unknown
9	Unknown, if required

**Definition:** This element indicates whether the vehicle driven at the time of the crash requires endorsement(s) on a Commercial Driver's License (CDL) and whether this driver is complying with the CDL endorsements.

**Remarks:** These endorsements include: double/triple bottoms, passenger vehicles with 16 passengers, tank, hazardous materials, combined tank/hazardous materials, and others. This element is to be coded independently from CDL Status. The driver is not automatically failing to comply with a CDL endorsement by not having a valid CDL. See the <u>Guidance on Coding This Element per License Type and Vehicle</u> section below.

**0 (No Endorsements Required for the vehicle)** is used when this vehicle requires no special endorsement on a CDL or requires no CDL to operate.

**1 (Endorsement(s) Required, complied with)** is used when this vehicle requires a CDL and requires a particular endorsement or set of endorsements, and the driver has a CDL and is in compliance with the specific endorsements. (Note: The status of the CDL is not used in determining if the driver has complied with the endorsement.)

**2 (Endorsement(s) Required, not complied with)** is used when this vehicle requires a CDL and particular endorsement(s) on the CDL, but the driver does not have a CDL or does not have the particular endorsement(s) required for the vehicle driven. The driver may have some other endorsement(s). (Note: The status of the CDL is not used in determining if the driver has complied with the endorsement.)

**3 (Endorsement(s) Required, compliance unknown)** is used when this vehicle requires a CDL and particular endorsement(s) on the CDL, but it is not known whether the driver was in compliance with the particular endorsement(s) or it is not known whether the driver had a CDL.

**9 (Unknown, if required)** is used when it is unknown if the vehicle requires a CDL, or when it is unknown if an endorsement is required on a CDL to operate the crash vehicle. The driver may or may not have a CDL.

#### Guidance on Coding This Element per License Type and Vehicle

The tables below provide guidance for coding this element for the type of license and vehicle driven in the crash:

NOII-CDE DIIVEI LICEIISE				
VEHICLE DRIVEN IN THE CRASH	D9			
Automobile	0			
Non-CDL Truck/Bus	0			
CDL, Not Requiring Endorsement	0			
CDL, Requiring Endorsement	2			
CDL, Unknown If Required	9			

**Non-CDL Driver License** 

#### CDL with No Endorsement

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	2
CDL, Unknown If Required	9

#### **CDL** with Endorsement

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Matching Endorsement	1
CDL, W/Different Endorsement	2
CDL, Unknown If Required	9

#### CDL, Endorsement Unknown

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	3
CDL, Unknown If Required	9

#### **CDL Unknown**

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	3
CDL, Unknown If Required	9

#### Not Licensed

VEHICLE DRIVEN IN THE CRASH	D9
Automobile	0
Non- CDL Truck/Bus	0
CDL, Not Requiring Endorsement	0
CDL, Requiring Endorsement	2
CDL, Unknown If Required	9

Check	IF	THEN
(4S1P)	BODY TYPE equals 80-89, 96, and HM1 does	COMPLIANCE WITH CDL ENDORSEMENTS MUST
	not equal 1,	equal 0.
(BIOP)	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 2.
(BJOP)	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE ENDORSEMENTS must be blank.
(ВКОР)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 1,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1-3, 9.
(BLOP)	COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 19,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
(CCOP)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, 99,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1.
(CG0P)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 3.
(D310)	HM2 equals 2,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 1-3.
(D410)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3, 9.
(D420)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3.
(D430)	COMPLIANCE WITH CDL ENDORSEMENTS equals 1-3,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 00.
(D460)	COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 99,	COMPLIANCE WITH CDL ENDORSEMENTS should equal 0, 3, 9.

### D10 - License Compliance with Class of Vehicle - FARS Only

#### FORMAT: 1 numeric SAS NAME: Vehicle.L\_COMPL ELEMENT VALUES:

Codes	Attributes	
0	Not licensed	
1	No license required for this class vehicle	
2	No valid license for this class vehicle	
3	Valid license for this class vehicle	
8	Unknown if CDL and/or CDL endorsement required for this vehicle	
9	<u>Unknown</u>	

**Definition:** This element refers to the type of license possessed or not possessed by the driver for the class of vehicle being driven at the time of the crash.

**Source:** Official driver record and police report. Official driver records take precedence over police reported information.

**Remarks:** This element is coded according to the driver's <u>Non-CDL License Status</u> when driving a vehicle not requiring a CDL and to the driver's <u>Commercial Motor Vehicle License Status</u> when driving a vehicle requiring a CDL.

Also see <u>Remarks for D7 on military personnel</u>.

**0** (Not licensed) should be used only when it has been reasonably established that the driver is not licensed (anywhere) and where <u>D7</u> equals **0** (Not licensed). Drivers who have a license but fail to have their license with them at the time of the crash should be coded according to the type of license they possess and the class of vehicle they were driving. **0** (Not licensed) should not be used in this instance. If the police report indicates that the driver has "no license," the analyst must first determine whether this means the person was not in possession of his/her license at the time of the crash or that the driver is not a licensed motor vehicle operator. A review of the violations cited section of the police report might yield some clues in this matter. If the person is cited for not possessing his/her license or for not having one, then code this information in variables <u>D21</u> <u>Violations Charged</u> and <u>D24 Related Factors-Driver Level</u>. If the analyst is uncertain as to whether or not the person possesses a license, then <u>9</u> (Unknown) should be used.

**1 (No license required for this class vehicle)** means that a license was not required for the vehicle being driven (e.g., mopeds in some states).

**2** (No valid license for this class vehicle) may be used for suspended, revoked, canceled, or expired driving privileges. It also refers to drivers with a valid license but not for the class of vehicle driven at the time of the crash. As an example, the driver has an "operator's license" when a "public passenger" type of license is required. For this driver, **2** (No valid license for this class vehicle) should be coded. Another common situation occurs when a separate license is required for a motorcycle. If the driver possesses a valid license for a passenger car but not for the motorcycle, then **2** (No valid license for this class vehicle) should be used if the driver was involved in this crash while driving a motorcycle.

A license (or a portion of the license applicable to the class vehicle driven) that is not in effect because of some action taken by the State, such as suspended, revoked, etc., is not to be coded as valid. Similarly, learner's permits that are not used under the proper conditions (for example, a required licensed driver for the class of vehicle driven is not present to accompany the driver involved) are not to be coded as valid either.

2 (No valid license for this class vehicle) should be used for suspended, revoked, disqualified, canceled, or expired CDL licenses when the vehicle requires a CDL (see table for Coding Scenarios for CDL Licenses).

3 (Valid license for this class vehicle) refers to the class of vehicle being driven. As an example, the driver has a "motorcycle" driver's license only and was driving a motorcycle at the time of the crash; 3 (Valid license for this class vehicle) should be used. On the other hand, a driver might possess a multiple-class license allowing him or her to drive a passenger car as well as a motorcycle. If the vehicle being driven at the time of the crash is a passenger car, also code this element 3 (Valid license for this class vehicle). If the vehicle driver requires a CDL and the CDL status is valid, use 3 (Valid license for this class vehicle).

8 (Unknown if CDL and/or CDL endorsement required for the vehicle) should be used if it cannot be determined if the vehicle driven requires a CDL or CDL endorsement. There should be sufficient cause to suspect the need for a CDL or CDL endorsement to use this code, such as the vehicle's size (26,001 lbs. or more), configuration (tractor/trailer, combinations, tankers, etc.), or possibly hauling hazardous cargo.

9 (Unknown) should be used when the driver has a license but the type or validity are uncertain or if it is unknown whether the driver had a license or not (e.g., hit-and-run).

A cross-reference table for coding variables D7 and D10 follows. Consult this table only when the driver is operating a vehicle that does not require a CDL.

D10 (License Compliance with Class of Vehicle)						ehicle)
D7 (Status)	0	1	2	3	8	9
0	Y	Y	N	N	N	N
1	N	Y	Y	N	N	N
2	N	Y	Y	N	N	N
3	N	Y	Y	N	N	N
4	N	Y	Y	N	N	N
6	N	Y	Y	Y	N	Y
9	N	Y	N	N	N	Y

#### Cross Reference Table for D7 and D10:

Y = Valid Combination

N = Invalid Combination

**REMINDER:** D7 applies to any license entry in the driver's record (except CDL). D10 applies to this vehicle only.

Check	IF	THEN		
(1H2F)	DRIVER PRESENCE equals 0, 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must be blank.		
(1KOP)	DRIVER'S LICENSE STATE equals 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must not equal 0-3.		
(6LOP)	COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 19,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.		
(8LOP)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-2, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 19.		
(9JOP)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, 1,	COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3, 9.		
(ВКОР)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 1,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1-3, 9.		
(BLOP)	COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 19,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.		
(CG0P)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 3.		
(D340)	NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 01-08, 99,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 0.		
(D380)	NON-CDL LICENSE STATUS equals 9,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should equal 1, 9.		
(D390)	NON-CDL LICENSE STATUS equals 0,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 2, 3, 8, 9.		
(D400)	NON-CDL LICENSE STATUS equals 0-4,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE should not equal 3, 8, 9.		
(D410)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0,	COMPLIANCE WITH CDL ENDORSEMENTS should not equal 1-3, 9.		

### **D11 - Compliance with License Restrictions – FARS Only**

#### FORMAT: 1 numeric SAS NAME: Vehicle.L\_RESTRI ELEMENT VALUES:

Codes	Attributes
0	No Restrictions or Not Applicable
1	Restrictions Complied With
2	Restrictions Not Complied With
3	Restrictions, Compliance Unknown
9	Unknown

Definition: This element identifies if a driver was compliant with restrictions on their license.

**Remarks:** Refers to both physical restrictions (corrective lenses, automatic transmission, etc.) and imposed restrictions (limited driving). Starting in 2004, it also refers to any limitations imposed on Learner's Permits and Intermediate Licenses in states with Graduated Driver Licensing (GDL) programs. (e.g., driving during prohibited periods [midnight to 5 AM]; driving without adult supervision, etc.). (See <u>Coding Scenarios for GDL Licensing</u> <u>Program</u> table.)

Code all applicable restrictions regardless of license status.

#### **Examples:**

If a <u>Non-CDL License Type</u> of **1 (Full Driver License)** is revoked or suspended but limited driving is permitted (e.g., to and from work), use the following criteria:

- a. If the crash occurs during permitted times of driving, code <u>Non-CDL License Type</u> as 1 (Full Driver License) and Status as 6 (Valid), code Compliance with License Restrictions as <u>1 (Restrictions</u> <u>Complied with)</u>, and code Related Factors-Driver Level as <u>19 (Legally Driving on Suspended or Revoked License)</u>.
- b. If the crash occurs during invalid times for driving, code <u>Non-CDL License Type</u> as 1 (Full Driver License) and Status as 1 (Suspended) or 2 (Revoked), code Compliance with License Restrictions as 2 (<u>Restriction Not Complied with</u>), and do NOT use Related Factors-Driver Level as 19 (Legally Driving on Suspended or Revoked License).

If due to a CDL, a driver has more than one license restriction, code compliance for the most appropriate license restrictions based on the vehicle being driven at the time of the crash. (i.e. – if vehicle being driven requires a CDL, use the CDL license restrictions).

**0** (No Restrictions or Not Applicable) is used when the driver has no restrictions on their license, when the driver is unlicensed or when they are operating a vehicle that does not require a license.

**1 (Restrictions Complied With)** is used when the driver is in compliance with the restrictions for their driver's license.

**2 (Restrictions Not Complied With)** is used when the driver is not compliant with the restrictions for their driver's license.

**3 (Restrictions, Compliance Unknown)** is used when it is known that this driver has restrictions on their license but compliance is not known.

**9 (Unknown)** is used when it is unknown if the driver is licensed or when it is unknown if a licensed driver had restrictions.

Check	IF	THEN
(1H4F)	DRIVER PRESENCE equals 0, 9,	COMPLIANCE WITH LICENSE RESTRICTIONS must
		be blank.
(2I0P)	DRIVER'S LICENSE STATE equals 99,	COMPLIANCE WITH LICENSE RESTRICTIONS must
		not equal 0-3.
(5I0P)	NON-CDL LICENSE STATUS equals 0,	COMPLIANCE WITH LICENSE RESTRICTIONS must
		not equal 1-3, 9.
(6IOP)	NON-CDL LICENSE STATUS equals 9, and	COMPLIANCE WITH LICENSE RESTRICTIONS must
	COMMERCIAL MOTOR VEHICLE LICENSE	not equal 1-3.
	STATUS equals 00,	
(6L0P)	COMPLIANCE WITH LICENSE RESTRICTIONS	LICENSE COMPLIANCE WITH CLASS OF VEHICLE
	equals 1, and RELATED FACTORS-DRIVER	must equal 3.
	LEVEL equals 19,	
(7I0P)	COMPLIANCE WITH LICENSE RESTRICTIONS	NON-CDL LICENSE STATUS must equal 6.
	equals 1, and RELATED FACTORS-DRIVER	
	LEVEL equals 19,	
(8J2P)	RELATED FACTORS-DRIVER LEVEL equals 73,	COMPLIANCE WITH LICENSE RESTRICTIONS must
	74,	equal 2.
(9J0P)	LICENSE COMPLIANCE WITH CLASS OF	COMPLIANCE WITH LICENSE RESTRICTIONS must
	VEHICLE equals 0, 1,	not equal 1-3, 9.
(D260)	NON-CDL LICENSE STATUS equals 9, or	COMPLIANCE WITH LICENSE RESTRICTIONS
	COMMERCIAL MOTOR VEHICLE LICENSE	should not equal 0.
	STATUS equals 99,	
(D690)	NON-CDL LICENSE TYPE equals 2, 7, and	RELATED FACTORS-DRIVER LEVEL should equal
	COMPLIANCE WITH LICENSE RESTRICTIONS	73, 74.
	equals 2,	
(D700)	NON-CDL LICENSE TYPE equals 1, and	RELATED FACTORS-DRIVER LEVEL should equal
	COMPLIANCE WITH LICENSE RESTRICTIONS	74.
	equals 2,	
(D730)	RELATED FACTORS-DRIVER LEVEL equals 73,	COMPLIANCE WITH LICENSE RESTRICTIONS
		should equal 2, and NON-CDL LICENSE TYPE
		should equal 2, 7.

## **D12** - Driver Height – FARS Only

#### **FORMAT:** 1 set 1 numeric, 1 set 2 numeric **SAS NAME:** Vehicle.DR\_HGT **ELEMENT VALUES:**

#### FEET

Codes	Attributes	
0	See Inches	
2-8	Actual Feet	
9	Unknown	

#### INCHES

Codes	Attributes
00-11, 24-96	Actual Inches
98	Other
99	Unknown

Definition: This element identifies a driver's height.

**Remarks:** Use the driver licensing files to code this element. The Coroner's Report may be used and may contain more current/accurate information.

Code the driver's height in feet and inches, if available. Inches less than 10 must be right-justified with a leading "0" (e.g., nine inches is coded "09"). If Height is only available in total inches, then code INCHES and code FEET as "0."

The tallest Height that can be recorded in total INCHES is 96 inches (8 ft.). The tallest Height that can be recorded in FEET and INCHES is 8 ft. – 11 inches. If the driver is taller than 96 inches, then you must code Height as feet and inches. If the driver is taller than 8 ft. – 11 inches, then you must code the DRIVER HEIGHT as "Other" (0 FEET, 98 INCHES).

DRIVER HEIGHT less than "3 Feet" or greater than "7 Feet – 0 Inches" or less than "36 Inches" or greater than "0 Feet – 84 Inches" will raise an error flag.

Check	IF	THEN
(1HDF)	DRIVER PRESENCE equals 0, 9,	DRIVER HEIGHT (feet and inches) must equal blank.
(4H1P)	DRIVER HEIGHT/INCHES is less than 12,	DRIVER HEIGHT/FEET must not be blank nor equal
		to 0.
(4H2P)	DRIVER HEIGHT/INCHES is greater than 11,	DRIVER HEIGHT/FEET must equal 0.
(4H3P)	DRIVER HEIGHT/FEET is 2-8,	DRIVER HEIGHT/ INCHES must equal 00-11.
(4H4P)	DRIVER HEIGHT/FEET equals 9,	DRIVER HEIGHT/INCHES must equal 99.
(4H5P)	DRIVER HEIGHT/INCHES equals 99,	DRIVER HEIGHT/FEET must equal 9.
(4H6P)	DRIVER HEIGHT/INCHES equals 98,	DRIVER HEIGHT/FEET must equal 0.
(4H7P)	DRIVER HEIGHT/FEET is 0,	DRIVER HEIGHT/INCHES must equal 24-96, 98.
(D600)	DRIVER HEIGHT/INCHES is greater than 11,	DRIVER HEIGHT/INCHES should not be less than 48.
(D610)	DRIVER HEIGHT/FEET is not blank and not	DRIVER HEIGHT/FEET should not be less than 3.
	equal to 0,	

Check	IF	THEN
(U260)	UNLIKELY: DRIVER HEIGHT is less than 3	
	feet or greater than 7 feet, verify data.	
(U280)	UNLIKELY: DRIVER HEIGHT is less than 36	
	inches or greater than 84 inches, verify	
	data.	

## **D13** - Driver Weight – FARS Only

#### FORMAT: 3 numeric SAS NAME: Vehicle.DR\_WGT ELEMENT VALUES:

Codes	Attributes
040-700	Actual weight in pounds
998	Other
999	Unknown

**Definition:** This element identifies a driver's weight.

**Remarks:** Use the driver licensing files to code this element. The Coroner's Report may be used and may contain more current/accurate information.

Code the driver's weight in pounds, if available.

Weight should be right justified.

Weights less than 100 lbs. must be coded with a leading "0" in the left-most position (e.g., 98 lbs. is coded "098").

DRIVER WEIGHT less than 50 lbs. or greater than 399 lbs. will raise an error flag.

Check	IF	THEN
(1HEF)	DRIVER PRESENCE equals 0, 9,	DRIVER WEIGHT must equal blank.
(U290)	UNLIKELY: DRIVER WEIGHT is less than 50 lbs.	
	or greater than 399 lbs., verify data.	

## D14, D15, D16, D17, D18 - Driver Level Counters – FARS Only

D14 - Previous Recorded Crashes\* D15 - Previous Recorded Suspensions and Revocations\* D16 - Previous DWI Convictions\* D17 - Previous Speeding Convictions\* D18 - Previous Other Moving Violation Convictions\*

FORMAT: 2 numeric for each element

**SAS NAME:** Vehicle.PREV\_ACC, Vehicle.PREV\_SUS, Vehicle.PREV\_DWI, Vehicle.PREV\_SPD, Vehicle.PREV\_OTH **ELEMENT VALUES:** 

Codes	Attributes	
00	None	
01-97	Actual Value, but any value greater than 05 will be questioned (except for "Previous Recorded	
	Suspensions and Revocations" when any value greater than 10 will be questioned).	
98	Crashes not reported on Driving Record (valid only for Previous Recorded Crashes)	
99	Unknown	

**Definition for Previous Recorded Crashes:** This element records any previous crashes for this driver. Count only events occurring within **five years** from the crash date.

**Definition for Previous Recorded Suspensions and Revocations:** This element records any previous license suspensions or revocations for this driver. Count only the events occurring within **five years** from the crash date. If it can be identified on the driving record, do not include in this count recorded suspensions and revocations resulting from non-traffic related issues or offenses (e.g., failure to pay child support, failure to appear in court for a non-driving offense, a suspension imposed for a drug-related offense not involving the operation of a motor vehicle). Also note that "cancellation" of a CDL license is not counted here.

**Definition for Previous DWI Convictions:** This element records any previous DWI convictions for this driver. Count only the events occurring within **five years** from the crash date.

**Definition for Previous Speeding Convictions:** This element records any previous Speeding convictions for this driver. Count only the events occurring within **five years** from the crash date.

**Definition for Previous Other Moving Violation Convictions:** This element records any other previous moving violation convictions for this driver. Count only the events occurring within **five years** from the crash date. This count excludes non-moving violations noted in the driver history. Examples include, registration or title violations, operating a motor vehicle without insurance, failure to pay required toll, improper/illegal parking, leaving child unattended in vehicle, driving on a suspended/revoked license, etc.

**Remarks:** If a driver has been DISQUALIFIED for a CDL, record this event in <u>PREVIOUS RECORDED SUSPENSIONS</u> <u>AND REVOCATIONS</u>. DO NOT include the current crash in any of the counters.

Remember there is a difference between a violation and a conviction. The violation is not counted in <u>Previous</u> <u>DWI</u>, <u>Previous Speeding</u>, and <u>Previous Other Moving Violation Convictions</u>. These elements refer ONLY TO CONVICTIONS. Both convictions and violations appear on driver records in many states. Be careful that you code the conviction dates and NOT the violation dates.

DWI refers to both alcohol and drug convictions.

When you are responding to another state's request for driver data, do the following:

- 1. In the counters, record both in-state and out-of-state convictions, crashes, suspensions, and revocations that appear on your state's record.
- 2. List out-of-state activity that is included in the counters in the area provided on *the* Out-of-State Driver Data Response through *MDE*.

Drivers can have a driving record or driver's license from more than one state. When you are coding the driver level counter elements (<u>Crashes</u>, <u>Suspensions</u>, <u>Revocations</u>, <u>DWI</u>, <u>Speeding</u>, and <u>Other Moving Violation</u> <u>Convictions</u>), be sure to combine distinct events from all of the records you have. Be careful not to double-count the same event. Also use Related Factors – Driver Level <u>89 (Driver has a Driving Record or Driver's License from</u> <u>More Than One State</u>) when this situation occurs.

<u>PREVIOUS OTHER MOVING VIOLATION CONVICTIONS</u> includes all other motor vehicle convictions. Some examples of convictions include:

- running a red light,
- reckless driving,
- improper lane changing,
- failure to yield, etc.

#### \* For Element \_\_\_\_\_, Values greater than \_\_\_\_\_ are unlikely and will raise an error flag:

Element	Value
PREVIOUS RECORDED CRASHES	8
PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS	10
PREVIOUS DWI CONVICTIONS	8
PREVIOUS SPEEDING CONVICTIONS	8
PREVIOUS OTHER MOVING VIOLATION CONVICTIONS	8

Make sure you know what constitutes a MOVING VIOLATION in your state. The DMV should be able to help you determine these.

Check	IF	THEN
(1H7F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS RECORDED CRASHES must be blank.
(1H8F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS RECORDED SUSPENSIONS must be blank.
(1H9F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS DWI CONVICTIONS must be blank.
(1H0F)	DRIVER PRESENCE equals 0, 9,	PREVIOUS SPEEDING CONVICTIONS must be blank.
(1HAF)	DRIVER PRESENCE equals 0, 9,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS must be blank.
(1J0P)	any counter equals 99,	all counters must equal 99.
(1J1P)	any counter equals 99,	DATE OF LAST CRASH, SUSPENSION, CONVICTION must equal 999999.
(1J2P)	any counter equals 99,	DATE OF FIRST CRASH, SUSPENSION, CONVICTION must equal 999999.
(2JOP)	all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99,	DATE OF LAST CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
(2J1P)	all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99,	DATE OF FIRST CRASH, SUSPENSION, CONVICTION must not equal 000000, 9999999.
(3I1P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS RECORDED CRASHES must equal 99.
(3I2P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS must equal 99.
(3I3P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS DWI CONVICTIONS must equal 99.
(3I4P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS SPEEDING CONVICTIONS must equal 99.
(3I5P)	DRIVER'S LICENSE STATE equals 99,	all driver history counters PREVIOUS OTHER MOVING VIOLATION CONVICTIONS must equal 99.
(4JOP)	all counters are not blanks and the sum of all counters less than 98 is equal to 1,	DATE OF LAST CRASH, SUSPENSION, CONVICTION must equal DATE OF FIRST CRASH, SUSPENSION, CONVICTION.
(CJ00)	PREVIOUS RECORDED CRASHES equals 98,	DRIVER'S LICENSE STATE should equal 09, 13, 28, 30, 35, 49.
(D010)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS RECORDED CRASHES should equal 99
(D020)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.
(D030)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS DWI CONVICTIONS should equal 99.
(D040)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS SPEEDING CONVICTIONS should equal 99.
(D050)	DRIVER'S LICENSE STATE equals 96, 97,	PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.

Check	IF	THEN
(D100)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS RECORDED CRASHES should equal 99.
(D110)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.
(D120)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS DWI CONVICTIONS should equal 99.
(D130)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS SPEEDING CONVICTIONS should equal 99.
(D140)	NON-CDL LICENSE STATUS equals 9,	all driver history counters PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.
(D480)	DRIVER'S LICENSE STATE equals 09, 13, 28, 30, 35, 49,	PREVIOUS RECORDED CRASHES should equal 98.
(U210)	UNLIKELY: PREVIOUS RECORDED CRASHES is greater than 8 and less than 98.	
(U220)	UNLIKELY: PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS is greater than 10 and less than 98.	
(U230)	UNLIKELY: PREVIOUS DWI CONVICTIONS is greater than 8 and less than 98.	
(U240)	UNLIKELY: PREVIOUS SPEEDING CONVICTIONS is greater than 8 and less than 98.	
(U250)	UNLIKELY: PREVIOUS OTHER MOVING VIOLATION CONVICTIONS is greater than 8 and less than 98.	

## D19, D20 - Date of First and Last Crash, Suspension, Conviction -FARS Only

**FORMAT:** 1 set 2 numeric, 1 set 4 numeric for each element. **SAS NAME:** Vehicle.FIRST\_MO, Vehicle.FIRST\_YR / Vehicle.LAST\_MO, Vehicle.LAST\_YR ELEMENT VALUES:

#### MONTH

Codes	Attributes
00	No Record
01-12	Actual Month
99	Unknown

#### YEAR

Codes	Attributes
0000	No Record
	All 4 Digits of Actual Year
9999	Unknown

**Definition for Date of First Crash, Suspension, Conviction:** This element identifies the date of the first crash, suspension, or conviction recorded in elements <u>D14 through D18</u>. Count only dates of events occurring within **five years** from the crash date.

**Definition for Date of Last Crash, Suspension, Conviction:** This element identifies the date of the last crash, suspension, or conviction recorded in elements <u>D14 through D18</u>. Count only dates of events occurring within **five years** from the crash date.

**Remarks**: If it can be identified on the driving record, do not include recorded suspensions and revocations resulting from non-traffic related issues or offenses (e.g., failure to pay child support, failure to appear in court for a non-driving offense, a suspension imposed for a drug-related offense not involving the operation of a motor vehicle).

Code only dates of events occurring within **five years** from the crash date. Code the month and year in that order.

This element, although it contains two pieces of information, should be treated as one element. That is never leave month blank without leaving the year blank, and vice versa.

Check	IF	THEN
(1HCF)	DRIVER PRESENCE equals 0, 9,	DATE OF FIRST CRASH, SUSPENSION,
		CONVICTION must be blank.
(1HBF)	DRIVER PRESENCE equals 0, 9,	DATE OF LAST CRASH, SUSPENSION,
		CONVICTION must be blank.
(1J1P)	If any counter equals 99,	DATE OF LAST CRASH, SUSPENSION,
		CONVICTION must equal 999999.
(1J2P)	If any counter equals 99,	DATE OF FIRST CRASH, SUSPENSION,
		CONVICTION must equal 999999.

Check	IF	THEN
(2J0P)	all counters are not blanks and PREVIOUS	DATE OF LAST CRASH, SUSPENSION,
	<b>RECORDED CRASHES is not equal to 98 and</b>	CONVICTION must not equal 000000, 999999.
	any counter are not equal to 00, 99,	
(2J1P)	all counters are not blanks and PREVIOUS	DATE OF FIRST CRASH, SUSPENSION,
	<b>RECORDED CRASHES is not equal to 98 and</b>	CONVICTION must not equal 000000, 999999.
	any counter are not equal to 00, 99,	
(2KOP)	DATE OF FIRST CRASH, SUSPENSION,	
	CONVICTION must be less than or equal to	
	DATE OF LAST CRASH, SUSPENSION,	
	CONVICTION.	
(3J1P)	all counters equal 00,	DATE OF FIRST CRASH, SUSPENSION,
		CONVICTION must equal 000000.
(4JOP)	all counters are not blanks and the sum of all	DATE OF LAST CRASH, SUSPENSION,
	counters less than 98 is equal to 1,	CONVICTION must equal DATE OF FIRST CRASH,
		SUSPENSION, CONVICTION.
(4K2P)	Month of DATE OF FIRST CRASH,	Year (of same) must equal 0000.
	SUSPENSION, CONVICTION equals 00,	
(4K3P)	Year of DATE OF FIRST CRASH, SUSPENSION,	Month (of same) must equal 00.
	CONVICTION equals 0000,	
(5J0P)	If the sum of all counters less than 98 is	DATE OF LAST CRASH, SUSPENSION,
	greater than fifteen,	CONVICTION must not equal DATE OF FIRST
		CRASH, SUSPENSION, CONVICTION.
(5KOP)	The Year of DATE OF FIRST CRASH,	
	SUSPENSION, CONVICTION must be within	
	five years of the Year of CRASH DATE.	
(990P)	any counter equals 99,	all counters and DATE OF LAST CRASH,
		SUSPENSION, CONVICTION and DATE OF FIRST
		CRASH, SUSPENSION, CONVICTION must equal 9999.
(D150)	the sum of all counters less than 98 is greater	DATE OF LAST CRASH, SUSPENSION,
	than five but less than fifteen,	CONVICTION should not equal DATE OF FIRST
		CRASH, SUSPENSION, CONVICTION.

## **D21** - Violations Charged

#### **FORMAT:** 2 numeric. Select all that apply. **SAS NAME:** Violatn.MVIOLATN **ELEMENT VALUES:**

#### Reckless/Careless/Hit-and-Run Type Offenses

Codes	Attributes
00	None
01	Manslaughter or homicide
02	Willful reckless driving; driving to endanger; negligent driving
03	Unsafe reckless (not willful, wanton reckless) driving
04	Inattentive, careless, improper driving
10	Use of Telecommunications Device
05	Fleeing or eluding police
06	Fail to obey police, fireman, authorized person directing traffic
07	Hit-and-run, fail to stop after crash
08	Fail to give aid, information, wait for police after crash
09	Serious violation resulting in death

#### **Impairment Offenses**

Codes	Attributes
11	Driving while intoxicated (alcohol or drugs) or BAC above limit (any detectable BAC for CDLs)
12	Driving while impaired
13	Driving under influence of substance not intended to intoxicate
14	Drinking while operating
15	Illegal possession of alcohol or drugs
16	Driving with detectable alcohol
18	Refusal to submit to chemical test
19	Alcohol, drug or impairment violations generally

#### **Speed-Related Offenses**

Codes	Attributes
21	Racing
22	Speeding (above the speed limit)
23	Speed greater than reasonable & prudent (not necessarily over the limit)
24	Exceeding special limit (e.g.: for trucks, buses, cycles, or on bridge, in school zone, etc.)
25	Energy speed (exceeding 55 mph, non-pointable)
26	Driving too slowly
29	Speed related violations, generally

#### Rules of the Road – Traffic Sign & Signals

Codes	Attributes
31	Fail to stop for red signal
32	Fail to stop for flashing red
33	Violation of turn on red (fail to stop & yield, yield to pedestrians before turning)
34	Fail to obey flashing signal (yellow or red)
35	Fail to obey signal, generally
36	Violate RR grade crossing device/regulations
37	Fail to obey stop sign
38	Fail to obey yield sign
39	Fail to obey traffic control device

#### Rules of the Road – Turning, Yielding, Signaling

Codes	Attributes
41	Turn in violation of traffic control (disobey signs, turn arrow or pavement markings; this is not a
	right-on-red violation)
42	Improper method & position of turn (too wide, wrong lane)
43	Fail to signal for turn or stop
45	Fail to yield to emergency vehicle
46	Fail to yield, generally
48	Enter intersection when space insufficient
49	Turn, yield, signaling violations, generally

#### Rules of the Road – Wrong Side, Passing & Following

Codes	Attributes
51	Driving wrong way on one-way road
52	Driving on left, wrong side of road, generally
53	Improper, unsafe passing
54	Pass on right (drive off pavement to pass)
55	Pass stopped school bus
56	Fail to give way when overtaken
58	Following too closely
59	Wrong side, passing, following violations, generally

#### Rules of the Road – Lane Usage

Codes	Attributes
61	Unsafe or prohibited lane change
62	Improper use of lane (enter of 3-lane road, HOV designated lane)
63	Certain traffic to use right lane (trucks, slow-moving, etc.)
66	Motorcycle lane violations (more than two per lane, riding between lanes, etc.)
67	Motorcyclist attached to another vehicle
69	Lane violations, generally

#### Non-Moving – License and Registration Violations

Codes	Attributes
71	Driving while license withdrawn
72	Other driver license violations
73	Commercial driver violations (log book, hours, permits carried)
74	Vehicle registration violations
75	Fail to carry insurance card
76	Driving uninsured vehicle
79	Non-moving violations, generally

#### Equipment

Codes	Attributes
81	Lamp violations
82	Brake violations
83	Failure to require restraint use (by self or passengers)
84	Motorcycle equipment violations (helmet, special equipment)
85	Violation of hazardous cargo regulations
86	Size, weight, load violations
89	Equipment violations, generally

#### **License and Registration Violations**

Codes	Attributes
91	Parking
92	Theft, unauthorized use of motor vehicle
93	Driving where prohibited (sidewalk, limited access, off truck route)
97	Not Reported
98	Other moving violation (coasting, backing, opening door)
99	Unknown Violation(s)

**Definition:** This element identifies all violations, citations, and infractions noted as charged to this driver in this crash.

**Remarks:** This refers to those violations to the Vehicle Code charged as noted *in the case materials associated with this crash.* Code all violations listed *in the case materials* for this driver regardless of ownership of the vehicle (e.g., "borrowed", "fleet", "rental cars", etc.).

If you are unable to distinguish between the violations within a specific category, use the General Code (i.e., 09, 19, 29, 39, 49, 59, 69, 79, 89) for that category.

**00 (None)** is used when there is indication that no violations were charged to this driver or when no violations are noted in the case materials for this driver and that indicates no violations were charged to the driver.

#### **CRSS SPECIAL INSTRUCTION:**

In cases where the investigating officer has designated "pending" in the case materials use **00 (None).** 

**71 (Driving While License Withdrawn)** would include violations for operating a vehicle with a suspended or revoked driver's license or violating the provisions of a work permit.

**72 (Other Driver License Violations)** is used when the driver is cited for not complying with learner's permit or intermediate driver license restrictions (GDL Restrictions) or if the driver's license has expired. This attribute is also used when the driver has been cited for driving without a license (i.e., never been issued a license. For suspended or revoked, see **71 (Driving While License Withdrawn)**).

#### 97 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **97 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown Violation(s))** is used when it is known that this driver had one or more violations but the specific violation(s) or violation category(ies) cannot be identified.

**Examples:** 

- If it is known a driver had two violations but they cannot be identified code 99 (Unknown Violation(s)) once.
- If the driver has a known specific violation(s) and other unspecified violation(s) code all the specific violation(s) and code 99 (Unknown Violation(s)) once.

#### FARS SPECIAL INSTRUCTION:

In cases where the investigating officer has designated "pending", always follow up whenever possible to confirm a violation was charged before entering <u>00 (None)</u> or **99 (Unknown).** 

Check	IF	THEN
(1H6F)	DRIVER PRESENCE equals 0, 9,	VIOLATIONS CHARGED must be blank.
(6KOP)	VIOLATION CHARGED equals 71,	RELATED FACTORS-DRIVER LEVEL must not equal 19.
(7KOP)	any VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.
(7K1P)	VIOLATIONS CHARGED code 99 must not be used more than once per driver.	
(8K0P)	VIOLATIONS CHARGED equals 07, 08,	HIT-AND-RUN must not equal 0.
(A270)	any VIOLATIONS CHARGED equals 31-35, 37,	TRAFFIC CONTROL DEVICE should equal 01-20, 98.
(D080)	VIOLATION CHARGED equals 01-06, 09, 31- 69, 81-91, 98,	RELATED FACTORS-DRIVER LEVEL should not all equal 00, 99.
(D090)	VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03,	POLICE REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE REPORTED DRUG INVOLVEMENT should equal 1.

Check	IF	THEN
(D350)	VIOLATIONS CHARGED equals 71,	NON-CDL LICENSE STATUS should not equal 0, 3, 6,
		9.
(D500)	VIOLATIONS CHARGED equals 05,	at least one RELATED FACTORS-CRASH LEVEL
		should equal 20.
(D530)	any VIOLATIONS CHARGED equals 36 for a	RELATION TO JUNCTION (b) should equal 06.
	vehicle involved in the first harmful event,	
(D560)	VIOLATIONS CHARGED equals 66,	BODY TYPE should equal 80-83, 88, 89.
(D570)	any VIOLATIONS CHARGED equals 83,	not all occupants of this vehicle should have
		RESTRAINT SYSTEM/HELMET USE equal to 01-05,
		08, 10-12, 16, 19.
(D580)	VIOLATIONS CHARGED equals 85,	HM1 should equal 2.
(D5A0)	VIOLATIONS CHARGED equals 21-25, 29,	SPEEDING RELATED must equal 2-5.
(D5B0)	any VIOLATIONS CHARGED equals 11-13,	at least one CONDITION (IMPAIRMENT) AT TIME
	18, 19,	OF CRASH (D23) should equal 09.
(D5E0)	any VIOLATIONS CHARGED equals 00 or 97,	only that one code and no other must be coded
		for this driver.
(U440)	UNLIKELY: VIOLATIONS CHARGED equals	
	97.	

## **D22** - Speeding Related

#### FORMAT: 1 numeric SAS NAME: Vehicle.Speedrel ELEMENT VALUES:

Codes	Attributes
0	No
2	Yes, Racing
3	Yes, Exceeded Speed Limit
4	Yes, Too Fast for Conditions
5	Yes, Specifics Unknown
9	Unknown

**Definition:** This element identifies if the driver's speed was related to the crash as identified by law enforcement.

**Remarks:** If the case materials state that more than one condition was present at the same time, enter the code with the lowest value. For example, if the driver was charged with "Too Fast for Conditions" **and** had a factor recorded for "Exceeded Speed Limit", you would use code <u>3 (Yes, Exceeded Speed Limit</u>) because that has a lower value than <u>4 (Yes, Too Fast for Conditions)</u>.

Speed can be indicated in the case materials by the police issuing a citation for a speed offense, by their indicating a related or contributing factor, or through a description in the narrative.

**0** (No) is used if the case materials do not indicate any speed related charges (violations, citations) and do not indicate any speed related factors.

**2 (Yes, Racing)** is used when two or more motor vehicles are engaged in a speed-related competition on the trafficway.

**3 (Yes, Exceeded Speed Limit)** is used when a motor vehicle is traveling above the posted/statutory speed limit on certain designated roadways and/or by certain types of vehicles (e.g., for trucks, buses, motorcycles, on bridge, at night, in school zone, etc.). Do not compare an estimated travel speed to the posted speed limit for determining the correct attribute for this data element. This attribute would apply in a case where law enforcement reports actual or estimated speed as unknown and still identifies exceeding the speed limit as a factor.

**4 (Yes, Too Fast for Conditions)** is used when a vehicle is traveling at a speed that was unsafe for the road, weather, traffic or other environmental conditions at the time.

5 (Yes, Specifics Unknown) is used when it is known that Speed or Speeding applies but it cannot be determined which of the more specific attributes apply. When the only known information is "traveling at a high rate of speed" or "speed was a factor" default to 5 (Yes, specifics unknown).

**9 (Unknown)** is used if the police state that the circumstances of the crash are unknown (i.e., it is unknown what factors, if any, may have been present at the time of the crash).

Check	IF	THEN
(1HFF)	DRIVER PRESENCE equals 0, 9,	SPEEDING RELATED must be blank.
(D5A0)	VIOLATIONS CHARGED equals 21-25, 29,	SPEEDING RELATED must equal 2-5.

## D23/NM14 - Condition (Impairment) at Time of Crash

**FORMAT:** 2 numeric. Select all that apply **SAS NAME:** Drimpair.DRIMPAIR **ELEMENT VALUES:** 

Codes	Attributes
00	None/Apparently Normal
01	III, Blackout
02	Asleep or Fatigued
03	Walking with a Cane or Crutches, etc.
04	Paraplegic or <i>in a</i> Wheelchair
05	Impaired Due to Previous Injury
06	<u>Deaf</u>
07	Blind
08	Emotional (Depressed, Angry, Disturbed, etc.)
09	Under the Influence of Alcohol, Drugs or Medication
10	Physical Impairment – No Details
96	Other Physical Impairment
98	Not Reported
99	Unknown If Impaired

**Definition:** This element identifies physical impairments to this driver or non-motorist which may have contributed to the cause of the crash as identified by law enforcement.

**Remarks:** Select all that apply. These impairments can appear anywhere in the case materials--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider pedestrian, non-motorist or witness statements unless verified by the investigating police officer by being reported in the narrative section of the crash report.

#### 00 (None/Apparently Normal) is used when:

- When the case materials make a positive statement that the individual was apparently normal or "none" was indicated on the *Police Crash Report*.
- When the case materials do not indicate an impairment in an available field and not reporting an impairment in that field indicates **00 (None/Apparently Normal)**.
- When the investigating officer:
  - $\circ \quad$  is limited in the number of factors that can be displayed
  - o and cannot select an impairment in addition to another factor relevant to the crash
  - and some other factor is selected
  - $\circ$   $\;$  and no other indication of impairment exists in the case materials.
- For omission of information see <u>98 (Not Reported)</u> guidance below.

**01 (III, Blackout)** is used when indicated in the case materials. Enter this attribute even if the source of the illness or loss of consciousness is alcohol or drug related. Use this attribute if the driver or non-motorist had fainted and/or seizures were identified.

**02 (Asleep or Fatigued)** is used when indicated in the case materials. Also, use this attribute when the investigating officer indicates the person was drowsy or sleepy. Alcohol or other drugs may be the source of this impairment.

**03 (Walking with a Cane or Crutches, etc.)** is used when non-motorist is walking with a cane, walker, knee scooter, or crutches when indicated in the case materials.

## **04 (Paraplegic or in a Wheelchair)** is used if this person *is paraplegic or in a wheelchair. This includes motorized and non-motorized wheelchairs and handicap scooters.*

**05 (Impaired Due to Previous Injury)** is used if the case materials dictate this condition (e.g., if a person is involved in this crash subsequent to his/her involvement in a previous crash in which the person was injured). This attribute should be extremely rare.

**06 (Deaf)** is used when this condition is attributed to this person in the case materials.

**07 (Blind)** is used when this condition is attributed to this person in the case materials.

**08 (Emotional [Depressed, Angry, Disturbed, etc.])** is used when the person is arguing with someone, is having a disagreement, is depressed, and/or is emotionally upset.

**09 (Under the Influence of Alcohol, Drugs or Medication)** is used when the investigating officer indicates that the individual was under the influence of alcohol, drugs, or medication. This attribute excludes interpretation of test results by the analyst/coder.

**10 (Physical Impairment-No Details)** is used when the case materials indicate a physical impairment existed but provides no further details about the impairment.

**96 (Other Physical Impairment)** is used when the case materials indicate that a physical impairment was involved but it isn't a listed attribute.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98** (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown if Impaired)** is used if the investigating officer states that the physical impairment of this person is unknown.

Check	IF	THEN
(4X2F)	any CONDITION (IMPAIRMENT) AT TIME OF	only that one code and no other must be coded
	CRASH (D23) equals 00 or 98 or 99,	for this driver.
(4X4F)	any CONDITION (IMPAIRMENT) AT TIME OF	POLICE REPORTED ALCOHOL INVOLVEMENT
	CRASH (D23) equals 09,	(P16) or POLICE REPORTED DRUG
		INVOLVEMENT (P19) should equal 1 for this
		person.
(6H1P)	DRIVER PRESENCE equals 0, 9,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
		(D23) must be blank.
(B17P)	CONDITION (IMPAIRMENT) AT TIME OF	CRITICAL EVENT: PRECRASH (EVENT) should not
	CRASH (D23) equals 09 for this driver,	equal 08 for this driver's vehicle.
(D5B0)	any VIOLATIONS CHARGED equals 11-13, 18,	at least one CONDITION (IMPAIRMENT) AT TIME
	19,	OF CRASH (D23) should equal 09.
(U530)	UNLIKELY: any CONDITION (IMPAIRMENT) AT	
	TIME OF CRASH (D23) equals 03, 05 or 07.	
(U682)	UNLIKELY: CRITICAL EVENT: PRECRASH	
	(EVENT) equals 08 for this vehicle and	
	CONDITION (IMPAIRMENT) AT TIME OF	
	CRASH (D23) does not equal 01 for this	
	vehicle's driver.	

## D24 - Related Factors – Driver Level

#### **FORMAT:** 2 numeric occurring 4 times **SAS NAME**: Vehicle.DR\_SF1, Vehicle.DR\_SF2, Vehicle.DR\_SF3, Vehicle.DR\_SF4 **ELEMENT VALUES**:

Codes	Attributes
00	None

#### **Physical/Mental Condition:**

Codes	Attributes
06	Careless Driving
08	Aggressive Driving / Road Rage
*13	Mentally Challenged
*04	Reaction to or Failure to Take Drugs/Medication
*12	Mother of Dead Fetus/Mother of Infant Born Post Crash

#### Miscellaneous Factors:

Codes	Attributes	
*15	Seat Back Not in Normal Upright Position, Seat Back Reclined	
18	Traveling on Prohibited Trafficways	
*19	Legally Driving on Suspended or Revoked License	
20	Leaving Vehicle Unattended with Engine Running. Leaving Vehicle Unattended in Roadway	
21	Overloading or Improper Loading of Vehicle with Passengers or Cargo	
22	Towing or Pushing Improperly	
23	Failure to Dim Lights or to Have Lights on When Required	
24	Operating Without Required Equipment	
*26	Following Improperly	
*27	Improper or Erratic Lane Changing	
*28	Improper Lane Usage	
*29	Intentional Illegal Driving on Road Shoulder, in Ditch, on Sidewalk, or on Median	
*30	Making Improper Entry to or Exit from Trafficway	
*31	Starting or Backing Improperly	
32	Opening Closure into Moving Traffic or While Vehicle is in Motion	
*33	Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying	
	Warning Not to Pass	
*34	Passing on Right Side	
*35	Passing with Insufficient Distance, or Inadequate Visibility, or Failing to Yield to Overtaking	
	<u>Vehicle</u>	
36	Operating the Vehicle in an Erratic, Reckless, or Negligent Manner	
16	Police or Law Enforcement Officer	
37	Police Pursuing This Driver or Police Officer in Pursuit	
*38	Failure to Yield Right-of-Way	
*39	Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers. Failure to Obey	
	Safety Zone Traffic Laws	
*40	Passing Through or Around Barrier	
*41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them	

Codes	Attributes
*42	Failure to Signal Intentions
*45	Driving Less Than Posted Minimum
*47	Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane
*48	Making Other Improper Turn
50	Driving Wrong Way on One-Way Trafficway
51	Driving on Wrong Side of Two-Way Trafficway (Intentional or Unintentional)
*52	Operator Inexperience
*53	Unfamiliar with Roadway
54	Stopped in Roadway (Vehicle Not Abandoned)
55	Improper Management of Vehicle Controls (Specify:)
56	Object Interference with Vehicle Controls (Specify:)
57	Driving with Tire-Related Problems
58	Overcorrecting
59	Getting Off/Out of a Vehicle
60	Alcohol and/or Drug Test Refused

#### **Special Circumstances:**

Codes	Attributes
*73	Driver Has Not Complied with Learner's Permit or Intermediate Driver License Restrictions (GDL
	Restrictions)
*74	Driver Has Not Complied with Physical or Other Imposed Restrictions (not including GDL
	Restrictions)
*89	Driver has a Driving Record or Driver's License from More Than One State
91	Non-Traffic Violation Charged (manslaughter, homicide, or other assault offense committed
	without malice)

#### Skidding, Swerving, Sliding Due To:

Codes	Attributes
*77	Severe Crosswind
*78	Wind from Passing Truck
*79	Slippery or Loose Surface
*80	Tire Blowout or Flat
*81	Debris or Objects in Road
*82	Ruts, Holes, Bumps in Road
*83	Live Animals in Road
*84	Vehicle in Road
*85	Phantom Vehicle
*86	Pedestrian, Pedal Cyclist, or Other Non-Motorist
*87	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road
*88	Trailer Fishtailing or Swaying

#### Unknown:

Codes	Attributes
99	Unknown

\* FARS ONLY ATTRIBUTES

**Definition:** This element identifies factors related to this driver expressed by the investigating officer.

**Remarks:** Code information provided by the investigating officer in the narrative, contributing factors/ circumstances field or citations/violations section on the crash report. This is a nominal list only and does NOT imply a hierarchy. However, if more than four factors apply to this driver, capture those which cannot be collected elsewhere in the data.

## NOTE: RELATED FACTORS-DRIVER LEVEL SHOULD BE CODED ONLY FOR "IN-TRANSPORT VEHICLES" (UNIT TYPE "1").

# RELATED FACTORS FOR MOTOR VEHICLE OCCUPANTS OTHER THAN DRIVERS OF "IN-TRANSPORT" VEHICLES SHOULD BE CODED UNDER <u>RELATED FACTORS-PERSON (MV OCCUPANT) LEVEL</u> (INCLUDING ALL OCCUPANTS IN <u>UNIT TYPES</u> "2, 3, AND 4".)

**00 (None)** is used when no applicable related factors are noted in the case materials, including hit-and-run vehicle drivers when no factors are identified or reported by the officer for this vehicle or driver. Zero-fill all fields. Also, use **00 (None)** to complete the remaining fields when you will be recording less than four driver related factors. DO NOT leave any remaining fields blank.

#### **Physical/Mental Condition:**

**06 (Careless Driving)** is used when the case materials include a factor or note a violation indicating careless driving.

#### Examples include:

- driving without due care
- operating a motor vehicle in a careless manner
- failure to give full time and attention
- inattentive operation.

**08** (Aggressive Driving/Road Rage) is used when the case materials include a factor or note a violation identifying aggressive driving behavior. The officer must use the term "Aggressive" in describing this driver's behavior. You may encounter the term "Road Rage" used to describe aggressive driving behavior. The two terms are not technically interchangeable but both will be coded here.

**\*13 (Mentally Challenged)** is used when the case materials identify that the driver has a mental illness or intellectual disorder.

**\*04 (Reaction to or Failure to Take Drugs/Medication)** is used when the case materials identify that this driver had an allergic reaction to medication/drugs, a reaction to drug interaction (over the counter and/or prescribed), or if there is information identifying that the driver failed to take required medication.

**12 (Mother of Dead Fetus/Mother of Infant Born Post Crash)** is used when the case materials identify that this driver is the mother of a fetus that died in or as a result of this crash or it is identified that this driver gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate individual and, thus, is not counted as a separate occupant in the crash.

#### **Miscellaneous Factors:**

\*15 (Seat Back Not in Normal Upright Position, Seat Back Reclined) is used when the case materials identify that this driver's seat back was not in a normal, safe driving position prior to the crash.

**18 (Traveling on Prohibited Trafficways)** is used when the case materials identify this driver was driving on an open trafficway that prohibited travel for the kind of vehicle they were operating. For example, driving a moped on an interstate, driving a truck where prohibited, or operating a vehicle with hazardous materials cargo where prohibited. For trucks or slower vehicles using the left lane when prohibited, use <u>28 (Improper Lane Usage)</u>.

\*19 (Legally Driving on Suspended or Revoked License) is used when the case materials identify this driver's license was suspended/revoked but they were legally driving at the time of the crash. For example, occupational restricted licenses typically allow drivers to drive to work, school, community service or certain other activities, with restrictions including the times of day, days of week and areas to which they may drive. Drivers whose licenses have been suspended or revoked for certain alcohol- or drug-related offenses can apply for ignition interlock restricted licenses. These licenses permit them to drive if they use an ignition interlock device, which tests breath for alcohol consumption, installed in their car.

**20 (Leaving Vehicle Unattended with Engine Running. Leaving Vehicle Unattended in Roadway)** is used when the case materials identify this driver took improper actions where their vehicle was left in a location intentionally and the driver was not present in or in close proximity to the vehicle.

#### Examples include:

- Leaving the vehicle curbside or in a driveway with a running engine.
- Abandoning a non-running vehicle in the middle of traffic.
- "Double-parked"
- "Parked on a bridge or tunnel"
- "Parking within an intersection"

**21 (Overloading or Improper Loading of Vehicle with Passengers or Cargo)** is used when the case materials identify this driver improperly loaded the vehicle occupants or cargo into or on the vehicle.

#### **Examples include:**

- The vehicle had more than 3 passengers in the front seat.
- There were persons riding on the exterior of the vehicle.
- The vehicle was carrying occupants that were sitting or standing on the rails, tailgate of a pickup, or improperly sitting in the bed of a pickup.
- More than one person secured in a belt restraint.
- An unsecured or uncovered load violation.
- The vehicle's trunk was open with extra-large cargo protruding.
- The case materials state the vehicle was overweight, over length or illegally or improperly oversize.

**22 (Towing or Pushing Improperly)** is used when the case materials identify this driver was operating the vehicle that was towing another vehicle with an improper connection (e.g., by rope or cable) or was pushing another vehicle in a dangerous manner (e.g., bumper to bumper).

**23** (Failure to Dim Lights or to Have Lights on When Required) is used when the case materials identify this driver failed to use proper headlight beams, failed to reduce high beams for an approaching vehicle or when following another vehicle or used fog lights when prohibited.

#### Examples include:

- The vehicle has its headlamps adjusted improperly causing glare.
- The vehicle failed to have its headlights on in a tunnel.
- A motorcycle not using lights as required.

**24 (Operating Without Required Equipment)** is used when the case materials identify this driver was operating the vehicle without a required piece of equipment or with required equipment being inoperable. For seatbelts, child restraints, and motorcycle helmets do not use this attribute when there is indication that an available restraint was not used (i.e., *Police Crash Report* Restraint Use box is marked as "Not Used").

#### **Examples include:**

- Defective or no lamps, brakes, mirrors, muffler, flares, wipers, horn, snow tires, chains, etc.
- A vehicle does not have extended side mirrors when required (e.g. when pulling a trailer).
- A vehicle driving in snow without snow tires when required.
- If the seatbelts have been removed from the vehicle.
- If there was no child safety seat(s) in the vehicle when required for the occupant(s).
- For a motorcycle rider that had no helmet with them when required by law.
- If the vehicle failed to have an airbag(s) reinstalled after a prior crash.

\*26 (Following Improperly) is used when the case materials identify this driver followed too closely. Examples include:

- Following a fire truck too closely.
- Failure to maintain a safe passing distance between trucks.
- Following another vehicle in a caravan too closely to allow entry by a merging vehicle.
- Following too close, generally. Also code for cases where the case materials document the vehicle was following too closely for weather conditions.

**NOTE: 26 (Following Improperly)** denotes "after or before the process of lane change" while **27 (Improper or Erratic Lane Changing)** signifies "in the process."

**\*27 (Improper or Erratic Lane Changing)** is used when the case materials identify this driver was making unsafe lane changes or failed to obey a "no lane change" sign or pavement marking prohibiting lane change. This may also be used in cases where the officer states the vehicle was weaving in and out of traffic.

\*28 (Improper Lane Usage) is used when the case materials identify this driver failed to properly keep their vehicle in the appropriate lane of travel. This attribute does not apply to vehicles that run off the roadway or that cross the median. Also do not use this value for a vehicle that leaves its lane because of a previous impact or at the direction of a flagman or police officer. For situations where the vehicle is on the wrong side as a result of a passing maneuver, see <u>33 (Passing Where Prohibited by Posted Signs, Pavement Markings or School Bus</u> <u>Displaying Warning Not to Pass)</u>. See <u>51 (Driving on Wrong Side of Two-Way Trafficway [Intentional or</u> <u>Unintentional])</u> for Driving on Wrong Side of Road.

#### **Examples include:**

- A vehicle that "drove left of center" striking an oncoming vehicle (includes both crossing a painted centerline and failing to maintain the proper side of a 2 lane roadway with no painted centerline.)
- A vehicle that goes straight in a turn lane.
- A vehicle that was using more than one lane on its side of a multi-lane highway.
- Trucks, buses, or slow vehicles failing to keep right for faster moving traffic.

**\*29 (Intentional Illegal Driving on Road Shoulder, in Ditch, on Sidewalk, or on Median)** is used when the case materials identify this driver was intentionally illegally driving in a location off of the roadway (e.g. shoulder, median, roadside, etc.) This attribute should not be used when the vehicle enters one of these locations as part of an avoidance maneuver or as a result of a critical or harmful event. Also do not use this value for a vehicle that leaves its lane at the direction of a flagman or police officer.

**\*30 (Making Improper Entry to or Exit from Trafficway)** is used when the case materials identify this driver made an improper entry to or exit from the trafficway. For improper entry of the roadway from a parked or stopped position see <u>31 (Starting or Backing Improperly)</u>.

#### Examples include:

- Driving onto or from a controlled access highway where prohibited.
- A vehicle entering a highway from a roadside location like a front yard, adjacent pasture or field.
- A vehicle entering a highway on an exit ramp or exiting on an entrance ramp.

**\*31 (Starting or Backing Improperly)** is used when the case materials identify this driver improperly entered the roadway from a parked or stopped position or improperly backed the vehicle in the roadway.

#### Examples include:

- Making an unsafe start from a parked position.
- Backing up on a one-way roadway.
- Starting onto a highway from a parked position on the shoulder.

**32 (Opening Closure into Moving Traffic or While Vehicle is in Motion)** is used when the case materials identify this driver improperly opened their door into moving traffic. This would include opening the trunk while the vehicle is in-transport.

\*33 (Passing Where Prohibited by Posted Signs, Pavement Markings or School Bus Displaying Warning Not to Pass) is used when the case materials identify this driver passed improperly by executing a passing maneuver where prohibited as designated by traffic controls or rules of the road.

#### **Examples include:**

- A vehicle passing a stopped school bus.
- A vehicle crossing over the solid line to pass another vehicle.
- Passing a vehicle stopped to allow a pedestrian movement.

**\*34 (Passing on Right Side)** is used when the case materials identify this driver was passing on the right side where it was prohibited. Includes passing on the right shoulder, emergency lane, or roadside.

\*35 (Passing with Insufficient Distance, or Inadequate Visibility, or Failing to Yield to Overtaking Vehicle) is

used when the case materials identify this driver exercised faulty judgment when passing or being passed. **Examples include:** 

#### Examples include:

- A vehicle passing uphill or in a curve that limits visibility.
- Cutting off the other vehicle while passing or being passed.

**36 (Operating the Vehicle in an Erratic, Reckless, or Negligent Manner)** is used when the case materials identify this driver was operating the vehicle in an erratic, reckless, or negligent manner. These are circumstances where the driver is engaged in a driving behavior with willful or wanton disregard for safety. This attribute can be used in conjunction with other factors but must be explicitly stated on the police record.

#### **Examples include:**

- Driving erratically
- Erratic lane changing
- Suddenly changing speed

**16 (Police or Law Enforcement Officer)** is used when the case materials identify this driver was a federal, state, or local law enforcement officer working at the time of the crash. This attribute also includes military and park police, border patrol, and all other sworn law enforcement officers.

**37 (Police Pursuing This Driver or Police Officer in Pursuit**) is used when the case materials identify this driver was fleeing from or attempting to elude the police or this driver is a police officer engaged in a "pursuit" that is active at the time of crash. For a case where both the fleeing driver and pursuing officer are in-contact vehicles, this factor is used for both drivers. Identify the officer using factor <u>16 (Police or Law Enforcement Officer)</u>. Also see Related Factors-Crash Level, for use of <u>20 (Police Pursuit Involved)</u>).

**Definition of Police Pursuit:** A pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop (either through the use of visual or audible emergency signals or a combination of emergency devices) to a motorist who the officer is attempting to apprehend, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued by the officer, or at the direction of a competent authority.

**\*38 (Failure to Yield Right-of-Way)** is used when the case materials identify this driver failed to yield the right-of-way.

#### Examples include:

- Failure to yield to pedestrian in a crosswalk.
- Failure to yield at an intersection or merge.
- Failure to yield to emergency vehicles.
- Failure to yield to streetcar already in intersection.

\*39 (Failure to Obey Actual Traffic Signs, Traffic Control Devices or Traffic Officers, Failure to Obey Safety Zone Traffic Laws) is used when the case materials identify this driver failed to obey an applicable traffic control device. If a driver stops as required but then fails to yield, use code <u>38 (Failure to Yield Right-of-Way)</u> and not 39 (Failure to Obey Actual Traffic Signs, Traffic Control Devices or Traffic Officers, Failure to Obey Safety Zone Traffic Laws).

#### **Examples include:**

- Failure to obey flashing signal.
- Violation of "No Turn On Red".
- Failure to obey lane use control signal.
- Failure to obey stop signs.
- Failure to obey yield sign (use both codes <u>38 (Failure to Yield Right-of-Way)</u> and **39 (Failure to Obey** Actual Traffic Signs, Traffic Control Devices or Traffic Officers, Failure to Obey Safety Zone Traffic Laws)).
- Passing around railroad gates.
- When vehicle does not stop when required by a traffic signal.

\*40 (Passing Through or Around Barrier) is used when the case materials identify this driver was driving in a prohibited area (play street, construction, etc.). This would denote "demarcated" areas. For driving around a railroad gate use <u>39 (Failure to Obey Actual Traffic Signs, Traffic Control Devices or Traffic Officers, Failure to Obey Safety Zone Traffic Laws</u>).

**\*41 (Failure to Observe Warnings or Instructions on Vehicles Displaying Them**) is used when the case materials identify this driver failed to heed warnings or follow instructions displayed on other vehicles.

#### **Examples include:**

- Construction instructions such as arrows directing traffic mounted on a vehicle
- Instructions on or warnings by emergency vehicles (ambulances, fire trucks, police cars)
- Failure to observe a wide right-turn warning on trucks or buses
- Failure to heed hazard lights on a disabled vehicle or a school bus arm

**\*42 (Failure to Signal Intentions**) is used when the case materials identify this driver failed to signal their intentions. This attribute includes a failure to signal by either lamp turn signal or hand.

**\*45 (Driving Less Than Posted Minimum)** is used when the case materials identify this driver was driving too slowly, or so as to impede traffic.

\*47 (Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane) is used when the case materials identify this driver was making an improper turn from a turn lane. To distinguish from <u>27 (Improper or Erratic Lane Changing)</u> and <u>28 (Improper Lane Usage)</u>, police officer must indicate the driver's intention to turn to use this attribute.

\*48 (Making Other Improper Turn) is used when the case materials identify this driver made a turn that was improper because it was unsafe, poorly executed, or in bad judgment. This attribute excludes turns that are improper because they are prohibited (e.g., No Right on Red, turning left in violation of a traffic signal). *A* roadway departure is not an indication of an improper turn in and of itself.

#### Examples include:

- a "too wide" right or left turn
- an unsafe U-turn (from the shoulder, etc.).

**50 (Driving Wrong Way on One-Way Trafficway)** is used when the case materials identify this driver was driving in the wrong direction on a one-way trafficway. If this is a divided highway, although each side is "one-way," driving against traffic should be coded as **51 (Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional]).** If the vehicle was going the wrong way on an entrance or exit ramp, also use <u>30 (Making Improper Entry to or Exit from Trafficway)</u>.

**51 (Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional])** is used when the case materials identify this driver was established in and driving on the wrong side of the highway. "Unintentional" means they may not be aware they are on the wrong side. For situations where a driver unintentionally crosses the centerline, see <u>28 (Improper Lane Usage)</u>. For situations where the vehicle is on the wrong side as a result of a passing maneuver, see <u>33 (Passing Where Prohibited by Posted Signs, Pavement Markings or School Bus Displaying Warning Not to Pass)</u>.

#### **Examples include:**

- Driving the wrong way/on the wrong side of a divided trafficway.
- Driving on the wrong side of an undivided trafficway.
- Driving the wrong way on a Rotary Intersection.
- Driving on the left half of approaching bridge or tunnel.

**\*52 (Operator Inexperience)** is used when the case materials identify this driver lacks experience operating the vehicle they were driving at the time of the crash. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or state of residence.

#### Examples include:

- A new/young recently licensed driver
- A driver inexperienced in the operation of a large truck or bus (based on the judgment of the police officer)
- A person driving a rental car where they are unfamiliar with the vehicle

**\*53 (Unfamiliar with Roadway)** is used when the case materials identify this driver is unfamiliar with the area/location where they were driving when the crash occurred. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or state of residence.

#### **Examples include:**

- A driver from out-of-state unfamiliar with area.
- A driver operating on a new stretch of road or section of road altered because of construction and/or detour.

**54 (Stopped in Roadway [Vehicle Not Abandoned])** is used when the case materials identify this driver stopped their vehicle in the roadway/travel lanes. It is intended to capture an unusual condition where a vehicle is stopped in the roadway with the driver present in or in close proximity to the vehicle. It includes both a vehicle in the process of stopping and "stopped" vehicles. It **excludes** typical "stopping" situations such as stopping in/for traffic, waiting to turn, or stopping for a traffic control.

#### **Examples include:**

- A vehicle disabled in a prior crash,
- A vehicle with a flat tire
- A vehicle that stops for debris in the roadway, etc.

55 (Improper Management of Vehicle Controls (SPECIFY)) is used for driver errors related to accelerating/braking/gear selection, etc. (e.g., reverse instead of forward, forward instead of reverse, accelerator instead of brake, unspecified pedal error, etc.).

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

56 (Object Interference with Vehicle Controls (SPECIFY)) is used for items reported to have interfered with the driver's operation of the vehicle controls (e.g. footwear interfered with pedals, floor mat interfered with pedals, loose cargo interfered with pedals, etc.).

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

## 57 (Driving with Tire-Related Problems) is used when the officer noted this driver was driving with "donut"/spare tire, improperly sized tire(s), driving on run flats in an air-out situation, etc.

**58 (Overcorrecting)** is used when the case materials identify this driver "overcorrected" based on the judgment of the police officer. This must be stated by the officer in the narrative or *Police Crash Report* field to be coded. Overcorrecting and Oversteering are technically different but this attribute may be selected for a reported combination of the two (e.g. overcorrecting/oversteering) *on the Police Crash Report*.

**59 (Getting Off/Out of a Vehicle)** is used when the case materials identify this driver was attempting to exit the vehicle when involved in the crash. It applies for either moving or non-moving vehicles.

60 (Alcohol and/or Drug Test Refused) is used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to administer a test post-refusal. Because of this, it is possible to code 60 (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

# Skidding, Swerving, Sliding Due To:

This set of attributes is applicable to the driver that attempted to avoid one of the following or whose ability to control the vehicle was affected by one of the following.

**\*77 (Severe Crosswind)** is used when the case materials identify this driver's ability to control the vehicle was affected by severe crosswinds.

**\*78 (Wind from Passing Truck)** is used when the case materials identify this driver's ability to control the vehicle was affected by winds produced by a passing truck.

\*79 (Slippery or Loose Surface) is used when the case materials identify this driver's ability to control the vehicle was affected by the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice, or snow (see <u>87 (Ice, Snow, Slush, Water, Sand, Dirt, Oil or Wet Leaves on Road)</u>.

### Examples include:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.

**\*80 (Tire Blowout or Flat)** is used when the case materials identify this driver's ability to control the vehicle was affected by a tire blowout or flat.

**\*81 (Debris or Objects in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of debris in the road. Examples would include: nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

**\*82 (Ruts, Holes, Bumps in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of road surface anomalies such as ruts, holes, dips, or bumps.

**\*83 (Live Animals in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of a live animal(s) that was in the road.

**\*84 (Vehicle in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that remain at the scene.

**\*85 (Phantom Vehicle)** is used when the case materials identify this driver attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

**\*86 (Pedestrian, Pedal Cyclist, or Other Non-Motorist)** is used when the case materials identify this driver attempted to avoid or lost control as a result of a pedestrian, a pedal cyclist (bicyclist), or other type of non-motorist.

**\*87 (Ice, Snow, Slush, Water, Sand, Dirt, Oil or Wet Leaves on Road)** is used when the case materials identify this driver's ability to control the vehicle was affected by a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see <u>79 (Slippery or Loose Surface)</u>.

**\*88 (Trailer Fishtailing or Swaying)** is used when the case materials identify this driver's ability to control the vehicle was affected by a trailer fishtailing or swaying. This condition may or may not result in a jackknife.

# Special Circumstances (73, 74, 89, 91):

# 73 (Driver Has Not Complied with Learner's Permit or Intermediate Driver License Restrictions [GDL

**Restrictions])** is used when the case materials identify this driver was a young driver and was not in compliance with a Learner's Permit or Intermediate Driver License restriction under a state's Graduated Driver's License (GDL) program.

# Examples include:

- Nighttime driving restrictions (e.g. midnight until 6:00 am).
- Unsupervised driving restrictions (e.g., the driver must have a passenger over the age of 21 to legally drive the vehicle).
- Passenger Restriction (e.g., the driver is only allowed one other passenger in the vehicle when driving).

This should **not** be used for restrictions for eyeglasses, lenses, equipment or other physical restrictions (see **74** (Driver Has Not Complied with Other Imposed Restrictions [not including GDL Restrictions])).

**\*74 (Driver Has Not Complied with Physical or Other Imposed Restrictions (not including GDL Restrictions)** is used when the case materials identify this driver did not comply with physical or other imposed license restrictions.

# **Examples include:**

- Driving without corrective lenses when required.
- Driving without required equipment (e.g., automatic transmission, adaptive controls, etc.).
- Violating special privileges on a suspended/revoked license for other than permitted activities (e.g., driving permitted only to and from work). Not to be used for general "driving on a suspended or revoked license".
- Driving vehicle without "Interlock System" when required.

**\*89 (Driver has a Driving Record or Driver's License from More than One State)** is used when the case materials identify this driver had any combination of a state or record in more than one state. This is coded regardless of the status of the license or the driving privilege of the driver at the time of the crash.

# 91 (Non-Traffic Violation Charged [Manslaughter, Homicide or Other Assault Offense Committed Without

**Malice])** is used when the case materials identify this driver will receive "Criminal" charges such as intoxicated assault or vehicular manslaughter. It would exclude other criminal offenses such as hit-and-run or failure to render aid at the scene of a crash.

# Unknown

**99 (Unknown)** is used when the circumstances surrounding the crash are unknown and reported as "unknown" by the investigating officer. In these circumstances, nine-fill all fields. If **Unknown** is used for any field, ALL fields must be **99 (Unknown)**. DO NOT leave any remaining fields blank.

# **\*FARS ONLY ATTRIBUTES**

# **Consistency Checks:**

Check	IF	THEN
(1LOP)	any RELATED FACTORS-DRIVER LEVEL equals blanks,	all RELATED FACTORS-DRIVER LEVEL must equal blanks.
(2H0F)	DRIVER PRESENCE equals 0, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 04, 08, 12, 13, 15, 16, 19, 52, 53, 58, 59, 73, 74, 77-88.
(2LOP)	any RELATED FACTORS-DRIVER LEVEL equal 99,	then all RELATED FACTORS-DRIVER LEVEL must equal 99.
(3LOP)	any RELATED FACTORS-DRIVER LEVEL equals 00,	all remaining RELATED FACTORS-DRIVER LEVEL must equal 00.
(5L0F)	RELATED FACTORS-DRIVER LEVEL equals 20,	DRIVER PRESENCE must not equal 1, 9.
(5L1F)	RELATED FACTORS-DRIVER LEVEL equals 04, 08, 12, 13, 15, 16, 19, 52, 53, 58, 59, 73, 74, 77-88,	DRIVER PRESENCE must not equal 0 or 9.
(6K0P)	VIOLATION CHARGED equals 71,	RELATED FACTORS-DRIVER LEVEL must not equal 19.
(7LOP)	Any RELATED FACTORS-DRIVER LEVEL can be used only once per driver form.	
(9C6P)	UNIT TYPE equals 2-4,	RELATED FACTORS-DRIVER LEVEL must equal 0.
(9L0F)	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 12,	SEX must equal 2, and AGE must be greater than 012.
(A080)	DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002,	one RELATED FACTORS-DRIVER LEVEL should equal 20.
(AZA2)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 10, 11, or 12,	then RELATED FACTORS – DRIVER LEVEL should not equal 48.
(AZA3)	<i>If RELATED FACTORS – DRIVER LEVEL equals</i> <i>48,</i>	then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10, 11, or 12.
(D470)	any RELATED FACTORS-DRIVER LEVEL equals 37,	at least one RELATED FACTORS-CRASH LEVEL should equal 20.

# Consistency Checks (FARS ONLY):

Check	IF	THEN
(4LOP)	any RELATED FACTORS-DRIVER LEVEL equals	TRAFFIC CONTROL DEVICE should not equal 00
	39 for this vehicle,	for this vehicle.
(6L0P)	COMPLIANCE WITH LICENSE RESTRICTIONS	LICENSE COMPLIANCE WITH CLASS OF VEHICLE
	equals 1, and RELATED FACTORS-DRIVER	must equal 3.
	LEVEL equals 19,	
(7I0P)	COMPLIANCE WITH LICENSE RESTRICTIONS	NON-CDL LICENSE STATUS must equal 6.
	equals 1, and RELATED FACTORS-DRIVER	
	LEVEL equals 19,	
(8IOP)	NON-CDL LICENSE STATUS equals 0-4, 9,	RELATED FACTORS-DRIVER LEVEL must not
		equal 19.

Check	IF	THEN
(8J2P)	RELATED FACTORS-DRIVER LEVEL equals 73, 74,	COMPLIANCE WITH LICENSE RESTRICTIONS must equal 2.
(8LOP)	LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-2, 9,	RELATED FACTORS-DRIVER LEVEL must not equal 19.
(BLOP)	COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-DRIVER LEVEL equals 19,	LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
(D080)	VIOLATION CHARGED equals 01-06, 09, 31- 69, 81-91, 98,	RELATED FACTORS-DRIVER LEVEL should not all equal 00, 99.
(D690)	NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal 73, 74.
(D700)	NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS equals 2,	RELATED FACTORS-DRIVER LEVEL should equal 74.
(D730)	RELATED FACTORS-DRIVER LEVEL equals 73,	COMPLIANCE WITH LICENSE RESTRICTIONS should equal 2, and NON-CDL LICENSE TYPE should equal 2, 7.
(V100)	HM1 equals 2, and RELATED FACTORS- DRIVER LEVEL does not equal 19,	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.
(V16P)	RELATED FACTORS-DRIVER LEVEL equals 88,	VEHICLE TRAILING must not equal 0, 9.

# **Precrash Level Data Elements**

<u>PC1 – State Number – FARS Only</u> PC2 – Consecutive Number – FARS Only

Precrash Data Overview

- PC3 Vehicle Number Precrash Level
- PC4 Contributing Circumstances, Motor Vehicle
- PC5 Trafficway Description
- PC6 Total Lanes in Roadway
- PC7 Speed Limit
- <u>PC8 Roadway Alignment</u>
- PC9 Roadway Grade
- PC10 Roadway Surface Type FARS Only
- PC11 Roadway Surface Conditions
- PC12 Traffic Control Device
- PC13 Device Functioning
- PC14 Driver's Vision Obscured By
- PC15 Driver Maneuvered to Avoid
- PC16 Driver Distracted By
- PC17 Pre-Event Movement (Prior to Recognition of Critical Event)
- PC18 Critical Event Precrash (Category)
- PC19 Critical Event Precrash (Event)
- PC20 Attempted Avoidance Maneuver
- PC21 Pre-Impact Stability
- PC22 Pre-Impact Location
- PC23 Crash Type

# **Precrash Data Overview**

Precrash data elements are completed for each of the in-transport motor vehicles in the case. This means that the entire crash is first completed from the perspective of one vehicle, then from the perspective of a second vehicle, if any, and so forth. The precrash data elements are:

- Driver Distracted By
- <u>Pre-Event Movement (Prior to Recognition of Critical Event)</u>
- <u>Critical Precrash Category</u>
- Critical Precrash Event
- <u>Attempted Avoidance Maneuver</u>
- Pre-Impact Stability
- Pre-Impact Location
- Crash Type

The precrash data elements are designed to identify the following:

- What was this vehicle doing just prior to the critical precrash event?
- What made this vehicle's situation critical?
- What was the avoidance response, if any, to this critical situation?
- What was the movement of the vehicle just prior to impact?

The most important determination that must be made for each in-transport motor vehicle is: what was this vehicle's Critical Precrash Event, (i.e., what action by this vehicle, another vehicle, person, animal, or non-fixed object was critical to this vehicle's crash?). Once the critical event is determined, the remaining precrash data elements are coded relative to this selected <u>Critical Precrash Event</u>.

Do not consider culpability as a factor for determining precrash data. Many crash scenarios will suggest fault, but this is considered coincidental rather than by design.

# **Critical Crash Envelope**

The critical crash envelope begins at the point where:

- 1. the driver recognizes an impending danger (e.g., deer runs into the roadway), or
- 2. the vehicle is in an imminent path of collision with another vehicle, pedestrian, pedalcyclist, other nonmotorist, object, or animal.

The critical crash envelope ends when:

- 1. all three:
  - a. the driver has made a successful avoidance maneuver, and
  - b. has full steering control, and
  - c. the vehicle is tracking; OR
- 2. the driver's vehicle impacts another vehicle, pedestrian, pedalcyclist, other non-motorist, object, or animal.

# Simple Single Critical Crash Envelope

Most crashes involve only a single critical crash envelope in which the object contacted is captured under the Critical Precrash Event, (e.g., a vehicle is traveling straight on a roadway and a deer runs into the roadway and is struck by the vehicle). This scenario, and similar ones, are very straightforward and will not present many problems.

### **Complex Single Critical Crash Envelope**

However, some single critical crash envelopes are more complex.

**Example A**: A driver avoids one obstacle and immediately impacts another vehicle, person, object, or animal. Because immediate is defined as **not** having an opportunity, or sufficient time, to take any additional avoidance actions, the Critical Precrash Event is related to the vehicle, person, object, or animal which the driver successfully avoided instead of the vehicle's first harmful event (*i.e.*, its impact); see <u>example 3</u> and <u>example 5</u>.

**Example B:** The driver avoids an obstacle only to (a) lose steering control and/or (b) have the vehicle stop tracking, and the vehicle subsequently impacts another vehicle, person, object, or animal.

Regardless of whether the driver:

- 1. attempted to regain steering control,
- 2. caused the vehicle to resume a tracking posture, or
- 3. avoided the impacted vehicle, person, object, or animal,

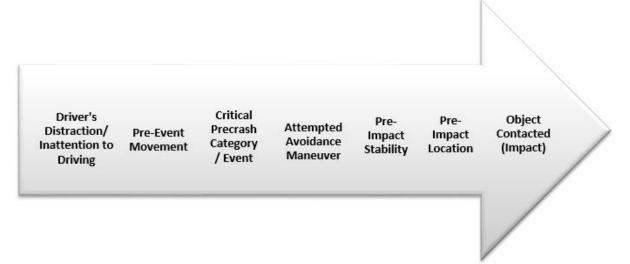
the Critical Precrash Event is similarly related to the vehicle, person, object, or animal which the driver successfully avoided because the driver's critical crash envelope was never stabilized.

In both examples above, the <u>Attempted Avoidance Maneuver</u> records the successful action taken to avoid the Critical Precrash Event.

Vehicles that are not involved in an impact with another vehicle, person, object, or animal in the sequence of crash events (that define this crash) are not included.

The coding order for a single critical crash envelope is illustrated in Figure 19.

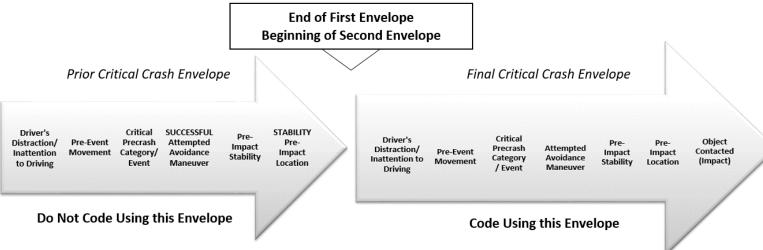
### Figure 19: Typical Order of a Single Critical Crash Envelope



### Multiple Critical Crash Envelopes

When a case involves multiple critical crash envelopes, select only the final critical crash envelope. In this situation, encode the element <u>Pre-Event Movement (Prior to Recognition of Critical Event)</u> as: **Successful avoidance maneuver to a previous critical event**. The final critical crash envelope is the one that resulted in this vehicle's first harmful event (i.e., its impact) as shown in <u>Figure 20</u>.

#### Figure 20: Typical Order of Multiple Critical Crash Envelopes



When there is doubt as to whether this vehicle had experienced a complex single, or multiple critical crash envelopes, choose the Critical Precrash Category/Event, to the vehicle, person, object, or animal which the driver successfully avoided (i.e., default to Complex Single). See <u>Complex Single Critical Crash Envelope</u> examples **A** and **B** above.

The following pages have: a method protocol, a <u>flowchart</u> illustrating the proper method and protocol for determining the precrash data elements, ten <u>Precrash General Rules</u>, and <u>eighteen examples</u> of various crash event sequences which contain one or more critical crash envelopes.

### **Method Protocol**

Consider the information obtained from the Police Report and any supplemental documents as inputs to your decision making process.

1. Determine <u>Critical Precrash Category</u> / <u>Critical Precrash Event</u>.

What action by this vehicle, another vehicle, person, animal, or object was critical to this driver becoming involved in the crash (i.e., use the "**BUT FOR**" \* test)?

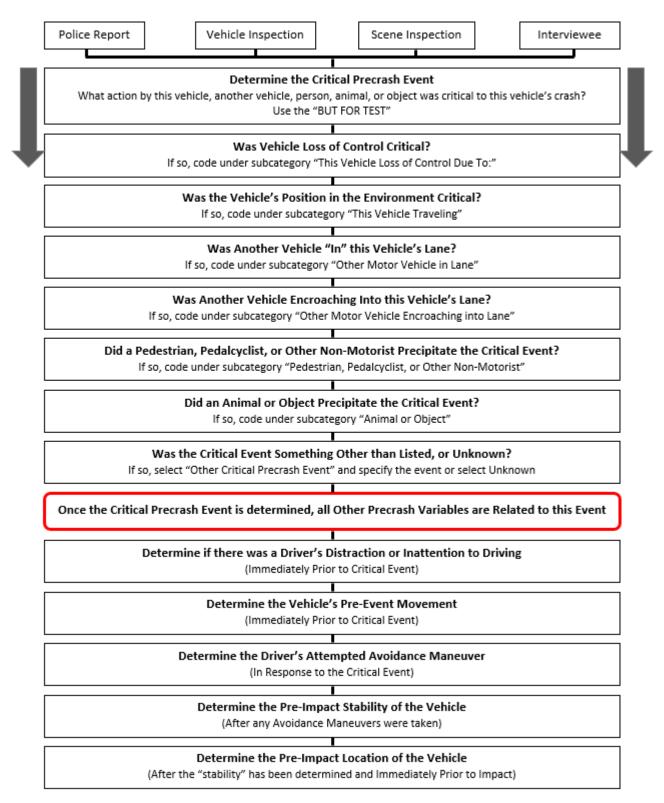
### \* FOR EXAMPLE:

- "But for" Vehicle # going left-of-center, this vehicle would not have been involved in this crash.
- "But for" having entered into the intersection, this vehicle would not have been involved in this crash. ASK yourself questions (a) through (f) below. Proceed through each question that applies to the crash you

are researching. Stop when the answer to the questions is "Yes". This is the Critical Precrash Category.

- a. Did the vehicle exhibit a control loss?
- b. Does the evidence suggest that the vehicle was in an environmentally dangerous position?
- c. Was another vehicle "in" this vehicle's lane?
- d. Was another vehicle entering into this vehicle's lane?
- e. Was a pedestrian, pedalcyclist, or other non-motorist in or approaching this vehicle's path?
- f. Was an animal in or approaching this vehicle's path or was an object in this vehicle's path?
- 2. Determine Driver Distracted By.
- 3. Determine Pre-Event Movement (Prior to Recognition of Critical Event).
- 4. Determine <u>Attempted Avoidance Maneuver</u>. What does your information indicate that the driver tried to do to avoid the crash?
- 5. Determine Pre-Impact Stability.
- 6. Determine <u>Pre-Impact Location.</u>

### **Precrash Methodology Flowchart**



# **Precrash General Rules**

- 1. <u>Attempted Avoidance Maneuver</u> assesses what the driver's action(s) was during the critical crash envelope in response to his/her realization of impending danger.
- 2. The mere presence of a traffic control signal/sign typically does not make the situation critical when determining <u>Critical Precrash Event</u>.

For example: A single vehicle approaches a stop sign and departs the right side of the road impacting a tree, in an attempt to avoid passing through the intersection. The sign has no bearing and therefore, does not make the situation critical.

**3.** When you know the <u>Critical Precrash Category</u>, but are unable to select a specific <u>Critical Precrash Event</u>, use the following guideline:

Default to one of the "Other" or "Unknown" attributes within each Critical Precrash Event category, rather than coding the entire Critical Precrash Category as "Other critical precrash event."

- **4.** If control is lost due to driver illness such as heart attacks, diabetic comas, etc., then Critical Precrash Event should be coded as "<u>Other cause of control loss (Specify:</u>)."
- 5. When coding <u>Critical Precrash Category</u> as "This vehicle loss of control", the loss of control must have occurred prior to the driver doing any avoidance maneuver. If the driver attempts a maneuver (i.e., brakes, steers, etc.) as a result of the driver's perception of a vehicle, object, pedestrian, or non-motorist, then select the vehicle, object, pedestrian, or non-motorist as the critical event because that is what made the situation critical. If the vehicle is in a yaw prior to the driver taking an avoidance action, then loss-of-control is what made it critical (e.g., critical curve scuff, hydroplaning, etc.).
- **6.** When determining Critical Precrash Category/Event if you do not know from available sources which driver had the right-of-way at a controlled or uncontrolled intersection, then use the following as a guideline:
  - a. If the junction is controlled by a 3-way / 4-way stop sign, or is uncontrolled, then use the common rule that the vehicle on the right has the right-of-way for determining encroachment.
  - b. If the junction is controlled by an on-colors traffic control device, and both drivers claim a green light, then both vehicles are in an environmentally dangerous position, and Critical Precrash Event for both vehicles should be <u>This Vehicle Traveling</u> (Critical Precrash category) <u>Crossing over (passing through)</u> junction (Critical Precrash Event).
- When two vehicles are initially traveling on the same trafficway and one executes a left turn with the right-of-way (i.e. green arrow), use <u>Other Motor Vehicle Encroaching Into Lane</u> <u>From opposite direction-over</u> <u>right lane line</u> for the turning vehicle's critical event. This applies to <u>Crash Types 68, 69</u>.

If the vehicles were initially on different trafficways (Crash Types <u>76, 77</u> and <u>82, 83</u>) the critical event for the vehicle turning left with the right-of-way should be <u>Other Motor Vehicle Encroaching</u> - <u>From crossing street</u> <u>across path</u>.

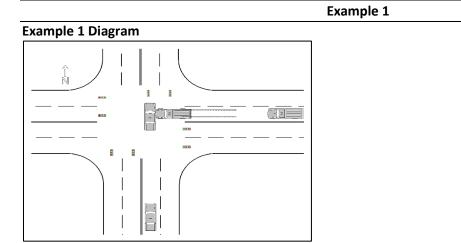
- 8. "Fixed" objects (e.g., trees, poles, fire hydrants, etc.) cannot be in the roadway.
- **9.** A motor vehicle is stopped in a travel lane and is impacted by another motor vehicle ricocheting off a vehicle. The Critical Precrash Event for the vehicle struck by the ricocheting vehicle is in the <u>category</u> of either: <u>Other Motor Vehicle In Lane</u> or <u>Other Motor Vehicle Encroaching Into Lane</u>.

- **10.** <u>Pre-Impact stability</u> should be indicated as "<u>Tracking</u>" if the following are met:
  - a. no skid marks are present on the diagram or mentioned in the narrative.
  - b. the case materials do not indicate skidding AND
  - c. the vehicle did not rotate 30 degrees or more (either clockwise or counterclockwise).

#### Note regarding Pre-Impact Stability:

If the case materials do not provide enough information (e.g., in the diagram, narrative, etc.) to determine precrash stability, code <u>9 (Precrash Stability Unknown)</u>.

Trafficway and its component definitions (i.e., roadway, road, shoulder, and median) can be found in the <u>ANSI</u> <u>D16.1 Manual on the Classification of Motor Vehicle Traffic Accidents</u>.



# Precrash Examples

Vehicle 1 was traveling northbound on a four-lane roadway. Vehicle 2 was traveling westbound on an intersecting four-lane roadway. The intersection was controlled by traffic signals. Both vehicles entered the intersection and the right side of Vehicle 1 was struck by the front of Vehicle 2. Police could not determine which vehicle had the right-of-way, both drivers claimed to have a green light. The driver of Vehicle 1 reported that he never saw Vehicle 2 approaching.

"None" was identified by police on the crash report for both drivers in the data element for recording driver distractions. The police also indicated that no skid marks were present at the scene associated with Vehicle 1, but there were pre-impact skids present at the scene associated with Vehicle 2 and that this supported the driver's statement that he attempted to stop when he saw Vehicle 1 in his path.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	This Vehicle Traveling
Critical Precrash (Event)	Crossing Over (Passing Through)	Crossing Over (Passing Through)
	Junction	Junction
Attempted Avoidance Maneuver	No Avoidance Maneuver	Braking
Pre-Impact Stability	Tracking	Skidding Longitudinally Rotation
		Less Than 30 Degrees
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	87	86

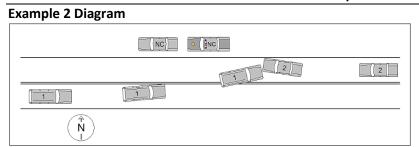
In this example, the **Critical Crash Envelope** for Vehicle 1 ( $V_1CCE$ ) begins at the point where it is in an imminent collision path with Vehicle 2. The **Critical Crash Envelope** for Vehicle 2 ( $V_2CCE$ ) begins at the point where the drivers recognize the impending danger. The **Critical Crash Envelopes** end at the point of impact with the other vehicle.

Since it could not be determined which vehicle had the right-of-way, the **Critical Event** is determined using **Precrash General Rule #6b.** It states; "If the junction is controlled by an on-colors traffic control device, and both drivers claim a green light, then both vehicles are in an environmentally dangerous position and the **Critical Event** for both vehicles should be <u>This Vehicle Traveling (Critical Event - Precrash (Category)) Crossing Over</u> (Passing Through) Junction (Crtical Event - Precrash (Event))."

Vehicle 1's **Pre-Impact Stability** was <u>Tracking</u> based on <u>Precrash General Rule #10</u>. <u>Skidding Longitudinally</u> <u>Rotation Less Than 30 Degrees</u> was selected for Vehicle 2's **Pre-Impact Stability** because tire marks were identified on the report and there was no indication of rotation.

It is important to keep in mind the type of traffic control (traffic signal versus stop sign) when determining rightof-way. Using the same scenario but substituting stops signs for the traffic signals, would change the **Critical Event** for both vehicles. <u>Precrash General Rule #6a</u> states; "If the junction is controlled by a 3-way or 4-way stop sign, or is uncontrolled, the vehicle on the right [Vehicle 2 in this case] would have had the right-of-way for determining encroachment."

#### Example 2



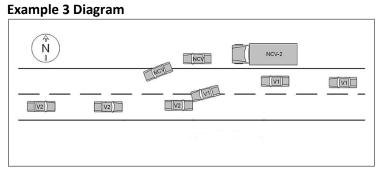
Vehicle 1 and Vehicle 2 are traveling in opposite directions on the same roadway. A police car (with lights activated) is making a traffic stop on the north side of the road. The driver of Vehicle 1 is looking at the activity on his left. Before he can react, Vehicle 1 crosses the centerline and strikes the front of Vehicle 2. The driver of Vehicle 2 also noticed the police activity, but he was attentive to the slowing traffic ahead. Vehicle 2 attempted to avoid the crash by braking and steering right.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Distracted by Outside Person,	Not Distracted
	Object, or Event	
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	Other Motor Vehicle Encroaching Into Lane
Critical Precrash (Event)	Over the Lane Line on Left	From Opposite Direction Over Left Lane
	Side of Travel Lane	Line
Attempted Avoidance	No Avoidance Maneuver	Braking and Steering Right
<u>Maneuver</u>		
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed on Roadway, But Left	Stayed in Original Travel Lane
	Original Travel Lane	
Crash Type	50	51

In this example, Vehicle 1 has one **Critical Crash Envelope** ( $V_1$ CCE) which begins at the point where Vehicle 1 is in an imminent collision path with Vehicle 2. Vehicle 1's **Critical Crash Envelope** ends at the point of impact with Vehicle 2.

Vehicle 2's **Critical Crash Envelope** (V<sub>2</sub>CCE) begins when the driver recognizes impending danger and ends at the point of impact with Vehicle 1.

When determining **Crash Type**, it is important to keep in mind that some **Crash Configurations** are plane of impact dependent, while others are not. In this case the **Crash Type** for Vehicle 1 and Vehicle 2 is <u>'50' and '51,'</u> <u>Head-On</u> respectively since it involved the front planes of both vehicles. If the collision had involved the side of one or both of the vehicles, then the **Crash Type** would have been <u>'64' and '65,' Angle/Sideswipe</u>.



Vehicle 1 and Vehicle 2 are traveling in opposite directions on the same roadway. A noncontact vehicle (NCV) is parked in front of a non-contact heavy truck on the road shoulder and suddenly enters the roadway into Vehicle 1's travel lane. The driver of Vehicle 1 instantly brakes and steers left to avoid the non-contact vehicle. Vehicle 1 crosses over the center line and **immediately** impacts the front of Vehicle 2. Vehicle 2 had no avoidance maneuvers. "None" was identified by police on the crash report for both drivers in the data element for recording driver distractions.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	Other Motor Vehicle Encroaching	Other Motor Vehicle Encroaching
	Into Lane	Into Lane
Critical Precrash (Event)	From Parking Lane/Shoulder	From Opposite Direction Over Left
	FIOH Farking Lane, Shoulder	Lane Line
Attempted Avoidance	Braking and Steering Left	No Avoidance Maneuver
<u>Maneuver</u>		
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed on Roadway, But Left	Stayed in Original Travel Lane
	Original Travel Lane	
Crash Type	58	59

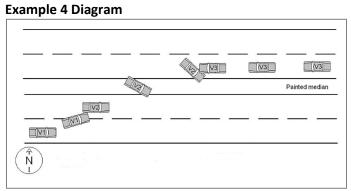
In this example, Vehicle 1 has one **Critical Crash Envelope** (V<sub>1</sub>CCE). Vehicle 1's **Critical Crash Envelope** involved a successful avoidance of a non-contact vehicle and resulted in an **immediate** impact to Vehicle 2. Vehicle 1's **Critical Crash Envelope** was initiated by the non-contact vehicle; afterwards there was no opportunity for subsequent avoidance actions. Therefore, the encroachment of the non-contact vehicle into Vehicle 1's travel lane is coded as the **Critical Event - Precrash (Event)** for Vehicle 1. Vehicle 1's **Attempted Avoidance Maneuver** is coded as the action taken to avoid the non-contact vehicle.

Vehicle 2 has one **Critical Crash Envelope** ( $V_2$ CCE) which begins at the point where Vehicle 1 is in an imminent path of collision with Vehicle 2 and ends at the point of impact with Vehicle 1.

Tracking is selected as Vehicle 1's Pre-Impact Stability based on Precrash General Rule #10.

Vehicle 1's **Pre-Impact Location** is <u>Stayed On Roadway But Left Original Travel Lane</u>. This attribute best describes the location of the vehicle after the critical event and before impact.

The non-contact vehicle and the non-contact truck were not involved in an impact in the sequence of crash events and are, therefore, non-contact vehicles and not counted in the structuring of the case.

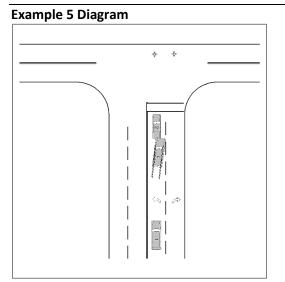


Vehicle 1 and Vehicle 2 are traveling in the same direction in adjacent lanes on a divided highway (with a painted median). Vehicle 1 has a tire blow out and loses control, crosses the left lane line and impacts the right rear of Vehicle 2. Vehicle 2 is redirected across the painted median, skidding and rotating clockwise, and subsequently impacts Vehicle 3. Vehicle 3 attempted to avoid Vehicle 2 by steering right and accelerating. "None" was identified by police on the crash report for all drivers in the data element for recording driver distractions.

Precrash Element	Vehicle 1	Vehicle 2	Vehicle 3
Driver Distracted By	Not Distracted	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight	Going Straight
Critical Precrash	This Vehicle Loss Control	Other Motor Vehicle	Other Motor Vehicle
(Category)	Due To:	Encroaching Into Lane	Encroaching Into Lane
Critical Precrash (Event)	Blow Out or Flat Tire	From Adjacent Lane (Same Direction) - Over Right Lane Line	From Opposite Direction - Over Left Lane Line
Attempted Avoidance Maneuver	Unknown/Not Reported	Unknown/Not Reported	Accelerating and Steering Right
Pre-Impact Stability	Tracking	Tracking	Tracking
Pre-Impact Location	Stayed on Roadway, But Left	Stayed in Original Travel	Stayed in Original Travel
	Original Travel Lane	Lane	Lane
<u>Crash Type</u>	45	44	98

In this example, Vehicle 1 has one **Critical Crash Envelope** ( $V_1CCE$ ) which begins with control loss due to the tire blow out and ends at the point of impact with Vehicle 2. The blow out is the **Critical Event - Precrash (Event)**. Vehicle 2 has two **Critical Crash Envelopes** ( $V_2CCE_1$  and  $V_2CCE_2$ ). Vehicle 2's first **Critical Crash Envelope** ( $V_2CCE_1$ ) begins when Vehicle 1 enters Vehicle 2's travel lane and ends at the point of impact with Vehicle 1. The first CCE is selected because Precrash is only interested in coding the **Critical Crash Envelope** which leads to a vehicle's first harmful event. Vehicle 3 has one **Critical Crash Envelope** ( $V_3CCE$ ) which begins when Driver 3 recognizes and reacts to Vehicle 2 which is in an imminent path of collision with Vehicle 3 and ends at the point of impact with Vehicle 2.

Attempted Avoidance Maneuver was coded as Unknown/Not Reported for Vehicles 1 and 2 because of a lack of information to assess attempted avoidance. The **Crash Type** for Vehicle 1 and Vehicle 2 is <u>'45' - '44,'</u> <u>Sideswipe/Angle: Straight Ahead</u>, respectively based on their positions (i.e. left versus right) and because Vehicle 1 did not intend to change lanes. Situations involving vehicles that intended to change lanes are captured with **Crash Type** codes <u>'46' and '47,' Sideswipe/Angle: Changing lanes</u>. The **Crash Type** for Vehicle 3 is <u>'98,' Other</u> since it was not involved in the first harmful event in the crash.



Vehicle 2 is stopped waiting to turn left in a left turn lane at an intersection controlled by a traffic signal. Vehicle 1 approaches the intersection and the driver is texting. Vehicle 1's driver looks up at the last minute and brakes and steers right leaving tire marks, but cannot avoid striking the rear of Vehicle 2. There is no information on the crash report to assess distraction for the driver of Vehicle 2.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	While Manipulating Cellular Phone	Not Reported
Pre-Event Movement	Going Straight	Stopped in Road
Critical Precrash (Category)	Other Vehicle In Lane	Other Vehicle In Lane
Critical Precrash (Event)	Other Vehicle Stopped	Traveling in Same Direction With Higher Speed
Attempted Avoidance Maneuver	Braking and Steering Right	No Avoidance Maneuver
Pre-Impact Stability	Skidding Longitudinally - Rotation Less Than 30 Degrees	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	20	22

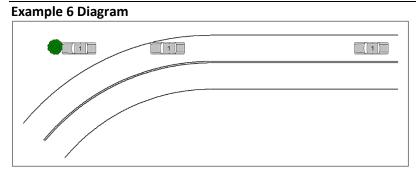
In this example, Vehicle 1's **Critical Crash Envelope** ( $V_1CCE$ ) begins at the point the driver recognizes Vehicle 2 is stopped in the lane, and ends at the point of impact with Vehicle 2. Vehicle 2's **Critical Crash Envelope** ( $V_2CCE$ ) begins and ends at the point of impact.

Vehicle 1's Driver Distracted By is While Manipulating a Cellular Phone. Texting is captured in this attribute.

The Pre-Event Movement and Critical Event coding can be tricky in rear-end crash scenarios. Refer to the **Precrash Event Scenarios for Different Rear-End Collision Situations** following the Precrash Examples for additional guidance.

The **Crash Type** for Vehicle 2 is <u>'22,' Rear-end: Stopped Left</u> because it was stopped and **intended** to turn left at the intersection.

The **Pre-Impact Stability** for Vehicle 1 is <u>Skidding Longitudinally - Rotation Less Than 30 Degrees</u> as opposed to <u>Tracking</u> because tire marks were present and rotation was minimal.



Vehicle 1 is traveling on a two-lane roadway and the driver, who is diabetic, has a hypoglycemic attack and begins to lose consciousness. The vehicle departs the right side of the road as it enters a curve and strikes a tree.

Precrash Element	Vehicle 1	
Driver Distracted By	Not Distracted	
Pre-Event Movement	Going Straight	
Critical Precrash (Category)	This Vehicle Loss Of Control Due To	
Critical Precrash (Event)	Other Cause Of Control Loss (Specify:)	
Attempted Avoidance Maneuver	None	
Pre-Impact Stability	Tracking	
Pre-Impact Location	Departed Roadway	
Crash Type	01	

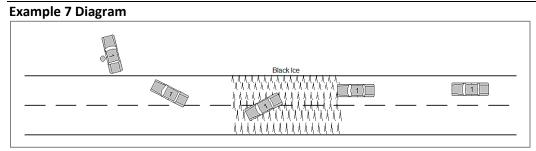
Vehicle 1's **Critical Crash Envelope** ( $V_1$ CCE) begins at the point where the vehicle is in imminent path of a collision with the tree and ends at impact.

**Driver Distracted By** is coded as <u>Not Distracted</u> because the driver lost consciousness just prior to the Critical Precrash Event and intoxication, illness, blackouts, falling asleep, or being fatigued are not considered distractions for the purposes of this element in FARS and CRSS.

The **Critical Event** is coded <u>This Vehicle Control Loss Due To: Other Cause of Control Loss (Specify:)</u> following <u>Precrash General Rule #4</u> which addresses loss of control because of driver illness.

The **Pre-Event Movement** element describes the vehicle's activity just prior to the **Critical Event**, in this case, <u>Going Straight</u>.

The **Crash Type** for Vehicle 1 is <u>'01,' Right Roadside Departure: Drive Off Road</u>. Do not confuse the **Critical Event Category** coding of <u>This Vehicle Control Loss Due To</u> with the **Crash Type** <u>'02,' Right Roadside Departure:</u> <u>Control/Traction Loss</u>.



Vehicle 1 is traveling on a two-lane roadway with moderate snow falling. The driver suddenly encounters black ice on the roadway, loses control, and begins to rotate counterclockwise. The driver attempts to regain control by braking and steering right, but overcorrects and the vehicle departs the right side of the roadway and strikes a pole. The police on the crash report identify that the driver is "Not Distracted".

Precrash Element	Vehicle 1	
Driver Distracted By Not Distracted		
Pre-Event Movement	Going Straight	
Critical Precrash (Category)	This Vehicle Loss Of Control Due To:	
Critical Precrash (Event)	Poor Road Conditions (Specify:)	
Attempted Avoidance Maneuver Braking and Steering Right		
Pre-Impact Stability	Skidding Laterally Clockwise Rotation	
Pre-Impact Location	Departed Roadway	
Crash Type	02	

Vehicle 1's **Critical Crash Envelope** (V<sub>1</sub>CCE) begins when the vehicle encounters the black ice and ends at impact with the pole.

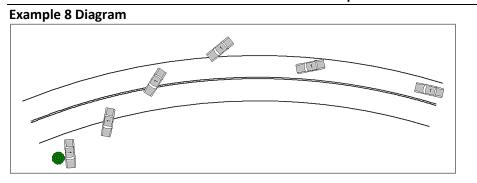
The **Critical Event** in this example is <u>This Vehicle Control Loss Due To: Poor Road Conditions (Specify:</u> (Black ice)).

It can be difficult to determine the **Critical Event** in cases when weather, road conditions, roadway alignment, and speed all potentially play a role in the crash. Examples 7 and 8 are prime examples, <u>Poor Road Conditions</u>, <u>Too Fast For Conditions</u>, or <u>This Vehicle Traveling</u> category attributes (e.g. <u>Off The Edge Of The Road On The</u> <u>Right Side</u>) could be selected based on the circumstances.

Typically, <u>Poor Road Conditions</u> such as ice and puddles are "suddenly" encountered by the driver and not an ongoing situation.

<u>Too Fast For Conditions</u> applies when the vehicle's movement and speed were not appropriate relative to the vehicle's surroundings; roadway curves are often involved.

If neither of these Loss Of Control Critical Events apply, then This Vehicle Traveling Category attributes are appropriate.



Vehicle 1 is traveling on a two-lane roadway with heavy rain falling. Police estimate the driver was traveling 55 mph in this 35-mph speed zone. While negotiating a curve, the driver loses control on the rain-slickened road and the vehicle slides off the right edge of the road but does not sustain an impact. The driver steers left in an attempt to regain control, crosses both travel lanes, and departs the left side of the road before striking a tree with its right side. The crash report identifies "None" in a Contributing Circumstances field that includes various driver distraction attributes among the factors available.

Precrash Element	Vehicle 1	
Driver Distracted By	Not Distracted	
Pre-Event Movement	Negotiating a Curve	
Critical Precrash (Category)	This Vehicle Loss of Control Due To	
Critical Precrash (Event)	Traveling Too Fast For Conditions	
Attempted Avoidance Maneuver Steering Left		
Pre-Impact Stability	Skidding Laterally Counterclockwise Rotation	
Pre-Impact Location	Departed Roadway	
Crash Type	07	

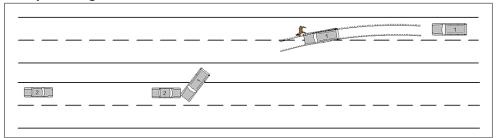
In this example, Vehicle 1 has one **Critical Crash Envelope** ( $V_1$ CCE) which begins when the driver begins to lose control and the vehicle begins to rotate counter-clockwise. The envelope ends at impact with the tree. This crash is not a multiple **Critical Crash Envelope** scenario because Vehicle 1 never regained control.

The **Critical Event** is coded <u>This Vehicle Control Loss Due To: Too Fast For Conditions</u> because the vehicle's movement and speed were not appropriate relative to the vehicle's surroundings (heavy rain and curve). This is applicable in this case even without the officer specifically stating "too fast for conditions."

The **Pre-Impact Location** is coded <u>Departed Roadway</u> since the element is based on the location of the vehicle after the critical event, and immediately before the first impact.

The **Crash Type** element is based on the first harmful event and the vehicle did not strike anything when it departed the right side of the road, therefore, <u>'07,' Left Roadside Departure-Control/Traction Loss</u> is selected as the **Crash Type**.

#### **Example 9 Diagram**



Vehicle 1 is traveling westbound on a highway with a posted speed limit of 55 mph. Vehicle 2 is traveling east on the same highway in sunny and dry conditions. A deer suddenly enters the roadway from the right and the driver of Vehicle 1 attempts to brake and steer left, leaving several meters of tire marks, but strikes the deer. Vehicle 1 then goes into a counterclockwise yaw and crosses into the oncoming lanes and strikes Vehicle 2.

The driver of Vehicle 1 had a blood alcohol concentration (BAC) of 0.15 and was charged with driving under the influence. There were no indications of distraction identified on the crash report for the driver of Vehicle 1. Instead, in the Contributing Factors field where the officer could assess distraction he selected "animal in road" and "had been drinking". The Contributing Factors for the driver of Vehicle 2 were coded as "Unknown". The driver of Vehicle 2 was killed.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Unknown if Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	Object or Animal	Other Motor Vehicle Encroaching
		Into Lane
Critical Precrash (Event)	Animal in Road	From Opposite Direction Over
		Left Lane Line
Attempted Avoidance	Braking and Steering Left	Unknown/Not Reported
<u>Maneuver</u>		Shkhown/Not Reported
Pre-Impact Stability	Skidding Longitudinally Rotation Less	Tracking
	Than 30 Degrees	Tracking
Pre-Impact Location	Stayed On Roadway, But Left Original	Stayed in Original Travel Lane
	Travel Lane	
Crash Type	13	98

Vehicle 1 has two **Critical Crash Envelopes** ( $V_1CCE_1$  and  $V_1CCE_2$ ). Vehicle 1's first **Critical Crash Envelope** ( $V_1CCE_1$ ) begins when the driver recognizes the deer in the roadway and ends at the point of impact with the deer. The Precrash coding is based on the **Critical Crash Envelope** which resulted in Vehicle 1's first impact ( $V_1CCE_1$ ).

Vehicle 2 has only one **Crash Envelope** (V<sub>2</sub>CCE) which begins when it's in imminent path of collision with Vehicle 1 and ends at impact.

<u>Not Distracted</u> is selected for Vehicle 1 **Driver Distracted By**. The driver took evasive maneuvers to avoid the deer which identifies that the driver was attentive prior to the Critical Event. Also, there were no indications of distraction identified on the crash report for the driver of Vehicle 1 and in the Contributing Factors field, where the officer could assess distraction, he selected "animal in road" and "had been drinking." It's important to note that the BAC level or indication of alcohol as a factor in the crash for the driver of Vehicle 1 plays no role in distraction coding.

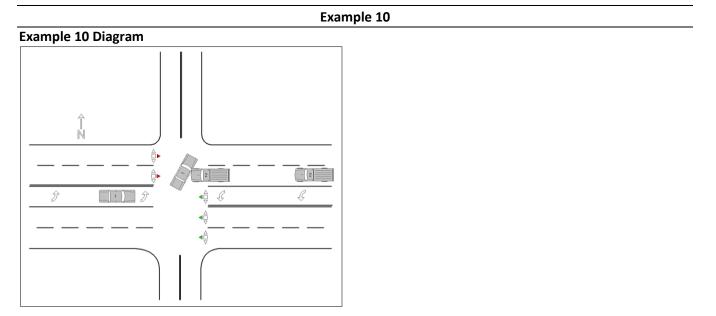
The **Pre-Impact Location** for Vehicle 1 is <u>Stayed On Roadway- But Left Original Travel Lane</u> since part of the vehicle was out of its original lane prior to impact with the deer. Similarly, vehicles that depart the road and strike a curb are coded as <u>Departed the roadway</u> even though the majority of the vehicle is still on the roadway.

The Crash Type for Vehicle 1 is <u>'13,' Pedestrian/Animal on Road</u>.

Vehicle 2 **Driver Distracted By** is coded <u>Unknown if Distracted</u>; the deceased driver could not be interviewed by the police and the officer coded "Unknown" in the field where distraction would be assessed.

Since no information was available to assess **Attempted Avoidance Maneuver** <u>Unknown/Not Reported</u> was selected for Vehicle 2.

The **Crash Type** for Vehicle 2 is <u>'98,' Other</u> since it was not involved in the first harmful event in the crash.



The crash occurred at the intersection of a five-lane east/west roadway with a center left-turn lane and a twolane north/south roadway. The intersection was controlled by traffic signals. Vehicle 1 was eastbound in the left-turn lane of the five-lane roadway. Vehicle 2 was traveling west on the same roadway. Vehicle 1 had a green turn arrow and attempted to turn left to go north on the intersecting two lane road. Vehicle 2 passed through the intersection and its front struck the right side of Vehicle 1. The officer reported that there was no evidence of avoidance actions by either of the vehicles involved.

"Not Distracted" was identified by police on the crash report for the driver of Vehicle 1. The Police Crash Report did not detail the circumstances regarding Vehicle 2's passing through the intersection, but the driver was cited for running a red light.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Reported
Pre-Event Movement	Turning Left	Going Straight
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into	This Vehicle Traveling
	Lane	
Critical Precrash (Event)	From Opposite Direction Over Right	Crossing Over (Passing Through)
	Lane Line	Junction

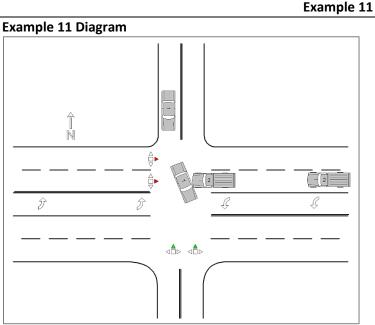
Precrash Element	Vehicle 1	Vehicle 2
Attempted Avoidance	No Avoidance Maneuver	No Avoidance Maneuver
<u>Maneuver</u>		
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	68	69

In this example, the **Critical Crash Envelope** for both vehicles ( $V_1CCE$ ) and ( $V_2CCE$ ) begin when they are in an imminent path of collision. The **Critical Crash Envelopes** end at the point of impact.

The first portion of <u>Precrash General Rule #7</u> applies to this crash. It states "When two vehicles are initially traveling on the **same** trafficway and one executes a left turn with the right-of-way (i.e. green arrow), use <u>Other</u> <u>Motor Vehicle Encroaching Into Lane - From Opposite Direction Over Right Lane Line</u> for the turning vehicle's **Critical Event**."

A similar principle applies for Vehicle 1's **Pre-Impact Location**; it's considered to have <u>Stayed in Original Travel</u> <u>Lane</u> while making the turn. Consider Vehicle 1's "lane" as continuing left as they negotiate the turn through the intersection.

Vehicle 2's **Driver Distracted By** is coded <u>Not Reported</u> since the Police Crash Report did not provide any information on distractions.



The crash occurred at the intersection of a five lane east/west roadway with a center left-turn lane and a twolane north/south roadway. The intersection was controlled by traffic signals. Vehicle 1 was southbound on the two-lane roadway. Vehicle 2 was traveling west on the five- lane roadway. Vehicle 1 had a green turn arrow and attempted to turn left to travel east on the intersecting five lane road. Vehicle 2 passed through the intersection and its front struck the left side of Vehicle 1.

The driver of Vehicle 1 was attentive and took no avoidance actions. Vehicle 2's driver reported that he was thinking about an issue at work and did not notice the traffic signal until the last moment. He applied his brakes, but no tire marks were present.

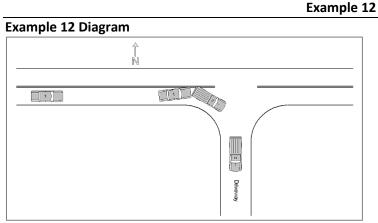
Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Lost in Thought/Day Dreaming
Pre-Event Movement	Turning Left	Going Straight
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into	This Vehicle Traveling
	Lane	
Critical Precrash (Event)	From Crossing Street Across Path	Crossing Over (Passing Through)
		Junction
Attempted Avoidance	No Avoidance Maneuver	Braking
Maneuver		
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	82	83

In this example, Vehicle 1's **Critical Crash Envelope** ( $V_1CCE$ ) begins at the point where Vehicle 1 is in an imminent collision path with Vehicle 2 and ends at the point of impact.

Vehicle 2's **Critical Crash Envelope** (V<sub>2</sub>CCE) begins when the driver recognizes Vehicle 1 turning in front of it in the intersection and ends at impact.

The second portion of <u>Precrash General Rule #7</u> applies to this crash. It states "When two vehicles are initially traveling on **different** trafficways the **Critical Event** for the vehicle turning left with the right-of-way should be <u>Other Motor Vehicle Encroaching into Lane-From Crossing Street, Across Path</u>."

Vehicles initially on **different** trafficways are captured in **Crash Type Configuration** <u>(K, 'Turn Into Path</u> (**Crash Types** <u>'76' - '85'</u>). So, in this case, the **Crash Types** for Vehicle 1 and Vehicle 2 are <u>'82' and '83'</u> respectively. Turning vehicles initially on the **same** trafficway are coded in **Crash Type Configuration** <u>(J, 'Turn Across Path</u> (**Crash Types** <u>'68' - '75'</u>). Unlike many of the other **Crash Types**, the plane contacted on the vehicle is irrelevant for the <u>Change Trafficway</u> (Category IV) **Crash Types**.



Vehicle 1 was eastbound on a two-lane roadway. Vehicle 2 was backing out of a driveway on the south side of the road, intending to travel east. Vehicle 1 braked and steered left, but was unable to avoid striking the rear of Vehicle 2. The driver of Vehicle 2 stated he saw the other vehicle approaching, but misjudged its speed and did not think they were going to collide.

The officer indicated that Vehicle 1 was traveling 50 mph in the 35 mph speed zone and applied the brakes just prior to impact, but did not leave tire marks. Driver distractions were identified by police for both drivers on the crash report as "None".

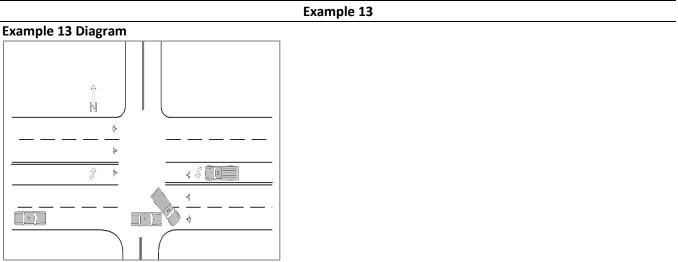
Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Backing Up
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into Lane This Vehicle Traveling	
Critical Precrash (Event)	From Driveway, Turning into Same Direction Backing	
Attempted Avoidance Maneuver	Braking and Steering Left	No Avoidance Maneuver
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Entered Roadway
Crash Type	93	92

In this example, Vehicle 1's **Critical Crash Envelope** ( $V_1$ CCE) begins at the point where the driver recognizes Vehicle 2 is backing into the roadway and recognizes the danger. The **Critical Crash Envelope** for Vehicle 1 ends at impact.

Vehicle 2's **Critical Crash Envelope** (V<sub>2</sub>CCE) begins when it's in imminent path of collision with Vehicle 1 and ends at impact.

Although Vehicle 1 was traveling 15 mph over the speed limit, the **Critical Precrash Category** for Vehicle 1 is <u>Other Motor Vehicle Encroaching Into Lane</u>. The situation that made the event critical was Vehicle 2's movement (backing out of the driveway) and not Vehicle 1's speed. The **Critical Event** for Vehicle 1 is <u>From</u> <u>Driveway Turning Into Same Direction</u>, since Vehicle 2 **intended** to travel east in the same direction as Vehicle 1.

The Critical Event for Vehicle 2 is This Vehicle Traveling- Backing.



Vehicle 1 was eastbound on a five-lane roadway with center left-turn lanes approaching an intersection controlled by a traffic signal. Vehicle 2 was westbound on the same roadway in the left turn lane. The signal was solid green for eastbound and westbound traffic. Vehicle 2 attempted to make a U-turn at the intersection

to travel east and was struck in the right side by the front of Vehicle 1. The driver of Vehicle 2 stated he scanned the intersection for traffic but did not see Vehicle 1 approaching. The driver of Vehicle 1 was attentive and saw the other vehicle approaching but did not think it would attempt to turn and consequently had no time to react. Police charged the driver of Vehicle 2 with failure to yield.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Looked but Did Not See
Pre-Event Movement	Going Straight	Making a U-Turn
Critical Precrash (Category)	Other Motor Vehicle Encroaching Into	This Vehicle Traveling
	Lane	
Critical Precrash (Event)	From Opposite Direction Over Left	Making a U-Turn
	Lane Line	
Attempted Avoidance	No Avoidance Maneuver	No Avoidance Maneuver
<u>Maneuver</u>		
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed on Roadway but Left
		Original Travel Lane
Crash Type	98	98

In this example, Vehicle 1's **Critical Crash Envelope** (V<sub>1</sub>CCE) begins at the point where the driver recognizes Vehicle 2 is making a U-turn in front of them and ends at impact.

Vehicle 2's **Critical Crash Envelope** ( $V_2$ CCE) begins when it's in imminent path of collision with Vehicle 1 and ends at impact.

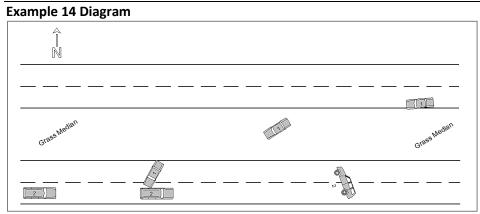
The **Critical Event** for Vehicle 1 is <u>Other Motor Vehicle Encroaching into Lane-From Opposite Direction Over Left</u> Lane Line.

The **Pre-Event Movement** for Vehicle 2 is <u>Making a U-Turn</u> and the **Critical Event** for Vehicle 2 is <u>Making a U-Turn</u>. If it is unclear if a vehicle is <u>Turning Left</u> or <u>Making a U-Turn</u>, default to <u>Turning Left</u>.

The key to the **Critical Event** coding in this case is that Vehicle 2 did **not** have the right of way while making the U-turn. If the scenario was altered such that Vehicle 2 was making a legal U-turn **with** the right of way, the first portion of <u>Precrash General Rule #7</u> would apply and Vehicle 2's **Critical Event** would be <u>Other Motor Vehicle</u> <u>Encroaching into Lane -From Opposite Direction Over Right Lane Line</u>.

The **Crash Type** for both vehicles is, <u>'98,' Other Crash Type</u>. This **Crash Type** is used for collisions that do not reasonably fit into any of the specified types. This code includes (but is not limited to): Rollovers on the road, U-turns, third or subsequent vehicles involved in a crash, or the second involved vehicle when the first harmful event involved a vehicle-to-object collision or non-collision.





Vehicle 1 was traveling westbound on a median divided highway. Vehicle 2 was traveling east on the same highway. The driver of Vehicle 1 reportedly fell asleep and drifted off the left side of the roadway. Vehicle 1 crossed the median and entered the eastbound lanes where its front struck the left side of Vehicle 2. After initial impact Vehicle 2 rotated counter-clockwise and rolled over one quarter turn, coming to rest on its right side. The field on the crash report for assessing driver distraction was coded as "Other" for the driver of Vehicle 1 and "None" for the driver of Vehicle 2.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	Other Motor Vehicle Encroaching
		Into Lane
Critical Precrash (Event)	Off the Edge of the Road on the Left	From Opposite Direction Over
	Side	Left Lane Line
Attempted Avoidance	No Avoidance Maneuver	Unknown/Not Reported
<u>Maneuver</u>		Olknown/Not Reported
Pre-Impact Stability	Skidding Laterally Counterclockwise	Tracking
	Rotation	Паскінg
Pre-Impact Location	Departed Roadway	Stayed in Original Travel Lane
Crash Type	64	65

In this example, Vehicle 1's **Critical Crash Envelope** ( $V_1$ CCE) begins at the point where the vehicle leaves the initial roadway and ends at impact.

Vehicle 2's **Critical Crash Envelope** (V<sub>2</sub>CCE) begins when the driver recognizes the other vehicle approaching and ends at impact.

Vehicle 1's **Driver Distracted By** is coded as <u>Not Distracted</u> because the driver was asleep just prior to the Critical Precrash Event and intoxication, illness, blackouts, falling asleep, or being fatigued are not considered distractions for the purposes of this element in FARS and CRSS.

Vehicle 1's **Attempted Avoidance Maneuver** is coded as <u>No Avoidance Maneuver</u> because this element identifies the driver's action/response to the Critical Event and this driver was asleep.

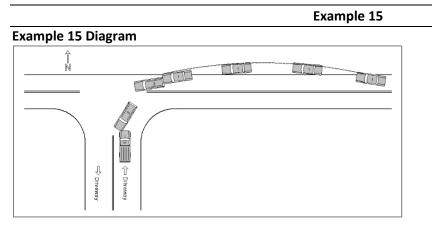
<u>Tracking</u> is the appropriate selection for Vehicle 2's **Pre-Impact Stability**. <u>Precrash General Rule #10</u> states that a vehicle is considered to be "Tracking" if the following conditions are met:

- a. No skid marks are present on the diagram or mentioned in the narrative,
- b. The case materials do not indicate skidding, and
- c. The vehicle did not rotate 30 degrees or more.

The **Pre-Impact Stability** for Vehicle 1 is <u>Skidding laterally-counterclockwise rotation</u> since the vehicle rotated 30 degrees or more. The driver need not make any steering inputs or leave tire marks for this attribute to be selected.

Median scenarios sometime cause confusion with the **Pre-Impact Location** element. <u>Departed Roadway</u> is used for vehicles crossing a median into oncoming traffic, as Vehicle 1 does in this case. A vehicle is considered to have <u>Returned to Roadway</u> only if it returned to the **same** roadway it was initially traveling on after the **Critical Event**.

The **Crash Type** for Vehicle 1 and Vehicle 2 is <u>'64' and '65,' Angle/Sideswipe</u> respectively since it involved the side plane of one or both of the vehicles. If the collision had involved the front plane of both vehicles, then the **Crash Type** would have been <u>'50' and '51,' Head-On</u>.



Vehicle 1 was traveling west on a two-lane roadway with a private driveway on the south side of the road. Vehicle 2 was westbound ahead of Vehicle 1 and was decelerating so it could turn left into the private drive. Vehicle 3 was stopped facing north on the driveway access of the private drive. The driver of Vehicle 1 was reportedly daydreaming and did not see Vehicle 2 decelerating in the lane ahead. After realizing Vehicle 2 was in its lane, the driver of Vehicle 1 braked and steered right off the right side of the road (leaving tire marks) and then steered left back into the travel lanes. The front of Vehicle 1 struck the rear of Vehicle 2 before the driver of Vehicle 2 could react. The initial impact pushed Vehicle 2 forward into Vehicle 3. The crash report identified "Not Distracted" for Vehicle 2 and Vehicle 3.

Precrash Element	Vehicle 1	Vehicle 2	Vehicle 3
Driver Distracted By	Lost in Thought/Day	Not Distracted	Not Distracted
	Dreaming		
Pre-Event Movement	Going Straight	Going Straight	Stopped in Roadway
Critical Precrash	Other Motor Vehicle In Lane	This Vehicle Traveling	Other Motor Vehicle
(Category)			Encroaching Into Lane
Critical Precrash (Event)	Traveling in Same Direction	This Vehicle Decelerating	From Crossing Street-
	While Decelerating		Turning into Opposite
			Direction

Precrash Element	Vehicle 1	Vehicle 2	Vehicle 3
Attempted Avoidance	Braking and Steering Right	No Avoidance Maneuver	No Avoidance Maneuver
<u>Maneuver</u>			
Pre-Impact Stability	Skidding Longitudinally	Tracking	Tracking
	Rotation Less Than 30		
	Degrees		
Pre-Impact Location	Returned to Roadway	Stayed in Original Travel	Stayed in Original Travel
		Lane	Lane
Crash Type	28	30	98

In this example, Vehicle 1's **Critical Crash Envelope** ( $V_1$ CCE) begins when the driver recognizes Vehicle 2 is decelerating ahead, and ends with impact with Vehicle 2.

Vehicle 2 has two **Critical Crash Envelopes** ( $V_2CCE_1$  and  $V_2CCE_2$ ). Vehicle 2's first **Critical Crash Envelope** ( $V_2CCE_1$ ) begins when it is in imminent path of a collision with Vehicle 1 and ends at the point of impact with Vehicle 1. Use the **Critical Crash Envelope** which resulted in Vehicle 2's first impact ( $V_2CCE_1$ ), because Precrash coding is associated with the **Critical Crash Envelope** which leads to a vehicle's first harmful event.

The **Critical Event** for Vehicle 1 is <u>Other Motor Vehicle in Lane-Traveling in Same Direction While Decelerating</u>, even though the vehicle departed the right side of the roadway prior to striking Vehicle 2. Determining the **Critical Event** can be made easier by using the "**But For**" test. In this example "But For" Vehicle 2 being in this vehicle's lane, it would not have been involved in the crash.

Vehicle 1's **Attempted Avoidance Maneuver** is *Braking and Steering Right*, because that was the driver's initial action in response to the realization of impending danger. Vehicle 1 steering left back into the roadway is not considered in this case. Vehicle 3's **Attempted Avoidance Maneuver** is <u>No Avoidance Maneuver</u> because the vehicle was stopped.

The **Pre-Impact Location** for Vehicle 1 is <u>Returned to Roadway</u>, since the vehicle returned to the **same** roadway during the Precrash motion.

The **Crash Type** for Vehicle 1 and Vehicle 2 is <u>'28' Rear-End: Decelerating (Slowing)</u> - <u>'30,' Rear-End:</u> <u>Decelerating, Going Left</u> respectively based on three factors:

- a. The front to rear impact configuration,
- b. Vehicle 2's decelerating (as opposed to stopped or lower steady speed), and
- c. Vehicle 2's **intent** to turn left into the private drive.

Example 16	Diagram				
	$\hat{\mathbb{P}}$				
				 2	_

Vehicle 1 was traveling east in the right lane of a straight and level divided highway with shoulders. Vehicle 2 was eastbound in the right lane behind Vehicle 1. Conditions were daylight with rain falling and fog. All indications are that both vehicles were driving at or near the speed limit. Vehicle 1 edged off the right side of the roadway onto the shoulder and the driver overcorrected, braking and steering left, back into its original lane. The vehicle went into a counter-clockwise yaw and was struck on the left side by the front of Vehicle 2.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Distraction (Distracted), Details	Not Distracted
	Unknown	
Pre-Event Movement	Going Straight	Going Straight
Critical Precrash (Category)	This Vehicle Traveling	Other Motor Vehicle in Lane
Critical Precrash (Event)	Over the Lane Line on Right Side of	Traveling in Same Direction While
	Travel Lane	Decelerating
Attempted Avoidance	Braking and Steering Left	Unknown/Not Reported
<u>Maneuver</u>		
Pre-Impact Stability	Skidding Laterally-Counter-Clockwise	Tracking
	Rotation	
Pre-Impact Location	Returned to Roadway	Stayed in Original Travel Lane
Crash Type	48	48

Police indicated the driver of Vehicle 1 was "Distracted" and that the driver of Vehicle 2 was "Not Distracted".

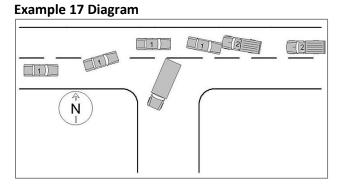
Vehicle 1's **Critical Crash Envelope** (V<sub>1</sub>CCE) begins when the driver realizes the vehicle is departing the travel lane and ends at impact.

The **Critical Crash Envelope** for Vehicle 2 (V<sub>2</sub>CCE) begins when the vehicle is in imminent path of collision with Vehicle 1, and ends at impact.

<u>Distraction (Distracted), Details Unknown</u> is selected for Vehicle 1 **Driver Distracted By**. Police reported the driver was distracted, although the specific distraction was not identified.

The presence of rain and fog does not affect Vehicle 1's **Critical Event** of <u>This Vehicle Traveling-Off The Edge of</u> <u>the Road On the Right Side</u> in this case. Do not assume that <u>This Vehicle Loss of Control</u> **Critical Events** such as <u>Poor Road Conditions</u> or <u>Traveling Too Fast for Conditions</u> are always selected just because the weather and/or road conditions were not optimal.

When determining **Crash Type**, it is important to keep in mind that some **Crash Configurations** are plane of impact dependent, while others are not. In this case the **Crash Type** for both vehicles are <u>'48,' Sideswipe/Angle:</u> <u>Specifics Other</u>. The vehicles were traveling in the same trafficway in the same direction (<u>Crash Type Category</u> <u>II</u>) and the impact involved the side of one or both of the vehicles (<u>Crash Type Configuration F</u>). If the impact had been front to rear, <u>Crash Configuration D (Rear-End)</u> would have applied.



Vehicle 1 is traveling eastbound. A noncontact vehicle (NCV) is westbound and attempts to turn left in front of Vehicle 1 into an intersecting private driveway. Vehicle 1 braked and steered left to avoid the noncontact vehicle. The driver of Vehicle 1 successfully avoided the noncontact vehicle and maintained full control, but crossed into the westbound lane. Now traveling the wrong way in the westbound lane, Vehicle 1 recognized that Vehicle 2 was in his path and attempted to steer right and return to the eastbound lane but struck Vehicle 2 head on. Vehicle 2 attempted to avoid the crash by braking and steering right. The crash report was coded as "Not Distracted" for both drivers.

Precrash Element	Vehicle 1	Vehicle 2
Driver Distracted By	Not Distracted	Not Distracted
Pre-Event Movement	Successful Avoidance Maneuver to a Previous Critical Event Going Straight	
Critical Precrash (Category)	Other Motor Vehicle in Lane	Other Motor Vehicle in Lane
Critical Precrash (Event)	Traveling in Opposite Direction	Traveling in Opposite Direction
Attempted Avoidance	Steering Right	Braking and Steering Right
<u>Maneuver</u>		Blaking and Steering Right
Pre-Impact Stability	Tracking	Tracking
Pre-Impact Location	Stayed in Original Travel Lane	Stayed in Original Travel Lane
Crash Type	52	52

In this example, Vehicle 1 has two **Critical Crash Envelopes** ( $V_1CCE_1$  and  $V_1CCE_2$ ). Vehicle 1's first **Critical Crash Envelope** ( $V_1CCE_1$ ) ends at the point where the driver of Vehicle 1 made a successful avoidance maneuver and maintained full control of the vehicle. Vehicle 1's second **Critical Crash Envelope** ( $V_1CCE_2$ ) begins shortly after the successful avoidance maneuver and ends at the point of impact with Vehicle 2. For coding purposes, use the **Critical Crash Envelope** which resulted in Vehicle 1's first impact ( $V_1CCE_2$ ).

Vehicle 2 has one **Critical Crash Envelope** (V2CCE<sub>1</sub>), which begins at the point where the driver of Vehicle 2 recognizes Vehicle 1 in their lane, and ends at the point of impact with Vehicle 1.

The **Crash Type** for both vehicles is coded <u>'52,' Head-On: Specifics Other</u> because Vehicle 1 had full control traveling the wrong way.

### Example 18: Precrash Event Scenarios for Different Rear-End Collision Situations

Rear-end crashes sometimes cause confusion with precrash coding. Two key points must be determined to accurately code the *Pre-Event Movement*, *Critical Event - Precrash (Category)* and *Critical Event - Precrash (Event)*:

- Was the lead vehicle stopped, decelerating, or traveling at a steady speed?
- Did the trailing vehicle decelerate prior to impact?

The following scenarios should be used as a guide.

### **Two Vehicle Collisions**

**Scenario 1:** Both vehicles in motion. Leading vehicle, traveling at steady speed, is struck from behind by trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction with Lower or Steady Speed
Lead	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

**Scenario 2:** Both vehicles traveling at same speed. Lead vehicle decelerates and trailing vehicle continues at initial speed. Trailing vehicle eventually applies brakes before striking the lead vehicle which is not yet stopped.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction
			While Decelerating
Lead	Going Straight	This Vehicle Traveling	This Vehicle Decelerating

**Scenario 3:** Both vehicles traveling at same speed. Lead vehicle stops and is immediately struck by trailing vehicle.

Vehicle Position	<b>Pre-Event Movement</b>	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction
			While Decelerating
Lead	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction
			with Higher Speed

**Scenario 4:** Lead vehicle is stopped on roadway and is struck by a trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Other Vehicle Stopped
Lead	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction
			with Higher Speed

Scenario 5: Lead and trailing vehicle stopped on roadway. Lead vehicle backs into trailing vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Stopped in Road	Other Motor Vehicle in Lane	Backing
Lead	Stopped in Road	This Vehicle Traveling	Backing

# **Three Vehicle Collisions**

stenand of two vehicles stopped in traine, strack by decelerating training vehicle			
Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Decelerating	Other Motor Vehicle in Lane	Other Vehicle Stopped
Middle	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction while Decelerating
Lead	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction with Higher Speed

**Scenario 7:** Lead vehicle stopped in traffic, middle vehicle decelerating, trailing vehicle strikes middle vehicle which strikes lead vehicle.

Vehicle Position	Pre-Event Movement	Critical Precrash (Category)	Critical Precrash (Event)
Trailing	Going Straight	Other Motor Vehicle in Lane	Traveling in Same Direction
			while Decelerating
Middle	Decelerating	Other Motor Vehicle in Lane	Traveling in Same Direction
			with Higher Speed
Lead	Stopped in Road	Other Motor Vehicle in Lane	Traveling in Same Direction
			with Higher Speed

# PC3 - Vehicle Number – Precrash Level

FORMAT: 3 numeric SAS NAME: Vehicle.Veh\_No ELEMENT VALUES:

• 001-999

**Definition:** This element identifies the number assigned to this vehicle in the crash.

**Remarks:** Each motor vehicle in a crash must be assigned a unique number by the Analyst. Order is not important.

Numbers assigned to vehicles must be consecutive, starting with '001' with no missing numbers.

# PC4 - Contributing Circumstances, Motor Vehicle

FORMAT: 2 numeric. Select all that apply. SAS NAME: Factor.MFACTOR ELEMENT VALUES:

Codes	Attributes
00	None
01	Tires
02	Brake System
03	Steering
04	Suspension
05	Power Train
06	Exhaust System
07	Head Lights
08	Signal Lights
09	Other Lights
10	Wipers
11	<u>Wheels</u>
12	Mirrors
13	Windows/Windshield
14	Body, Doors
15	Truck Coupling / Trailer Hitch / Safety Chains
16	Safety Systems
17	Vehicle Contributing Factors - No Details
97	<u>Other</u>
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element describes the possible pre-existing motor vehicle defects or maintenance conditions that may have contributed to the crash.

**Remarks:** Rationale: Important for determining the significance of pre-existing problems, including equipment and operation, in motor vehicles involved in crashes that could be useful in determining the need for improvements in manufacturing and consumer alerts.

00 (None) is used:

- when the case materials make a positive statement that the vehicle had no defects or "none" was indicated on the *Police Crash Report*.
- when the case materials do not indicate a defect in an available field and not reporting a defect in that field indicates "None".
- when the investigating officer is limited in selection and cannot select a defect in addition to another factor relevant to crash and no other indication of a defect exists in the case materials.

For omission of information see <u>Not Reported</u> guidance below.

**01 (Tires)** include any defect *(e.g., lost/losing re-tread) or maintenance issue* of a tire *(e.g., one or more bald tires).* If the contributing factor is of the wheel (e.g., a lug nut comes off), then use <u>11 (Wheels)</u>. If the officer noted this driver was driving with a "donut"/spare tire, improperly sized tire(s), driving on run-flats in an airout situation, etc., see Driver Related Factor <u>57 (Driving with Tire Related Problems)</u>.

02 (Brake System) includes parking brakes.

**03 (Steering)** is used when the case materials indicate the following may have contributed to the crash: tie rod ends, kingpins, power steering components, and ball joints.

**04 (Suspension)** is used when the case materials indicate that the vehicle's suspension components may have contributed to the crash. These include, springs, shock absorbers, struts, and control arms.

**05 (Power Train)** is used when the case materials indicate that the vehicles power train components may have contributed to the crash. Examples are: universal joints, drive shaft, and transmission. This also includes engine, differential, and stuck throttles.

**06 (Exhaust System)** includes exhaust manifold(s), headers, muffler, catalytic converter, tailpipe, etc.

**09 (Other Lights)** is used for an indication of *missing or inoperative* tail lights *on the vehicle or trailer* contributing to the crash. It *is* also used when the case materials indicated the "lights" of the vehicle contributed to the crash *but the type of light is not specified.* 

11 (Wheels) includes loss of lug nuts.

**13 (Windows/Windshield)** is used when there is a pre-existing defect to the windows or windshield such as improper tinting or cracks.

14 (Body, Doors) includes trunk, hood, tailgate, rear doors of cargo vans, etc.

15 (Truck Coupling/Trailer Hitch/Safety Chains) applies to a defective trailer hitch or an improper trailer hitch.

**16 (Safety Systems)** is used when the case materials indicate that the air bags failed to deploy or the air bag deployed inappropriately. Also, use this when a seat belt failure is described, such as webbing that was excessively worn or came unlatched. Excludes: improper use.

**17 (Vehicle Contributing Factors - No Details)** is used if a vehicle "factor" or "defect" is indicated in the case materials but no information is given concerning the nature of the "factor."

**97 (Other)** includes any other component described in the case materials that is not listed in the above attribute list, such as, horns.

# 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported.**"

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash*

*report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown)** is used only if the case material specifically indicates an "unknown defect" or "unknown contributing factor."

### **Consistency Checks:**

Check	IF	THEN
(1L4P)	any DRIVER'S VISION OBSCURED BY equals	at least one CONTRIBUTING CIRCUMSTANCES,
	09,	MOTOR VEHICLE must equal 97.
(1L5P)	any DRIVER'S VISION OBSCURED BY equals	at least one CONTRIBUTING CIRCUMSTANCES,
	10,	MOTOR VEHICLE must equal 07 or 08 or 09.
(3D70)	CRITICAL EVENT – PRECRASH (EVENT) equals	CONTRIBUTING CIRCUMSTANCES, MOTOR
	01-04,	VEHICLE must not equal 00.
(3DB0)	any CONTRIBUTING CIRCUMSTANCES,	only that one code and no other must be coded
	MOTOR VEHICLE equals 00 or 98 or 99,	for this vehicle.
(V990)	any SEQUENCE OF EVENTS equals 61,	CONTRIBUTING CIRCUMSTANCES, MOTOR
		VEHICLE should not equal 00.

# **PC5** - Trafficway Description

# FORMAT: 1 numeric SAS NAME: VEHICLE.VTRAFWAY ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	Two-Way, Not Divided
2	Two-Way, Divided, Unprotected Median
3	Two-Way, Divided, Positive Median Barrier
5	Two-Way, Not Divided with a Continuous Left-Turn Lane
4	One-Way Trafficway
6	Entrance/Exit Ramp
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the value indicated in the case materials which best describes the trafficway flow just prior to this vehicle's critical precrash event.

**Remarks:** Enter the value indicated in the case materials which best describes the trafficway flow just prior to this vehicle's critical precrash event. For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its critical precrash event, the trafficway selected for classification is the one the vehicle departed is the one it is on before entering the junction.

A trafficway may include several roadways if it is a physically divided highway. Trafficways are not physically divided unless the divider is a median, barrier, or other constructed device. **Pavement markings do qualify when they meet the definition of a median.** Refer to the definition of <u>03 (On Median)</u> under Relation to Trafficway.

A channelized lane should be considered a turn lane of the roadway it is part of, not a separate one-way roadway. Therefore, crashes occurring in a channelized lane should not be coded as **on** a separate trafficway **but should reflect the trafficway the vehicle was on before entering the channel.** 

**0** (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its critical precrash event.

**1 (Two-Way, Not Divided)** is used whenever there is no median. Generally, medians are not designed to legally carry traffic. Any painted markings on the roadway less than four feet wide are not medians. **NOTE:** Although gores separate roadways, and traffic islands (associated with channels) separate travel lanes, neither is involved in the determination of trafficway division.

**5 (Two-Way, Not Divided, with a Continuous Left-Turn Lane)** is used whenever the trafficway has a two-way left turn lane positioned between opposing straight-through travel lanes. It is designed to allow left turns to driveways, shopping centers, businesses, etc., while at the same time providing a separation of opposing straight-through travel lanes.

2 (Two-Way, Divided, Unprotected Median) is used whenever the trafficway is physically divided, however, the division is unprotected [e.g., vegetation, gravel, paved medians, trees, water, embankments, *painted medians greater than 4 feet*, and ravines that separate a trafficway (i.e., all non-manufactured barriers)]. NOTE: Raised curbed medians DO NOT constitute a positive barrier in and by themselves. The unprotected medians can be of any width; however, painted, paved, flush areas must be at least 4 feet in width to constitute a median strip. *Continuous Left-turn Lanes are not considered Unprotected Medians (see <u>5 (Two-Way, Not Divided, with a Continuous Left-Turn Lane)</u>).* 

**3 (Two-Way, Divided, Positive Median Barrier)** is used whenever the traffic is physically divided and the division is protected by any concrete, metal, or other type of longitudinal barrier (i.e., all manufactured barriers). For underpass support structures and bridge rails acting as a barrier, use this attribute.

Traffic Barrier refers to a physical structure such as a guardrail, a concrete safety barrier, or a rock wall which has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

All traffic barriers are constructed on a median strip; therefore, if a traffic barrier exists on a divided highway, **3 (Two-Way, Divided, Positive Median Barrier)** must be used. If it is not known whether or not a barrier exists, assume one does and use **3 (Two-Way, Divided, Positive Median Barrier)** (that is, if a median is known to exist).

**4 (One-Way Trafficway)** is used whenever the trafficway is undivided and traffic flows in one direction (e.g., one-way streets).

**6 (Entrance/Exit Ramp)** is an auxiliary or connecting roadway used for entering or exiting through-traffic lanes of a limited access roadway.

# 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code **8 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when police indicate unknown.

	1	
Check	IF	THEN
(250P)	RELATION TO JUNCTION (b) equals 01, 02, 04,	TRAFFICWAY DESCRIPTION should equal 2, 3 for
	06, 07, 16-19, 98, 99, and RELATION TO	at least one vehicle involved in the first harmful
	TRAFFICWAY equals 03,	event.
(254P)	RELATION TO TRAFFICWAY equals 01, and	TRAFFICWAY DESCRIPTION must equal 6 for at
	RELATION TO JUNCTION (b) equals 20,	least one vehicle involved in the first harmful
		event.

Check	IF	THEN
(740P)	RELATION TO JUNCTION (b) equals 07,	TRAFFICWAY DESCRIPTION must equal 2, 3 for at least one vehicle.
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00,	<u>all</u> must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
(A300)	ROUTE SIGNING equals 1,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.
(A470)	WORK ZONE equals 0, and TRAFFICWAY DESCRIPTION equals 1-3, 5,	TOTAL LANES IN ROADWAY should not equal 1.
(A481)	TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal 02, 03,	TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
(A482)	TRAFFICWAY DESCRIPTION equals 4 or 6,	TOTAL LANES IN ROADWAY should not equal 5- 7.
(A490)	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.
(A491)	TRAFFICWAY DESCRIPTION equals 2 or 3,	TOTAL LANES IN ROADWAY should not equal 7.
(A492)	TRAFFICWAY DESCRIPTION equals 2, 3, 5, 6,	SPEED LIMIT must not equal 00.
(A493)	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	SPEED LIMIT should be greater than 15.
(A494)	TRAFFICWAY DESCRIPTION equals 6,	ROADWAY GRADE should not equal 3, 4.
(A495)	TRAFFICWAY DESCRIPTION equals 0,	the first event in SEQUENCE OF EVENTS for this vehicle should not equal 63, 64, 69 or 71.
(A610)	RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05,	TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the first harmful event.
(A611)	TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.
(A620)	CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3,	RELATION TO TRAFFICWAY should equal 03.
(A720)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02,	TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at least one vehicle.
(A881)	RELATION TO TRAFFICWAY equals 11,	TRAFFICWAY DESCRIPTION should equal 5 for at least one vehicle.
(AM2P)	any SEQUENCE OF EVENTS equals 25 or 57,	TRAFFICWAY DESCRIPTION should equal 3, 6.

# Consistency Check (CRSS Only):

Check	IF	THEN
(A3H0)	INTERSTATE HIGHWAY equals 1, and	TRAFFICWAY DESCRIPTION should not equal 4
	RELATION TO JUNCTION (a) equals 1, and	for at least one vehicle involved in the first
	RELATION TO JUNCTION (b) is not equal to 03	harmful event.
	or 05 or 20,	

# PC6 - Total Lanes in Roadway

# FORMAT: 1 numeric SAS NAME: Vehicle.VNUM\_LAN ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	One Lane
2	Two Lanes
3	Three Lanes
4	Four Lanes
5	Five Lanes
6	Six Lanes
7	Seven or More Lanes
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the value indicated in the case materials which best describes the number of roadway lanes just prior to this vehicle's critical precrash event.

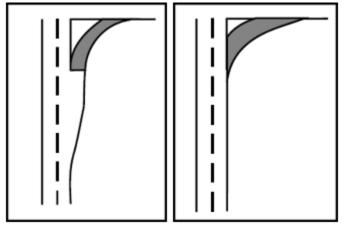
**Remarks:** For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

A roadway is one part of a divided trafficway or, if undivided, the same as the trafficway.

The number of lanes counted does not include any of which are rendered unusable by restriction of the right-ofway (e.g., closed due to construction).

If turn bays, acceleration, deceleration, or center 2-way left turn lanes exist and are physically located within the cross section of the roadway, and these lanes are the most representative of the driver's environment just prior to the critical precrash event, then they are to be included in the number of lanes. Because a channelized lane is separated, it should not be included unless it is preceded by a turn bay or turn lane and this bay or lane is felt to be most representative of the driver's environment just prior to impact.

Channelized lanes are separated from other through or turn related lanes. (**NOTE:** The separation normally will not involve a physical barrier.) If the channel is most representative of the driver's critical precrash environment, count the number of lanes in the channel for this element. (See Examples of Channelized lanes Figure 21.)



**0** (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its critical precrash event.

If traffic flows in both directions and is undivided, code the total number of lanes in both directions. If the trafficway is divided into two or more roadways, code only the number of lanes for the roadway on which this vehicle was traveling. **Be aware that the case materials may indicate the total number of lanes on the divided trafficway.** 

### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**."

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(A250)	LAND USE AND FUNCTIONAL SYSTEM (b)	TOTAL LANES IN ROADWAY should not equal 1
	equals 01-03, and RELATION TO JUNCTION (a)	for the vehicles involved in the first harmful
	equals 1, and RELATION TO JUNCTION (b)	event.
	does not equal 03, 05, 20,	
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL LANES	all must equal 0, 00, and SPEED LIMIT must
	IN ROADWAY, ROADWAY ALIGNMENT,	equal 00 for this vehicle.
	ROADWAY GRADE, ROADWAY SURFACE TYPE,	
	or ROADWAY SURFACE CONDITIONS equals	
	0, 00,	

Check	IF	THEN
(A310)	ROUTE SIGNING equals 1, and RELATION TO	TOTAL LANES IN ROADWAY should not equal 1
	JUNCTION (a) equals 0,	for any vehicle.
(A470)	WORK ZONE equals 0, and TRAFFICWAY	TOTAL LANES IN ROADWAY should not equal 1.
	DESCRIPTION equals 1-3, 5,	
(A481)	TRAFFICWAY DESCRIPTION equals 6, and	TOTAL LANES IN ROADWAY should equal 1, 2, 8,
	RELATION TO JUNCTION (b) does not equal	9.
	02, 03,	
(A482)	TRAFFICWAY DESCRIPTION equals 4 or 6,	TOTAL LANES IN ROADWAY should not equal 5-
		7.
(A491)	TRAFFICWAY DESCRIPTION equals 2 or 3,	TOTAL LANES IN ROADWAY should not equal 7.
(A500)	TOTAL LANES IN ROADWAY equals 3-7,	ROADWAY SURFACE TYPE should not equal 4, 5,
		7.
(PC50)	PRE-IMPACT LOCATION equals 2,	TOTAL LANES IN ROADWAY should not equal 1.

# Consistency Check (CRSS Only):

Check	IF	THEN
(A3G0)	INTERSTATE HIGHWAY equals 1, and	TOTAL LANES IN ROADWAY should not equal 1
	RELATION TO JUNCTION (a) equals 1, and	for at least one vehicle involved in the first
	RELATION TO JUNCTION (b) is not equal to 03	harmful event.
	or 05 or 20,	

# PC7 - Speed Limit

## FORMAT: 2 numeric SAS NAME: Vehicle.VSPD\_LIM ELEMENT VALUES:

Codes	Attributes
00	No Statutory Limit/Non-Trafficway or Driveway Access
05-95	Actual Speed Limit (in 5 mph increments)
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the value indicated in the case materials which best represents the speed limit just prior to this vehicle's critical precrash event.

**Remarks:** For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

**Note:** Refer to the highway speed limit that is operational at the time and place of the crash whether physically displayed or not. Try not to confuse advisory signs on entrance/exit ramps or near intersections with the actual legal maximum speed limit. Disregard advisory or other speed signs since they do not indicate the legal speed limit. If a state has a statute that uniformly reduces the maximum allowable speed limit within or near a construction zone, then code the indicated reduced speed limit, if known.

Acceptable speed limits are in 5 mph increments.

**00 (No Statutory Limit/Non-Trafficway or Driveway Access)** is used when there is no posted speed limit and no law that governs the maximum speed you can drive (dirt roads, private roads open to the public). Also use this attribute in cases when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its precrash event.

When coding Speed Limit for roadways with two different speed limits (for north and south-bound lanes), use the speed limit for the direction of travel where the critical precrash event begins.

When a roadway has a different speed limit for different types of vehicles, code the speed limit that is applicable to passenger cars.

Example:

A rural Interstate highway has a speed limit of 65 MPH for passenger cars, but the same road has a 55 MPH speed limit for heavy trucks/buses.

- **Circumstance 1:** A single-vehicle (passenger car) crash. Speed Limit = 65 MPH
- **Circumstance 2:** A single-vehicle (heavy truck/bus) crash. Speed Limit = 65 MPH
- Circumstance 3: A two-vehicle crash, (passenger car and heavy truck/bus) crash. Speed Limit = 65 MPH

#### Logic:

Our statisticians feel that it would be more representative to code the Speed Limit of the majority of the traffic, namely the passenger car. In addition, they feel that by identifying the car speed limit of 65 MPH, they can then determine the truck speed limit by reviewing the state's speed limit law. (The reverse is not necessarily true.)

# 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used when police indicate unknown.

Values less than 15 mph are unlikely occurrences and will raise an error flag.

### FARS SPECIAL INSTRUCTION:

Accurate coding of Speed Limit is extremely important. Do not rely solely on the *Police Crash Report*. Check with the State Highway Department as well.

When coding Speed Limit on On/Off Ramps (i.e., when the critical precrash event occurs on the ramp), consider the following:

- A. When a ramp has a posted Speed Limit a regulatory (black on white) sign, not an advisory (black on yellow) one the posted speed should be coded.
- B. When there is an advisory speed limit or no sign at all, you should:
  - 1. Check with your State Highway Department to see if there is an implicit speed limit for all unmarked ramps. If there is, code speed limit.
  - 2. If there is not; code the speed limit of the controlled access highway.

Check	IF	THEN
(1TOP)	SPEED LIMIT for every vehicle is greater than 55, and not equal to 98 or 99,	LAND USE AND FUNCTIONAL SYSTEM (a) should not equal 2 or 6, and LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 06, 07 or 96.
(A220)	LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
(A320)	ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0,	SPEED LIMIT should not equal 05-40 for any vehicle.
(A492)	TRAFFICWAY DESCRIPTION equals 2, 3, 5, 6,	SPEED LIMIT must not equal 00.
(A493)	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	SPEED LIMIT should be greater than 15.
(A521)	any SEQUENCE OF EVENTS equals 46,	SPEED LIMIT should equal 05-50, 98 or 99 for this vehicle.

Check	IF	THEN
(A700)	SPEED LIMIT is greater than 65 for every vehicle,	ROUTE SIGNING should equal 1-4.
(A830)	FIRST HARMFUL EVENT equals 46,	SPEED LIMIT should be less than 55 for the vehicle involved in the first harmful event.
(A900)	SPEED LIMIT equals 60, 65 for every vehicle,	LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 04-07 or 96.
(A940)	STATE NUMBER equals 11,	maximum SPEED LIMIT (not including 98 or 99) should equal 55.
(A945)	STATE NUMBER equals 15,	maximum SPEED LIMIT (not including 98 or 99) should equal 60.
(A950)	STATE NUMBER equals 02, 09, 10, 25, 34, 36, 41, 43, 44, 50,	maximum SPEED LIMIT (not including 98 or 99) should equal 65.
(A955)	STATE NUMBER equals 01, 05, 06, 12, 13, 17, 18, 19, 21, 24, 26, 27, 28, 29, 33, 37, 39, 42, 45, 47, 51, 53, 54, 55,	maximum SPEED LIMIT (not including 98 or 99) should equal 70.
(A960)	STATE NUMBER equals 04, 08, 20, 22, 23, 31, 35, 38, 40, 48,	maximum SPEED LIMIT (not including 98 or 99) should equal 75.
(A961)	STATE NUMBER equals 16, 30, 32, 46, 49, 56,	maximum SPEED LIMIT (not including 98 or 99) should equal 80.

# Consistency Checks (CRSS Only):

Check	IF	THEN
(A3J0)	INTERSTATE HIGHWAY equals 1, and	SPEED LIMIT should not equal 01-40 for at least
	<b>RELATION TO JUNCTION (a) equals 1, and</b>	one vehicle involved in the first harmful event.
	RELATION TO JUNCTION (b) is not equal to 03	
	or 05 or 20,	
(A965)	PSU equals MA, VT, NY, NJ, OR, WI,	maximum SPEED LIMIT (not including 98 or 99)
		should equal 65.
(A970)	PSU equals AL, CA, FL, GA, IA, IL, KY, MD, MI,	maximum SPEED LIMIT (not including 98 or 99)
	MN, NC, OH, PA, SC, TN, VA, WA,	should equal 70.
(A975)	PSU equals AZ, CO, LA, ME, OK, TX, UT,	maximum SPEED LIMIT (not including 98 or 99)
		should equal 75.
(A980)	PSU equals SD,	Maximum SPEED LIMIT (not including 98 or 99)
		should equal 80.

# PC8 - Roadway Alignment

# FORMAT: 1 numeric SAS NAME: Vehicle.VALIGN ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	<u>Straight</u>
2	Curve-Right
3	<u>Curve-Left</u>
4	Curve - Unknown Direction
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the value indicated in the case materials which best represents the roadway alignment prior to this vehicle's critical precrash event.

**Remarks:** For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. *For crashes occurring in a channel, consider the Roadway Alignment of the channel itself.* 

This data element is coded in accordance with the precrash protocols outlined in the **PRECRASH DATA OVERVIEW** section of the Coding Manual. In the precrash data elements that record the characteristics of the trafficway, the value coded should be most representative of the driver's critical precrash environment. For resolving ambiguities, the **Police Crash Report** information is prioritized as follows:

- 1. The Narrative is used if it describes roadway alignment prior to the vehicle's critical precrash event.
- 2. The Diagram is used if it shows the roadway alignment prior to the vehicle's critical precrash event.
- 3. If the roadway alignment prior to the vehicle's critical precrash event is not described in the Narrative or shown in the Diagram, use the check-box information.
- 4. If the check-box does not exist, is not filled out, or is recorded at the crash level and does not apply to this vehicle's environment, then code <u>8 (Not Reported)</u>.

**0** (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its precrash event.

1 (Straight) is selected if the case materials indicate this vehicle's roadway is straight.

**2 (Curve Right)** or **3 (Curve Left)** is selected if the case materials indicate this vehicle's roadway is curved or there is any curvature discernable on the diagram.

**4 (Curve - Unknown Direction)** is selected if the case materials indicate a curve, but no curve direction (left/right) is indicated.

## 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code **8 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL LANES	all must equal 0, 00, and SPEED LIMIT must
	IN ROADWAY, ROADWAY ALIGNMENT,	equal 00 for this vehicle.
	ROADWAY GRADE, ROADWAY SURFACE TYPE,	
	or ROADWAY SURFACE CONDITIONS equals	
	0, 00,	
(A4D0)	PRE-EVENT MOVEMENT (PRIOR TO	ROADWAY ALIGNMENT must equal 2-4.
	RECOGNITION OF CRITICAL EVENT) equals 14,	
(A4D1)	PRE-EVENT MOVEMENT (PRIOR TO	ROADWAY ALIGNMENT should not equal 2-4.
	RECOGNITION OF CRITICAL EVENT) equals 01,	

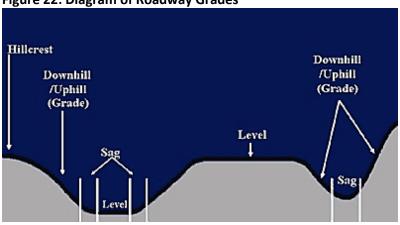
# PC9 - Roadway Grade

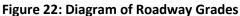
### FORMAT: 1 numeric SAS NAME: Vehicle.VProfile ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway or Driveway Access
1	Level
3	Hillcrest
5	Uphill
6	Downhill
2	Grade, Unknown Slope
4	Sag (Bottom)
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the value indicated in the case materials which best represents the roadway grade prior to this vehicle's critical precrash event.

**Remarks:** For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction. *For crashes occurring in a channel, consider the Roadway Grade of the channel itself.* 





**0** (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its critical precrash event.

3 (Hillcrest) refers to the area of transition between an uphill and a downhill grade.

2 (Grade, Unknown Slope) is used if the case materials indicate a grade, but uphill/downhill is not indicated.

**4** (Sag [Bottom]) is a designed transition feature between a change of grade at the bottom of a hill. It is not a dip, which is a flaw.

A dip on the road is not the same as a sag. A sag is a design feature whereas a dip is a flaw. The minimum length of a sag is 100 feet.

### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported.**"

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(1Z1P)	any SEQUENCE OF EVENTS equals 66,	ROADWAY GRADE should equal 6 for this vehicle.
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
(A494)	TRAFFICWAY DESCRIPTION equals 6,	ROADWAY GRADE should not equal 3, 4.

# PC10 - Roadway Surface Type - FARS Only

## FORMAT: 1 numeric SAS NAME: Vehicle.VPAVETYP ELEMENT VALUES:

Codes	Attributes
0	Non-Trafficway Area or Driveway Access
1	Concrete
2	Blacktop, Bituminous, or Asphalt
3	Brick or Block
4	Slag, Gravel or Stone
5	Dirt
7	Other
8	Not Reported
9	Unknown

**Definition:** This element identifies the value indicated in the case materials which best represents the roadway surface type prior to this vehicle's critical precrash event.

**Remarks:** For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction.

Should be obtained from the crash report or the State Highway Department.

If the Police *Crash* Report lists more than one type, choose the type with the lowest number. For example, if the *Police Crash Report* indicates Dirt/Gravel, then use **4 (Slag, Gravel or Stone)**.

**0** (Non-Trafficway or Driveway Access) is used when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its critical precrash event.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **7 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

# 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report*

*that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

Check	IF	THEN
(A160)	LAND USE AND FUNCTIONAL SYSTEM (b)	ROADWAY SURFACE TYPE should equal 1, 2, 8 or 9
	equals 01-06,	for at least one vehicle.
(A170)	ROADWAY SURFACE TYPE equals 3-5 for	LAND USE AND FUNCTIONAL SYSTEM (b) should
	every vehicle,	not equal 01-06.
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL	all must equal 0, 00, and SPEED LIMIT must equal
	LANES IN ROADWAY, ROADWAY	00 for this vehicle.
	ALIGNMENT, ROADWAY GRADE,	
	ROADWAY SURFACE TYPE, or ROADWAY	
	SURFACE CONDITIONS equals 0, 00,	
(A330)	ROUTE SIGNING equals 1, 2,	ROADWAY SURFACE TYPE should equal 1, 2, 8 for
		at least one vehicle.
(A490)	TRAFFICWAY DESCRIPTION equals 2, 3, 5,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.
(A500)	TOTAL LANES IN ROADWAY equals 3-7,	ROADWAY SURFACE TYPE should not equal 4, 5, 7.

# PC11 - Roadway Surface Conditions

## FORMAT: 2 numeric SAS NAME: Vehicle.VSurCond ELEMENT VALUES:

Codes	Attributes
00	Non-Trafficway or Driveway Access
01	Dry
02	<u>Wet</u>
03	Snow
10	<u>Slush</u>
04	Ice/Frost
06	Water (Standing, Moving)
05	Sand
11	Mud, Dirt, Gravel
07	Oil
08	<u>Other</u>
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the value indicated in the case materials which best represents the roadway surface condition prior to this vehicle's critical precrash event.

**Remarks:** For vehicles departing the trafficway prior to their critical precrash events, the trafficway selected for classification is the one the vehicle departed. If this vehicle is in a junction just prior to its critical precrash event, the roadway selected for classification is the one it is on before entering the junction. These conditions may have been present but did not necessarily contribute to the crash.

If more than one surface condition is indicated for this vehicle, then select the condition that would have most affected the vehicle's traction.

**00 (Non-Trafficway or Driveway Access)** is used when this vehicle is entering a trafficway but was not on a trafficway prior to its critical precrash event or when the vehicle was in a driveway access prior to its critical precrash event.

A road made of sand or dirt would be coded **01 (Dry)** under normal conditions, not **05 (Sand)**, **11 (Mud, Dirt, Oil)**.

**02 (Wet)** describes a roadway surface that is covered with water from rain or melted snow.

03 (Snow) describes a roadway surface that is covered with snow.

**10 (Slush)** describes a roadway surface that is covered with melting snow.

**04 (Ice/Frost)** includes a roadway covered with ice from freezing rain or water runoff that has pooled on the roadway and turned to ice.

**06 (Water [Standing, Moving])** describes a roadway surface that is covered with water and typically localized. **FARS SPECIAL INSTRUCTION:** See Related Factors-Crash Level <u>**05 (Surface Under Water)**</u> to see if it applies. **05 (Sand)** includes sand on the roadway as a result of sand blown by wind or sand discharged on the roadway by highway trucks.

**11 (Mud, Dirt, Gravel)** indicates these substances present on the surface of the roadway at the crash location, not the surface type of the roadway by design.

- **07 (Oil)** includes fuel spilled on the roadway.
- **08 (Other)** is used for roadway surface conditions not described above.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **08 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used when police indicate unknown.

Check	IF	THEN
(1A1P)	RELATED FACTORS-CRASH LEVEL equals 05,	ROADWAY SURFACE CONDITIONS must equal 06 for at least one vehicle.
(A040)	CRASH MONTH equals 05-09,	ROADWAY SURFACE CONDITIONS should not equal 03, 04, 10.
(A1A0)	ROADWAY SURFACE CONDITIONS equals 01 for a vehicle involved in the first harmful event,	ATMOSPHERIC CONDITIONS should not equal 02-04, 11, 12.
(A1C0)	ROADWAY SURFACE CONDITIONS equals 01,	DRIVER'S VISION OBSCURED BY should not equal 08.
(A510)	any ATMOSPHERIC CONDITIONS equals 02- 04, 11, 12,	ROADWAY SURFACE CONDITIONS should not equal 01, 07, 08, 99 for any vehicle.
(A292)	any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT, ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS equals 0, 00,	all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.

# PC12 - Traffic Control Device

## FORMAT: 2 numeric SAS NAME: Vehicle.VTrafCon ELEMENT VALUES:

Codes	Attributes
00	No Controls

#### **Traffic Signals**

Codes	Attributes	
01	Traffic Control Signal (on colors) without Pedestrian Signal	
02	Traffic Control Signal (on colors) with Pedestrian Signal	
03	Traffic Control Signal (on colors) not known whether or not Pedestrian Signal	
07	Lane Use Control Signal	
08	Other Highway Traffic Signal	
09	Unknown Highway Traffic Signal	
04	Flashing Traffic Control Signal	

#### **Regulatory Signs**

Codes	Attributes
20	Stop Sign
21	Yield Sign
28	Other Regulatory Sign
29	Unknown Regulatory Sign
23	School Zone Sign/Device

#### **Other Signs and Signals**

Codes	Attributes
40	Warning Sign
65	Railway Crossing Device
50	Person
98	<u>Other</u>

#### **Not Reported and Unknown**

Codes	Attributes
97	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the **sign or signal** indicated in the case materials which best describes the traffic controls in the vehicle's environment just prior to this vehicle's critical precrash event.

**Remarks:** The roadway used for coding this element is the one this vehicle departed if it is off the roadway just prior to its critical precrash event. If this vehicle is in a junction just prior to its critical precrash event, this element is coded based on the roadway this vehicle was on before entering the junction.

Code the attribute indicated in the case materials if it directly matches.

Code this element whether the device was functioning or not. If more than one device is present, code the highest device (lowest number on list) most related to the crash.

There are two exceptions:

- One exception is <u>50 (Person)</u> which includes a law enforcement officer, crossing guard, flagman, etc. **50** (Person) takes precedence over the entire list.
- The other exception is a <u>28 (Other Regulatory Sign</u>). You may have a Regulatory Speed Limit Sign along with another Traffic Control Device (for example, a Warning Sign for a dangerous condition in which the Warning Sign is more relevant in the crash). In this case, the <u>40 (Warning Sign</u>) is more appropriate to code.

# MUTCD Notes:

- Traffic calming devices:
  - Although some highway design features, such as curbs, median barriers, guardrails, speed humps or tables, and textured pavement, have a significant impact on traffic operations and safety, they are not considered to be traffic control devices and provisions regarding their design and use are generally not included.
- Pavement markings:
  - While pavement markings are considered Traffic Control Devices in MUTCD, this element should only be used to identify Signs and Signals.

**00 (No Controls)** is used if, at the time of the crash, there was no intent to control (regulate or warn) vehicle traffic. Use this attribute if statutory controls apply (e.g., state law requires that when two vehicles meet at an uncontrolled intersection, the one on the right has the right-of-way).

When a traffic control is deactivated (e.g., traffic signal that emits no signals) during certain times of the day and was deactivated at the time of the crash, code **00** (No Controls). A traffic control that has just been installed and not yet activated is also coded **00** (No Controls).

However, a traffic control that is out (e.g., due to a power failure) and was reported as such in the case materials is coded, unless a temporary control (e.g., stop sign, police officer, etc.) has been inserted, in which case the temporary control should be coded.

#### **Traffic Signals**

**01 (Traffic Control Signal [on colors] without Pedestrian Signal)** refers to any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed, utilizing the colors of red, yellow, and green. This traffic control signal does not have a pedestrian control signal. The source of actuation is of no concern.

**02 (Traffic Control Signal [on colors] with Pedestrian Signal)** refers to any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed, utilizing the colors of red, yellow, and green. This traffic control signal does have a pedestrian control signal. The source of actuation is of no concern.

**03 (Traffic Control Signal [on colors] not known whether or not Pedestrian Signal)** any highway traffic signal by which traffic is alternatively directed to stop and permitted to proceed, utilizing the colors of red, yellow, and green. It is unknown if this traffic control signal has a pedestrian control signal. The source of actuation is of no concern.

**07 (Lane Use Control Signal)** is for permanent lane control electronic devices (i.e., overhead lights or "X" indicating lane open or closed for rush hour lanes, bridges or at tollbooths).

**08 (Other Highway Traffic Signal)** should be coded for traffic signals that are not covered in the preceding attributes. Use this attribute when a School Bus uses flashing lights to control traffic around the bus, regardless of any additional signs the school bus uses. For example, a school bus uses flashing lights and a stop sign on an arm to stop traffic around the school bus. This should only be used if the crash occurred during the time the sign was in effect.

**09 (Unknown Highway Traffic Signal)** is used with the investigating officer reported that the highway traffic signal was unknown at the time of crash.

**04 (Flashing Traffic Control Signal)** usually has a single colored head and flashes. Use this attribute if it is a Highway Traffic Signal that is flashing. This includes a flashing beacon. If a flashing red beacon appears with a stop sign, use this attribute.

Guide signs do not constitute traffic controls.

You may have a Regulatory Speed Limit Sign along with another Traffic Control Device (for example, a Warning Sign for a dangerous condition in which the Warning Sign is more relevant in the crash). In this case, the Warning Sign is more appropriate to code.

Another set of questions arises from the issue of proximity of the device to the crash. Judgment must be applied in these situations. Typical signs which create such problems are:

- Speed limit signs where a party to the crash may be speeding
- "Do Not Pass" signs where a no passing zone extends for miles but is only marked at the beginning of the zone
- Pedestrians Prohibited signs at entrances to freeways but a pedestrian crash occurs on the freeway between interchanges
- And other such signs which may pertain to a significant length of road.

In these instances, if the crash occurs within reasonably close proximity of the sign and the sign type is relevant to the crash then it may be appropriate to code the sign.

If there is a question as to which type a sign is, consult the <u>Manual of Uniform Traffic Control Devices (MUTCD</u>). Generally, the appropriate code should be used if a party to the crash failed to heed the sign, was in a position to be controlled by the sign, or the sign has some relationship to the crash. For example, for a crash at a fourlegged, two-way stop intersection where a driver fails to stop at the stop sign and collides with another vehicle, use the attribute **20 (Stop Sign)**. Conversely, at the same intersection, a driver on an approach not controlled by a stop sign loses control and strikes a utility pole. In this case, **20 (Stop Sign)** would not be appropriate.

Pavement markings are not considered as traffic control devices.

# **Regulatory Signs**

**20 (Stop Sign)** is a traffic sign used to control vehicular traffic, usually erected at road junctions, that instructs drivers to stop and then to proceed only if the way ahead is clear. This attribute does not include Stop Signs at Rail Grade Crossings. Stop Signs at Rail Grade Crossings are coded <u>65 (Railway Crossing Device)</u>.

**21 (Yield Sign)** indicates that a vehicle driver must slow down and prepare to stop if necessary usually while merging into traffic on another road but needn't stop if the way is clear. This attribute does not include Yield Signs at Rail Grade Crossings. Yield Signs at Rail Grade Crossings are coded <u>65 (Railway Crossing Device)</u>.

# 28 (Other Regulatory Sign)

Regulatory signs inform highway users of traffic laws or regulations and indicate the applicability of legal requirements that would not otherwise be apparent.

Examples of Regulatory Signs other than 20 (Stop Sign) or 21 (Yield Sign) are:

- Regulatory Speed Limit signs (black numbers on a white background)
- Turn Prohibition signs
- Do Not Pass
- Do Not Enter signs
- Wrong-way
- One-way signs
- Road Closed signs
- Hazardous Cargo signs

**29 (Unknown Regulatory Sign)** is used when the investigating officer reported that the regulatory sign was unknown at the time of crash.

**23 (School Zone Sign/Device)** is used when the first harmful event occurred during the time the sign was in effect. If the sign was in effect, it does not matter whether or not children were present. Some **23 (School Zone Signs/Devices)** can be flashing, if this is the case, use this attribute before using **04 (Flashing Traffic Control Signal)**.

# **Other Signs and Signals**

**40 (Warning Sign)** is used when it is deemed necessary to warn traffic of existing or potentially hazardous conditions on or adjacent to a highway or street.

# Examples of Warning Signs:

- Work/Construction Zone related signs (Lane Shift, Uneven Surface, Workers Ahead, etc.)
- Changes in Horizontal Alignment signs (Hill, Curve, etc.)
- Road Narrows
- Divided Road/Divided Road Ends
- Low Clearance
- Road Surface Condition signs (Bump, Slippery When Wet, etc.)
- Traffic Flow signs (Merge, Two-way Traffic, No Passing Zone etc.)
- This includes electronic warning signs such as portable signs, (i.e., attached to a vehicle), or stationary devices
- Flashing lights on an approaching train
- Advisory Speed signs (often black-on-yellow)

# 65 (Railway Crossing Device) is used to control or warn vehicular traffic at a railway crossing.

Examples:

- Flashing Lights
- Wigwags
- Bells
- Cross Bucks
- Stop Signs at Rail Grade Crossing
- Yield Signs at Rail Grade Crossings

**50** (**Person**) is someone, (e.g., police officer, crossing guard, flagman or officially designated person), that is in the act of controlling both vehicular and pedestrian traffic.

**98 (Other)** includes: any other device, which (a) functions as a traffic control device which is not listed as an attribute of this data element and (b) is not excluded by the manual and (c) is related to the crash. Some examples are: barricades, cones, drums, and object markers.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **98 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **97 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

### Not Reported and Unknown

### 97 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code 97 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown)** is used if the investigating officer reported that the traffic control device at the time of crash was not known.

Check	IF	THEN
(4LOP)	any RELATED FACTORS-DRIVER LEVEL equals	TRAFFIC CONTROL DEVICE should not equal 00
	39 for this vehicle,	for this vehicle.
(520F)	FIRST HARMFUL EVENT equals 10,	TRAFFIC CONTROL DEVICE must not equal 01-
		04, 07-09, 20-50, 98 for the vehicle involved in
		the first harmful event.
(610P)	TRAFFIC CONTROL DEVICE equals 00,	DEVICE FUNCTIONING must equal 0.
(640F)	TRAFFIC CONTROL DEVICE equals 23 for any	RELATED FACTORS-CRASH LEVEL should equal
	vehicle,	21.
(641F)	RELATED FACTORS-CRASH LEVEL equals 21,	TRAFFIC CONTROL DEVICE should not equal 00
		for every vehicle.
(642F)	TRAFFIC CONTROL DEVICE equals 00 for any	RELATED FACTORS-CRASH LEVEL should not
	vehicle,	equal 21.
(650P)	TRAFFIC CONTROL DEVICE equals 65 for any	RAIL GRADE CROSSING IDENTIFIER must not
	vehicle,	equal 0000000.
(660P)	TRAFFIC CONTROL DEVICE is not equal to 00,	DEVICE FUNCTIONING must not equal 0.
(660Q)	TRAFFIC CONTROL DEVICE does not equal 97,	it is unlikely that DEVICE FUNCTIONING equals 8.
(661P)	TRAFFIC CONTROL DEVICE equals 97,	DEVICE FUNCTIONING must equal 8.
(A1B0)	TRAFFIC CONTROL DEVICE equals 20-21 for a	RELATION TO JUNCTION (b) should not equal 01,
	vehicle involved in the first harmful event,	18.

Check	IF	THEN
(A210)	LAND USE AND FUNCTIONAL SYSTEM (b)	TRAFFIC CONTROL DEVICE should not equal 01-
	equals 01, 02, and RELATION TO JUNCTION	04, 07, 20, 23, 40, 50, 65.
	(a) equals 0,	
(A270)	any VIOLATIONS CHARGED equals 31-35, 37,	TRAFFIC CONTROL DEVICE should equal 01-20, 98.
(A293)	WORK ZONE equals 1-3, and RELATION TO	TRAFFIC CONTROL DEVICE should equal 01-03,
	JUNCTION (b) equals 02, 03,	20, 40, 97 or 98 for the vehicle(s) involved in the first harmful event.
(A294)	WORK ZONE equals 1-3, and RELATION TO	TRAFFIC CONTROL DEVICE should equal 00, 21,
	JUNCTION (b) equals 01, 04, 05, 08, 17-19,	28, 40, 50, 97 or 98 for the vehicle(s) involved in
		the first harmful event.
(A440)	RELATION TO JUNCTION (b) equals 06,	TRAFFIC CONTROL DEVICE should equal 65 for
		any vehicle involved in the first harmful event.
(A520)	SEQUENCE OF EVENTS equals 10,	TRAFFIC CONTROL DEVICE should not equal 01-
		09, 20-29, 40-50, 98.
(A770)	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should equal 01-04
		for the vehicle involved in the first harmful
		event.
(A780)	FIRST HARMFUL EVENT equals 46,	TRAFFIC CONTROL DEVICE should not equal 00
		for the vehicle involved in the first harmful
(1000)		event.
(A890)	RELATION TO JUNCTION (b) equals 01,	TRAFFIC CONTROL DEVICE should not equal 01-
		03 for any vehicle involved in the first harmful event.
(PB06)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	PEDESTRIAN equals 730,	vehicle must equal 01-03.
(PB09)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	BICYCLE equals 141, 143, 151-158, 217 or	vehicle must not equal 00.
(PB10)	218, PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
(PDTO)	BICYCLE equals 151, 156, 157, 217 or 218,	vehicle must equal 01-04.
(PB11)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	BICYCLE equals 143 or 154,	vehicle must equal 01-04, 20, 21, 28 or 29.
(PB21)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
(1021)	BICYCLE equals 160,	vehicle should equal 00.
	BICYCLE equals 160,	vehicle should equal 00.

# Consistency Check (CRSS Only):

Check	IF	THEN
(A930)	INTERSTATE HIGHWAY equals 1, and	TRAFFIC CONTROL DEVICE should not equal 01-
	RELATION TO JUNCTION (a) equals 1, and	03, 20, 23 or 65 for at least one vehicle involved
	RELATION TO JUNCTION (b) is not equal to 03	in the first harmful event.
	or 05 or 20,	

# **PC13 - Device Functioning**

# FORMAT: 1 numeric SAS NAME: Vehicle.VTCONT\_F ELEMENT VALUES:

Codes	Attributes
0	No Controls
1	Device Not Functioning
2	Device Functioning - Functioning Improperly
3	Device Functioning Properly
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the functionality of the traffic control device recorded for this vehicle in the element <u>Traffic Control Device</u>.

Remarks: This data element is coded with respect to the control selected in the element Traffic Control Device.

1 (Device Not Functioning) is used when the device is not functioning at all (e.g., signal out, sign knocked down).

**2 (Device Functioning - Functioning Improperly)** is used when the device was functioning to an extent but not as intended (e.g., red signal lamp burned out, sign twisted or obscured by vegetation).

**3 (Device Functioning Properly)** is used when the traffic control device was functioning as designed at the time of the crash. As a default rule, if the device is listed as present, code **3 (Device Functioning Properly)** unless specified otherwise. For example, the *Police Crash Report* indicates a stop sign is applicable to a vehicle at intersection crash and there is no mention of it functioning improperly, it is assumed the stop sign was functional.

# 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code **8 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**9 (Unknown)** is used if the investigating officer reported that it was unknown if the traffic control device was functioning at the time of crash.

Check	IF	THEN
(610P)	TRAFFIC CONTROL DEVICE equals 00,	DEVICE FUNCTIONING must equal 0.
(660P)	TRAFFIC CONTROL DEVICE is not equal to 00,	DEVICE FUNCTIONING must not equal 0.
(661P)	TRAFFIC CONTROL DEVICE equals 97,	DEVICE FUNCTIONING must equal 8.
(660Q)	TRAFFIC CONTROL DEVICE does not equal 97,	it is unlikely that DEVICE FUNCTIONING equals 8.

# PC14 - Driver's Vision Obscured By

FORMAT: 2 numeric. Select all that apply. SAS NAME: Vision.MVISOBSC ELEMENT VALUES:

Codes	Attributes
00	No Obstruction Noted
01	Rain, Snow, Fog, Smoke, Sand, Dust
02	Reflected Glare, Bright Sunlight, Headlights
03	Curve, Hill or Other Roadway Design Feature
04	Building, Billboard, Other Structure
05	Trees, Crops, Vegetation
06	In-Transport Motor Vehicle (including load)
07	Not In-Transport Motor Vehicle (parked/working)
08	Splash or Spray of Passing Vehicle
09	Inadequate Defrost or Defog System
10	Inadequate Vehicle Lighting System
11	Obstruction Interior to the Vehicle
12	External Mirrors
13	Broken or Improperly Cleaned Windshield
14	Obstructing Angles on Vehicle
95	No Driver Present / Unknown if Driver Present
97	Vision Obscured – No Details
98	Other Visual Obstruction
99	Unknown

**Definition:** This data element records impediments to a driver's visual field that were noted in the case materials.

**Remarks:** These "visual obstructions" can appear anywhere in the case materials. Examples include a field on the *Police Crash Report* (e.g., "Contributing Factors"), in the narrative section, in the violations section, or in witness statements.

**00 (No Obstruction Noted)** is used when the case materials give no indication of a visual obstruction for this driver.

**01 (Rain, Snow, Fog, Smoke, Sand, Dust)** is used when one or more of these conditions exist AND are noted to have obstructed the view of the driver. Do not use this attribute when only the vehicle windshield is described as "fogged". (See <u>09 (Inadequate Defrost or Defog System)</u> or <u>13 (Broken or Improperly Cleaned Windshield)</u>.)

**02 (Reflected Glare, Bright Sunlight, Headlights)** is used when one or more of these conditions are noted to have obstructed the view of the driver.

**03 (Curve, Hill or Other Roadway Design Feature)** is used when any of these roadway features or design elements is noted to have obstructed the view of the driver (including embankment, sag, etc.).

**04 (Building, Billboard, Other Structure)** is used when any of these man-made structures are noted to have obstructed the view of the driver (including traffic signs, poles, signals, etc.).

**05 (Trees, Crops, Vegetation)** is used when any of these natural features are noted to have obstructed the view of the driver.

**06 (In-Transport Motor Vehicle [including load])** is used when a vehicle that is in motion or stopped on the roadway is noted to have obstructed the view of the driver. The vehicle may be but does not have to be a contact vehicle in the case.

**07 (Not In-Transport Motor Vehicle [parked, working])** is used when a vehicle that is parked in a designated parking area or space, stopped in an area off the roadway, or is a working motor vehicle is noted to have obstructed the view of the driver. The vehicle may be but does not have to be a contact vehicle in the case.

**08 (Splash or Spray of Passing Vehicle)** is used when this condition is noted to have obstructed the view of the driver. The splash or spray can come from water or mud; however, the use of this attribute does not require it to be raining at the time of the crash.

**09 (Inadequate Defrost or Defog System)** is used when the presence of frost or fog on the windshield was noted as being due to an inadequate system. The case materials must state specifically that the system was not operating properly. If the case materials state the presence of frost or fog alone on the windshield, you should use <u>13 (Broken or Improperly Cleaned Windshield)</u>.

**10 (Inadequate Vehicle Lighting System)** is used when the case materials indicate this driver's vision was impaired because the exterior lighting system (including head-lights, fog-lights, etc.) of the driver's vehicle was deficient in some way. This would include being turned off or not operating properly. This response should not be used to describe inadequate lighting systems of other vehicles (e.g., oncoming motor vehicles) or for inadequate highway lighting.

**11 (Obstruction Interior to the Vehicle)** is used when the case materials indicate this driver's vision was impaired because of a feature in the interior of their vehicle (including head restraint, rear-view mirror, window stickers, sun shades, ornaments, windshield tinting).

**12 (External Mirrors)** is used when the case materials indicate that an exterior mirror on this driver's vehicle created a visual obstruction.

**13 (Broken or Improperly Cleaned Windshield)** is used when this condition is noted to have obstructed the view of the driver. The presence of frost or fog on the windshield would apply. For a "fogged" or "frosted" windshield due to an inadequate or inoperable system see <u>09 (Inadequate Defrost or Defog System)</u>.

**14 (Obstructing Angles on Vehicle)** is used when the case materials indicate that the size or shape of a driver's own vehicle created a visual obstruction (including trailer, vehicle height, blind spot). Not to be confused with visual obstructions from other vehicles or a vehicle's interior components such as head restraints, sun shades, etc.

**95 (No Driver Present/Unknown if Driver Present)** is used when there is no driver in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash.

**97 (Vision Obscured - No Details)** is used when the case materials indicate that a vision impediment exists but does not clearly indicate the nature of the impediment.

**98 (Other Visual Obstruction)** is used when the case materials indicate the nature of a vision impediment that cannot be attributed to one of the other attributes above. For example, an unattached trailer left on the road shoulder.

**99 (Unknown)** is used when the case materials specifically indicate unknown.

Check	IF	THEN
(1HJF)	DRIVER'S VISION OBSCURED BY equals 95,	DRIVER PRESENCE must equal 0 or 9.
(1L2P)	any DRIVER'S VISION OBSCURED BY equals 00	only that one code and no other must be coded
	or 95 or 99,	for this vehicle.
(1L4P)	any DRIVER'S VISION OBSCURED BY equals	at least one CONTRIBUTING CIRCUMSTANCES,
	09,	MOTOR VEHICLE must equal 97.
(1L5P)	any DRIVER'S VISION OBSCURED BY equals	at least one CONTRIBUTING CIRCUMSTANCES,
	10,	MOTOR VEHICLE must equal 07 or 08 or 09.
(2H1F)	UNIT TYPE equals 1, and DRIVER PRESENCE	DRIVER'S VISION OBSCURED BY must equal 95.
	equals 0 or 9,	
(A1C0)	ROADWAY SURFACE CONDITIONS equals 01,	DRIVER'S VISION OBSCURED BY should not equal
		08.
(PB31)	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH	at least one DRIVER'S VISION OBSCURED BY
	TYPE equals 147, 157 or 357,	must equal 06 for the vehicle number identified
		in this person's VEHICLE NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.
(PB32)	PEDESTRIAN/BIKE TYPING -PEDESTRIAN	at least one DRIVER'S VISION OBSCURED BY
	CRASH TYPE equals 742,	must not equal 00 or 95 for the vehicle number
		identified in this person's VEHICLE NUMBER OF
		MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB33)	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH	DRIVER'S VISION OBSCURED BY for the striking
	TYPE equals 156,	vehicle must not equal 06.

# PC15 - Driver Maneuvered to Avoid

**FORMAT:** 2 numeric. Select all that apply **SAS NAME:** Maneuver.MDRMANAV **ELEMENT VALUES:** 

Codes	Attributes
00	Driver Did Not Maneuver to Avoid
01	<u>Object</u>
02	Poor Road Conditions (Puddle, Ice, Pothole, etc.)
03	Live Animal
04	Motor Vehicle
05	Pedestrian, Pedalcyclist or Other Non-Motorist
92	Phantom/Non-Contact Motor Vehicle
95	No Driver Present / Unknown if Driver Present
98	Not Reported
99	Unknown

**Definition:** This data element identifies the thing(s) the driver attempted to avoid while the vehicle was on the road portion of the trafficway, just prior to the <u>First Harmful Event</u> for this vehicle.

**Remarks:** The "road" by definition includes the roadway and shoulder/parking lane portions, when a shoulder/parking lane is present. The source for this data is the crash report narrative or related crash report form fields as completed by the investigating officer. It is the officer's assessment. Consequently, do not consider items noted only in driver or witness statement documentation unless verified by being reported in the crash report narrative.

Code the thing(s) the driver tried to avoid whether the maneuver was successful or not (i.e., whether or not the driver was able to avoid the object, poor road condition, animal, vehicle, or non-motorist).

00 (Driver Did Not Maneuver to Avoid) is used when:

- The crash report indicates that no avoidance maneuvers were taken by the driver.
- The avoidance maneuver(s) occurred after the first harmful event for the vehicle.
- The avoidance maneuver occurred when the vehicle was not on a roadway, shoulder, or parking lane.

**01 (Object)** is used when the driver attempted to avoid a non-fixed object such as; an animal carcass, an unattached trailer, a bicycle without a rider, downed tree limbs or power lines, debris from a previous crash, rocks that fall from an adjacent hillside, a load that fell from another vehicle, debris left from a tire blowout, etc.

**02 (Poor Road Conditions [Puddle, Ice, Pothole, etc.])** is used when the driver maneuvered to avoid the location of a road condition. Treat the condition as if it were an object. Do not use this attribute if the driver lost control while traveling on/over the road condition but made no maneuver to avoid it.

**03 (Live Animal)** is used when the driver attempted to avoid a live animal that is stationary or moving. A dead animal carcass is considered debris and coded as <u>**01 (Object)**</u>.

**04 (Motor Vehicle)** is used when the driver attempted to avoid another **contact** motor vehicle in the crash (receives a vehicle form). This includes in-transport, parked or working motor vehicles. A trailer not connected to a motor vehicle would be considered a <u>01 (Object)</u>.

**05 (Pedestrian, Pedalcyclist or Other Non-Motorist)** is used when the driver attempts to avoid a pedestrian, pedalcyclist or other non-motorist. Other Non-motorist would include persons riding on an animal, or in an animal drawn conveyance or on a personal conveyance. A person killed in a previous crash or an unoccupied pedalcycle or personal conveyance would be considered a <u>01 (Object)</u>.

**92 (Phantom/Non-Contact Motor Vehicle)** is used when the driver attempted to avoid another motor vehicle in the crash that was reported as a **non-contact** or phantom vehicle **(does not receive a <u>vehicle form</u>)**. This includes in-transport, parked, or working motor vehicles. A trailer not connected to a motor vehicle would be considered a <u>01 (Object)</u>.

**95 (No Driver Present/Unknown if Driver Present)** is used when there is no driver in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash.

# 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown)** is used when the information about a particular vehicle's circumstances are reported as "unknown."

Check	IF	THEN
(3BCP)	CRASH TYPE equals 34, 36, 38, 40, 54, 56, 58, or 60,	DRIVER MANEUVERED TO AVOID must not equal 00.
(9C4P)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER MANEUVERED TO AVOID must only equal 95.
(9C5P)	DRIVER MANEUVERED TO AVOID equals 95,	DRIVER PRESENCE must equal 0 or 9.
(AZ6P)	any DRIVER MANEUVERED TO AVOID equals 00,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 17.
(AZ7P)	any DRIVER MANEUVERED TO AVOID equals 00 or 95 or 98, or 99,	only that one code and no other must be coded for this vehicle.
(AZBP)	any DRIVER MANEUVERED TO AVOID equals 03,	CRITICAL EVENT – PRECRASH (EVENT) should equal 87-89.
(AZCP)	any DRIVER MANEUVERED TO AVOID equals 05,	CRITICAL EVENT – PRECRASH (EVENT) should equal 80-85.
(AZEP)	any DRIVER MANEUVERED TO AVOID equals 01,	CRITICAL EVENT – PRECRASH (EVENT) should equal 90-92.
(AZDQ)	DRIVER MANEUVERED TO AVOID equals 04,	NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.

Check	IF	THEN
(B10P)	PRE-EVENT MOVEMENT (PRIOR TO	DRIVER MANEUVERED TO AVOID should equal
	RECOGNITION OF CRITICAL EVENT) does not	00.
	equal 17, ATTEMPTED AVOIDANCE	
	MANEUVER equals 01,	
(V59Q)	ATTEMPTED AVOIDANCE MANEUVER equals	DRIVER MANEUVERED TO AVOID should equal
	99,	00, 98 or 99.

# PC16 - Driver Distracted By

**FORMAT:** 2 numeric. Select all that apply. **SAS NAME:** Distract.MDRDSTRD **ELEMENT VALUES:** 

Codes	Attributes
00	Not Distracted
01	Looked But Did Not See
16	No Driver Present / Unknown if Driver Present
96	Not Reported

#### **Distractions**

Codes	Attributes
03	By Other Occupant(s)
04	By a Moving Object in Vehicle
05	While Talking or Listening to Cellular Phone
06	While Manipulating Cellular Phone
07	Adjusting Audio or Climate Controls
09	While Using Other Component/Controls Integral to Vehicle
10	While Using or Reaching For Device/Object Brought Into Vehicle
12	Distracted by Outside Person, Object or Event
13	Eating or Drinking
14	Smoking Related
15	Other Cellular Phone Related
17	Distraction/Inattention
18	Distraction/Careless
19	Careless/Inattentive
92	Distraction (Distracted), Details Unknown
93	Inattention (Inattentive), Details Unknown
97	Lost in Thought / Day Dreaming
98	Other Distraction
99	Unknown if Distracted

**Definition:** This element identifies the attribute(s) which best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. Distraction from the primary task of driving occurs when drivers divert their attention from the driving task to some other activity. Also, driving while daydreaming or lost in thought is identified as distracted driving by NHTSA. Physical conditions/impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) are not identified as distractions by NHTSA.

**Analytical Note:** The attributes in this element are presented to provide selections that most unambiguously match what can be encountered in various presentations on state crash report forms. They are not all considered "distractions" as defined by NHTSA. Data in the public output files for Driver Distracted By will not be presented exactly as displayed in this element's attribute listing.

**Remarks:** Record the attribute(s) which best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realization of an impending critical event does

not occur. If this driver's vehicle has two critical crash envelopes, record the attribute(s) which best describe the driver's attention prior to the first Critical Precrash Event (i.e., prior to realization of the impending danger which the driver successfully avoided). Intoxication, III, Blackout, Asleep, or Fatigued are not considered distractions. This information is captured under the data element <u>Condition (Impairment) At Time of Crash</u>.

Driver Distracted By is a "Select all that apply" element. If the element values <u>00 (Not Distracted)</u>, <u>01 (Looked But Did Not See)</u>, <u>16 (No Driver Present)</u>, <u>17 (Distraction/Inattention)</u>, <u>18 (Distraction/Careless)</u>, <u>19 (Careless/Inattentive)</u>, <u>92 (Distraction [Distracted]</u>, <u>Details Unknown</u>), <u>93 (Inattention [Inattentive]</u>, <u>Details Unknown</u>), <u>96 (Not Reported)</u>, or <u>99 (Unknown if Distracted)</u> are selected, then only that one element value may be used.

### Witness Statements:

When coding Driver Distracted By, witness statements, including those from vehicle passengers or pedestrians, may be used to provide information when police sources are unavailable. The officer's assessment on the **Police Crash Report** will take precedence over items reported in a witness statement document in all cases. The officer's assessment includes any statements from a witness included by the officer as part of the **Police Crash Report** narrative. In the absence of an indication on the **Police Crash Report**, information that is in direct contradiction in two witness statements will not be included.

### 00 (Not Distracted)

- When the case materials indicate that the individual was completely attentive to driving and <u>O1 (Looked</u> <u>But Did Not See)</u> does not apply.
- When the case materials do not indicate a distraction in an available field, and not reporting a distraction in that field indicates **00 (Not Distracted)**.
- When the investigating officer is limited in selection and cannot select a distraction in addition to another factor relevant to crash and no other indication of distraction exists in the case materials.
- For omission of information see <u>96 (Not Reported)</u> guidance below.

**O1 (Looked But Did Not See)** is used when the driver is paying attention to driving (not distracted), but does not see the relevant vehicle, object, etc. This attribute should be used when a driver has an opportunity to take some action prior to impact, but the driver takes no action and no distractions apply. This situation frequently occurs when an overtaking vehicle is in the driver's "blind spot" or at intersections when a crossing vehicle is not noticed. If the driver **sees** the vehicle, object, etc., but does not consider it a danger, and no distractions apply then the **00 (Not Distracted)** would be used.

**16 (No Driver Present/Unknown if Driver Present)** is used when there is no driver in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash.

# 96 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **96 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**03 (By Other Occupant[s])** is used when the driver was distracted by another occupant in this driver's vehicle prior to realization of impending danger. Examples of other occupant distraction include conversing with or looking at another occupant e.g., baby/child in back seat, rowdy teenager, argumentative spouse, etc.

**04 (By a Moving Object in Vehicle)** is used when the driver was distracted by a moving object in this driver's vehicle prior to realization of impending danger. Examples include a dropped object, a moving pet, insect, or cargo.

**05 (While Talking or Listening to Cellular Phone)** is used when the driver is talking or listening on a cellular phone. This attribute includes talking or listening on a "hands-free" or Bluetooth enabled phone.

**06 (While Manipulating Cellular Phone)** is used when the driver is dialing or text messaging (texting) on a cellular phone. Any manual button/control actuation on the phone qualifies. This includes dialing or text messaging on any wireless e-mail device.

**07 (Adjusting Audio or Climate Controls)** is used when someone is distracted from the driving task while adjusting the air conditioner, heater, radio, cassette, using the radio, using the cassette or CD that are mounted in the vehicle.

**09 (While Using Other Component/Controls Integral to Vehicle)** is used when the driver is distracted while manipulating a control in the vehicle including adjusting headlamps or interior lights, controlling windows (power or manual), manipulating door locks (power or manual), adjusting side view mirrors (power or manual), adjusting rear view mirror, adjusting seat (power or manual), adjusting steering wheel, adjusting seat belt, on-board navigational devices, etc. (original equipment).

**10 (While Using or Reaching for Device/Object Brought into Vehicle)** is used when the driver is distracted while using or reaching for a device in the vehicle including a radar detector, CDs, razors, music portable CD player, headphones, a navigational device, laptop or tablet PC, etc. This attribute is also used when it cannot be determined if the involved device was OEM, brought into the vehicle, or a function of a cell phone (i.e. GPS).

If it is unknown if the device or object was brought into the vehicle or was original equipment on this vehicle, default to brought into vehicle and use attribute **10 (While Using or Reaching for Device/Object Brought Into Vehicle)**.

**12 (Distracted by Outside Person, Object, or Event)** is used when the driver was distracted by an outside person, object, or event prior to realization of impending danger. Examples include animals on the roadside, a previous crash, or non-traffic related signs (e.g., advertisements, electronic billboards, etc.) Do not use this attribute for a person, object, or event that the driver has recognized and for which the driver has taken some action (e.g., avoiding a pedestrian on the roadway).

**13 (Eating or Drinking)** is used when the driver is eating or drinking or involved in an activity related to these actions (e.g., picking food from carton placed on passenger seat, reaching to throw out used food wrapper, etc.)

**14 (Smoking Related)** is used when the driver is smoking or involved in an activity related to smoking, such as lighting a cigarette, putting ashes in the ash tray, etc. Any method of lighting the cigarette would be coded **14 (Smoking Related)**.

**15 (Other Cellular Phone Related)** is used when the case material indicates the driver is distracted from the driving task due to cellular phone involvement, but none of the specified codes are applicable (e.g., reaching for cellular phone, etc.). This attribute is also applied when specific details regarding cellular phone distraction/usage are not provided.

**17 (Distraction/Inattention)** is used **exclusively** when "Distraction/Inattention" or "Inattention/Distraction" are noted in the case materials as one combined attribute and it cannot be determined which Driver Distracted By attribute is intended, <u>92 (Distraction [Distracted], Details Unknown)</u> or <u>93 (Inattention [Inattentive], Details Unknown)</u>.

**18 (Distraction/Careless)** is used **exclusively** when "Distraction/Careless" or "Careless/Distraction" are noted in the case materials as one combined attribute and it cannot be determined which Driver Distracted By attribute applies.

**19 (Careless/Inattentive)** is used **exclusively** when "Careless/Inattentive" or "Inattentive/ Careless" are noted in the case materials as one combined attribute and it cannot be determined which Driver Distracted By attribute applies.

**92 (Distraction [Distracted], Details Unknown)** is used when "distraction" or "distracted" are noted in the case materials, but specific distraction(s) cannot be identified. For non-specific "inattention" see attribute **93** (Inattention [Inattentive], Details Unknown).

**93 (Inattention [Inattentive], Details Unknown)** is used when "inattention" or "inattentive" are noted in the case materials, but it cannot be identified if this refers to a distraction(s).

**97 (Lost in Thought / Day Dreaming)** is used when the driver is not completely attentive to driving because he/she is thinking about items other than the driving task. For non-specific "distraction" see element value <u>92 (Distraction [Distracted], Details Unknown)</u>. For non-specific "inattention" see element value <u>93 (Inattention [Inattentive], Details Unknown)</u>.

**98 (Other Distraction)** is used when details regarding this driver's distraction are known but none of the specified codes are applicable.

99 (Unknown if Distracted) is used when the case materials specifically indicate unknown.

Check	IF	THEN
(BJ1P)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9,	DRIVER DISTRACTED BY must equal 16.
(BJ2P)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 1,	DRIVER DISTRACTED BY must not equal 16 or blank.
(BJ3P)	UNIT TYPE equals 1, and DRIVER DISTRACTED BY equals 16,	DRIVER PRESENCE must equal 0 or 9.
(BJ4P)	any DRIVER DISTRACTED BY equals 03,	NUMBER OF OCCUPANTS must be greater than 01.
(BJ7P)	any DRIVER DISTRACTED BY equals 00 or 01 or 16 or 17 or 18 or 19 or 92 or 93 or 96 or 99,	only that one code and no other must be used.

# PC17 - Pre-Event Movement (Prior to Recognition of Critical Event)

## FORMAT: 2 numeric SAS NAME: Vehicle.P\_Crash1 ELEMENT VALUES:

Codes	Attributes
00	No Driver Present/Unknown if Driver Present
01	Going Straight
02	Decelerating in Road
03	Accelerating in Road
04	Starting in Road
05	Stopped in Roadway
06	Passing or Overtaking Another Vehicle
07	Disabled or "Parked" In Travel Lane
08	Leaving A Parking Position
09	Entering A Parking Position
10	Turning Right
11	Turning Left
12	Making A U-Turn
13	Backing Up (Other Than for Parking Position)
14	Negotiating A Curve
15	Changing Lanes
16	Merging
17	Successful Avoidance Maneuver to A Previous Critical Event
98	Other (Specify:)
99	<u>Unknown</u>

**Definition:** This element identifies the attribute that best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took no action or had no time to attempt any evasive maneuvers.

**Remarks:** Record the attribute that best describes this vehicle's activity **prior** to the driver's realization of an impending critical event or just **prior** to impact if the driver took no action or had no time to attempt any evasive maneuvers.

Actions taken by the driver, of this vehicle, **after realization** of an impending danger are captured in <u>Attempted</u> <u>Avoidance Maneuver</u>.

**00 (No Driver Present/Unknown if Driver Present)** is pre-coded for in-transport motor vehicles when the element <u>Driver Presence</u> is coded as <u>**0 (No Driver Present/Not Applicable)**</u>.

**01 (Going Straight)** is used when this vehicle's path of travel was straight ahead without any attempted or intended changes. The coding of this attribute is not always dependent on the roadway alignment.

**02 (Decelerating in Road)** is used when this vehicle was traveling straight ahead within the road portion of the trafficway and was decelerating.

**04 (Starting in Road)** is used when this vehicle was in the process of starting forward from a stopped position within the road portion of the trafficway (e.g., start up from traffic signal).

**05 (Stopped in Roadway)** is used when this vehicle was stopped momentarily, with the motor running within the roadway portion of the trafficway (e.g., stopped for traffic signal).

**06 (Passing or Overtaking Another Vehicle)** is used when this vehicle was traveling straight ahead and was in the process of passing or overtaking another vehicle on the left or right. **Note:** This attribute is not used in rearend collisions. (See Tables - <u>Precrash Event Scenarios for Different Rear-End Situations</u>.)

**07 (Disabled or "Parked" In Travel Lane)** is used when this vehicle was "parked" in a travel lane (e.g., double parked, disabled) with a driver present in the vehicle.

**08 (Leaving A Parking Position)** is used when this vehicle was entering the travel lane from a parking area adjacent to the traffic lanes. This attribute includes vehicles that were previously stopped/parked on the shoulder, roadside, median, etc. For vehicles backing from a driveway use attribute <u>13 (Backing Up [Other Than for Parking Position])</u>.

**09 (Entering A Parking Position)** is used when this vehicle was leaving the travel lane to a parking area adjacent to the traffic lanes (i.e., in the process of parking). This attribute includes vehicles that are stopping/parking on the shoulder, roadside, median, etc. For vehicle backing into a driveway use **13 (Backing Up [Other Than for Parking Position])**.

**10 (Turning Right)** is used when this vehicle was moving forward and turned right, changing lanes from one roadway to a different roadway (e.g., from or to a driveway, parking lot or intersection). Excludes situations where the vehicle was leaving a parking position.

**11 (Turning Left)** is used when this vehicle was moving forward and turned left, changing lanes from one roadway to a different roadway (e.g., from or to a driveway, parking lot or intersection). Excludes situations where the vehicle was leaving a parking position.

**12 (Making a U-Turn)** is used when this vehicle was moving forward making a U-turn on the trafficway. Excludes situations where the vehicle was leaving a parking position.

**13 (Backing Up [Other Than for Parking Position])** is used when this vehicle was traveling backwards within the trafficway. Do not use this attribute if the vehicle was backing into or out of a parking space. (See <u>09 (Entering a Parking Position</u>) or <u>08 (Leaving A Parking Position</u>) respectively.) Vehicles backing into or from a driveway are included in this attribute.

14 (Negotiating A Curve) is used when this vehicle was continuing along a road that curved to the right or left.

**15 (Changing Lanes)** is used when this vehicle was traveling straight ahead and changed travel lanes to the right or left while on the same roadway.

**16 (Merging)** is used when this vehicle was moving forward and merging from the left or right into a traffic lane (e.g., roadway narrows, exit/entrance ramps).

**17 (Successful Avoidance Maneuver to A Previous Critical Event)** is used when this vehicle responded to a previous critical event and successfully avoided an impact. However, this maneuver precipitated a subsequent critical crash envelope, which resulted in this vehicle's first impact.

**98 (Other [Specify:])** is used when this vehicle's pre-event movement is known but none of the specified attributes are applicable. The movement must be specified in the "specify box".

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

**99 (Unknown)** is used when the vehicle's movement prior to the driver's realization of an impending critical event is unknown.

Check	IF	THEN
(3B4P)	PRE-EVENT MOVEMENT (PRIOR TO	CRASH TYPE must not equal 44-69, 71-73, 76,
	RECOGNITION OF CRITICAL EVENT) equals 10,	77, 79, 81-83, 86-92.
(3B5P)	PRE-EVENT MOVEMENT (PRIOR TO	CRASH TYPE must not equal 44-67, 69-71, 73,
	RECOGNITION OF CRITICAL EVENT) equals 11,	77-81, 83, 86-92.
(3BDP)	CRASH TYPE equals 46, 47, and ATTEMPTED	PRE-EVENT MOVEMENT (PRIOR TO
	AVOIDANCE MANEUVER equals 01 or 99,	RECOGNITION OF CRITICAL EVENT) must not equal 01.
(3BFP)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 08 or 09,	CRASH TYPE must not equal 46 or 47.
(3BGP)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	DRIVER PRESENCE must equal 0 or 9.
(3C00)	CRASH TYPE equals 68, 72, 76 or 82,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 98.
(3C10)	CRASH TYPE equals 70, 78 or 80,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 or 98.
(3C20)	this vehicle is involved in the First Harmful Event and its CRASH TYPE equals 29-31,	this vehicle's PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 02.
(3C30)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 12,	CRASH TYPE should equal 98.
(3C40)	CRASH TYPE equals 46,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 07, 09 or 12.
(3C50)	CRASH TYPE equals 92,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 08, 09, 13, 98, 99.
(3C60)	CRASH TYPE equals 25-27, 29-31,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should not equal 05 or 07.

#### **Consistency Checks:**

Check	IF	THEN
(3C70)	PRE-EVENT MOVEMENT (PRIOR TO	CRASH TYPE should equal 92 or 98.
	RECOGNITION OF CRITICAL EVENT) equals 13,	
(3C80)	CRASH TYPE equals 47,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should equal
		06, 15, 16, or ATTEMPTED AVOIDANCE
		MANEUVER should equal 06, 08 or 11.
(3D60)	CRASH TYPE equals 46 or 47,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should not
		equal 01.
(9BAP)	MANNER OF COLLISION equals 07, and PRE-	CRASH TYPE should equal 44-49, 98, 99 for the
. ,	EVENT MOVEMENT (PRIOR TO RECOGNITION	vehicles involved in the first harmful event.
	OF CRITICAL EVENT) equals 10 or 11 for	
	neither one of the vehicles involved in the	
	first harmful event,	
(9BCP)	MANNER OF COLLISION equals 08, and PRE-	CRASH TYPE should equal 64-67, 98, 99 for the
	EVENT MOVEMENT (PRIOR TO RECOGNITION	vehicles involved in the first harmful event.
	OF CRITICAL EVENT) equals 10 or 11 for	
	neither one of the vehicles involved in the	
	first harmful event,	
(A430)	PRE-EVENT MOVEMENT (PRIOR TO	RELATION TO JUNCTION (b) should not equal
. ,	RECOGNITION OF CRITICAL EVENT) equals 10,	01, 18.
	11 for a vehicle involved in the first harmful	
	event,	
(A4C0)	RELATION TO JUNCTION (b) equals 04,	at least one PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) for the
		vehicles involved in the first harmful event
		should equal 10, 11, 13 or 98.
(A4D0)	PRE-EVENT MOVEMENT (PRIOR TO	ROADWAY ALIGNMENT must equal 2-4.
	RECOGNITION OF CRITICAL EVENT) equals 14,	
(A4D1)	PRE-EVENT MOVEMENT (PRIOR TO	ROADWAY ALIGNMENT should not equal 2-4.
	RECOGNITION OF CRITICAL EVENT) equals 01,	
(A61F)	FIRST HARMFUL EVENT equals 08, 09, 11, 15,	CRASH TYPE should equal 13 for the vehicle
	49, and RELATION TO TRAFFICWAY equals 01,	involved in the first harmful event.
	02, 07, 11, and PRE-EVENT MOVEMENT	
	(PRIOR TO RECOGNITION OF CRITICAL EVENT)	
	is not equal to 00, 13 for the vehicle involved	
	in the first harmful event,	
(AZ20)	UNIT TYPE equals 1, and DRIVER PRESENCE	PRE-EVENT MOVEMENT (PRIOR TO
	equals 0 or 9,	RECOGNITION OF CRITICAL EVENT) must equal
		00.
(AZ30)	PRE-EVENT MOVEMENT (PRIOR TO	ATTEMPTED AVOIDANCE MANEUVER must
-	RECOGNITION OF CRITICAL EVENT) equals 00,	equal 00.
(AZ50)	PRE-EVENT MOVEMENT (PRIOR TO	PRE-IMPACT STABILITY must equal 0.
-	RECOGNITION OF CRITICAL EVENT) equals 00,	

Check	IF	THEN
(AZ60)	PRE-IMPACT STABILITY equals 0,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) must equal
		00.
(AZ6P)	any DRIVER MANEUVERED TO AVOID equals	PRE-EVENT MOVEMENT (PRIOR TO
	00,	RECOGNITION OF CRITICAL EVENT) must not
		equal 17.
(AZ70)	PRE-IMPACT LOCATION equals 0,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) must equal
		00.
(AZ80)	PRE-EVENT MOVEMENT (PRIOR TO	PRE-IMPACT LOCATION must equal 0.
	RECOGNITION OF CRITICAL EVENT) equals 00,	
(AZAO)	PRE-EVENT MOVEMENT (PRIOR TO	TRAVEL SPEED should equal 000 for this vehicle.
	RECOGNITION OF CRITICAL EVENT) equals 05	
	or 07,	
(AZA2)	PRE-EVENT MOVEMENT (PRIOR TO	then RELATED FACTORS – DRIVER LEVEL should
	<b>RECOGNITION OF CRITICAL EVENT) does not</b>	not equal 48.
	equal 10, 11, or 12,	
(AZA3)	RELATED FACTORS – DRIVER LEVEL equals	then PRE-EVENT MOVEMENT (PRIOR TO
	48,	RECOGNITION OF CRITICAL EVENT) should
/ <b>\</b>		equal 10, 11, or 12.
(B10P)	PRE-EVENT MOVEMENT (PRIOR TO	DRIVER MANEUVERED TO AVOID should equal
	RECOGNITION OF CRITICAL EVENT) does not	00.
	equal 17, and ATTEMPTED AVOIDANCE	
(0047)	MANEUVER 01,	
(PB17)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	PEDESTRIAN for a person involved in the first	RECOGNITION OF CRITICAL EVENT) must equal
	harmful event equals 211-214 or 219,	08, 09, 13, or 98. Note: this edit is restricted to vehicles which are involved in only one event
		with pedestrian(s).
(PB40)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one PRE-EVENT MOVEMENT (PRIOR TO
(FD40)	BICYCLE equals 610,	RECOGNITION OF CRITICAL EVENT) must equal
	bierele equais 010,	08, 09, or 13 for the vehicle number identified in
		this person's <b>VEHICLE</b> NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.
(PB41)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
( /	BICYCLE equals 215,	RECOGNITION OF CRITICAL EVENT) must equal
		08 or 09 for the vehicle number identified in this
		person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE
		STRIKING NON-MOTORIST.
(PB42)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
. /	BICYCLE equals 111, 211 or 212,	RECOGNITION OF CRITICAL EVENT) must equal
		11, <b>16</b> , or 17 for the vehicle number identified in
		this person's <b>VEHICLE</b> NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.

Check	IF	THEN
(PB43)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217 or 218,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10, <i>16</i> , or 17 for the vehicle number identified in this person's <i>VEHICLE</i> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB45)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 781 or 782,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11 or 17 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB46)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 221-225,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB49)	PERSON TYPE equals 05 or 08, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.
(PB50)	PERSON TYPE equals 05 or 08, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795, or 799.
(PB52)	PERSON TYPE equals 06 or 07, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE should equal 610.
(PB56)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 791, 792, 794, 795,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PBAO)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.

Check	IF	THEN
(PBA1)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	BICYCLE equals 112, 151, 213, 214, 217 or	RECOGNITION OF CRITICAL EVENT) should equal
	218, and VEHICLE NUMBER - VEHICLE LEVEL	10.
	equals VEHICLE NUMBER OF MOTOR VEHICLE	
	STRIKING NON-MOTORIST,	
(PBA5)	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d,	PRE-EVENT MOVEMENT (PRIOR TO
	2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d,	RECOGNITION OF CRITICAL EVENT) should
		equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15,
		16, or 17 for the vehicle number that struck this
<u> </u>		non-motorist.
(PBA6)	PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d,	PRE-EVENT MOVEMENT (PRIOR TO
	6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d,	RECOGNITION OF CRITICAL EVENT) should
		equal 10 for the vehicle number that struck this non-motorist.
(PBA7)	PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d,	PRE-EVENT MOVEMENT (PRIOR TO
(PDA7)	10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a,	RECOGNITION OF CRITICAL EVENT) should
	12b, 12c, 12d,	equal 11 for the vehicle number that struck this
	120, 120, 120,	non-motorist.
(V535)	ATTEMPTED AVOIDANCE MANEUVER equals	PRE-EVENT MOVEMENT (PRIOR TO
(1000)	00,	RECOGNITION OF CRITICAL EVENT) must equal
		00.
(V538)	JACKKNIFE equals 2,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) must not
		equal 04, 05, 07-09 or 13 for this vehicle.

# PC18 - Critical Event – Precrash (Category)

#### FORMAT: 1 numeric SAS NAME: none ELEMENT VALUES:

Codes	Attributes
1	This Vehicle Loss of Control Due to:
2	This Vehicle Traveling
3	Other Motor Vehicle in Lane
4	Other Motor Vehicle Encroaching into Lane
5	Pedestrian or Pedalcyclist or Other Non-Motorist
6	Object or Animal
7	<u>Other</u>
9	<u>Unknown</u>

**Definition:** This element identifies the category of the event that was critical to this vehicle being involved in the crash.

**Remarks:** When more than one condition applies and it cannot be determined which one had a greater effect, choose the higher listed attribute (e.g., <u>1 (This Vehicle Loss of Control Due to:)</u> takes precedence over <u>2 (This Vehicle Traveling)</u>).

If you do not know from available sources which driver had the right-of-way at a controlled or uncontrolled intersection, follow the guidelines under <u>Precrash General Rule #6</u>.

**1 (This Vehicle Loss of Control Due to:)** is used to identify situations where the critical factor leading to the collision involved control loss of this vehicle. Control loss can be related to either mechanical failure or environmentally induced vehicle instability. (See <u>Precrash General Rule #5</u> for additional guidance.)

**2 (This Vehicle Traveling)** is used to identify situations where the critical factor leading to the collision involves the travel path of this vehicle.

**3 (Other Motor Vehicle in Lane)** is used to identify situations where the critical factor leading to the collision involved the travel of the other vehicle in the same lane as this vehicle.

**4 (Other Motor Vehicle Encroaching into Lane)** is used to identify situations where the critical factor leading to the collision involves the other vehicle's movement into or across this vehicle's travel lane from another lane, intersection, driveway, or ramp.

**5** (Pedestrian or Pedalcyclist or Other Non-Motorist) is used to identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist, or other non-motorist. A pedalcyclist is defined as a person riding a pedal power conveyance (e.g., bicycle, tricycle, etc.). Other non-motorists include persons on personal conveyances (e.g., baby carriage, skate board, roller blades, motorized wheelchair, etc.) and any person riding on an animal or in an animal-drawn conveyance (e.g., on horseback, in a horse-drawn carriage, etc.).

**6 (Object or Animal)** is used to identify situations where the critical factor leading to the collision for this vehicle involved an object or animal.

**7 (Other)** is used when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the crash are not considered as other critical precrash events. For example, use this attribute if the critical event developed from this vehicle's departure from a driveway.

9 (Unknown) is used when the critical precrash event which resulted in the collision is unknown.

Check	k Language	
(FP6F)	UNIT TYPE equals 1, and CRITICAL EVENT – PRECRASH (CATEGORY) equals blank, case status is	
	flawed.	

# PC19 - Critical Event – Precrash (Event)

## FORMAT: 2 numeric SAS NAME: Vehicle.P\_Crash2 ELEMENT VALUES:

## THIS VEHICLE LOSS OF CONTROL DUE TO:

Codes	Attributes
01	Blow Out/Flat Tire
02	Stalled Engine
03	Disabling Vehicle Failure (e.g., Wheel Fell Off) (Specify:)
04	Non-Disabling Vehicle Problem (e.g., Hood Flew Up) (Specify:)
05	Poor Road Conditions (Puddle, Pothole, Ice, Etc.) (Specify:)
06	Traveling Too Fast for Conditions
08	Other Cause of Control Loss (Specify:)
09	Unknown Cause of Control Loss

## THIS VEHICLE TRAVELING

Codes	Attributes
10	Over the Lane Line on Left Side of Travel Lane
11	Over the Lane Line on Right Side of Travel Lane
12	Off the Edge of the Road on the Left Side
13	Off the Edge of the Road on the Right Side
14	End Departure
15	Turning Left
16	Turning Right
17	Crossing Over (Passing Through) Junction
18	This Vehicle Decelerating
19	Unknown Travel Direction
20	Backing
21	Making a U-Turn

## **OTHER MOTOR VEHICLE IN LANE**

Codes	Attributes	
50	Other Vehicle Stopped	
51	Traveling in Same Direction with Lower Steady Speed	
52	Traveling in Same Direction While Decelerating	
53	Traveling in Same Direction with Higher Speed	
54	Traveling in Opposite Direction	
55	In Crossover	
56	Backing	
59	Unknown Travel Direction of the Other Motor Vehicle in Lane	

Codes	Attributes	
60	From Adjacent Lane (Same Direction) Over Left Lane Line	
61	From Adjacent Lane (Same Direction) Over Right Lane Line	
62	From Opposite Direction Over Left Lane Line	
63	From Opposite Direction Over Right Lane Line	
64	From Parking Lane/Shoulder, Median/Crossover, Roadside	
65	From Crossing Street, Turning into Same Direction	
66	From Crossing Street, Across Path	
67	From Crossing Street, Turning into Opposite Direction	
68	From Crossing Street, Intended Path Not Known	
70	From Driveway, Turning into Same Direction	
71	From Driveway, Across Path	
72	From Driveway, Turning into Opposite Direction	
73	From Driveway, Intended Path Not Known	
74	From Entrance to Limited Access Highway	
78	Encroachment by Other Vehicle - Details Unknown	

## PEDESTRIAN OR PEDALCYCLIST OR OTHER NON-MOTORIST

Codes	Attributes	
80	Pedestrian in Road	
81	Pedestrian Approaching Road	
82	Pedestrian Unknown Location	
83	Pedalcyclist or Other Non-Motorist in Road	
84	Pedalcyclist or Other Non-Motorist Approaching Road	
85	Pedalcyclist or Other Non-Motorist Unknown Location	

## **OBJECT OR ANIMAL**

Codes	Attributes
87	Animal in Road
88	Animal Approaching Road
89	Animal - Unknown Location
90	Object in Road
91	Object Approaching Road
92	Object Unknown Location

#### **OTHER (SPECIFY:)**

Code	Attribute
98	Other Critical Precrash Event (Specify:)

#### **UNKNOWN:**

Code	Attribute
99	Unknown

**Definition:** This element identifies the critical event which made the crash imminent (i.e., something occurred which made the collision possible).

#### **Remarks:**

The selection of the <u>Critical Precrash Category</u> will determine what Critical Precrash Events are available to select.

When you know the Critical Precrash Category, but are unable to select a specific Critical Precrash Event, use the following guideline:

Default to one of the "Other" or "Unknown" attributes within each Critical Precrash Event category, rather than coding the entire Critical Precrash Category as "Other critical precrash event". (Precrash General Rule #3)

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

Responsive actions to this situation, if any, are coded under <u>Attempted Avoidance Maneuver</u>.

A Critical Precrash Event is coded for each vehicle and identifies the circumstances leading to this vehicle's first impact in the crash.

Do not refer to culpability. Many crash scenarios will suggest fault, but this should be coincidental rather than by design. As an example, vehicle 1 was speeding when vehicle 2 crossed vehicle 1's path from a driveway. The situation which made the precrash event critical for vehicle 1 (since it did not lose control) was vehicle 2's movement across vehicle 1's path **and not** vehicle 1's speed.

The mere presence of a traffic control signal/sign typically does not make the situation critical when determining Critical Precrash Event. (See example under <u>Precrash General Rule #2</u>)

When selecting events within the categories of <u>THIS VEHICLE TRAVELING</u> and <u>OTHER MOTOR VEHICLE</u> <u>ENCROACHING INTO LANE</u> for Critical Events occurring in intersections, a vehicle's "travel lane" extends through the intersection area even if no lane line markings are present within the intersection. For example, for a vehicle that is turning left, its original travel lane extends through the intersection to the lane into which it is turning. (See <u>Figure 23</u> below).

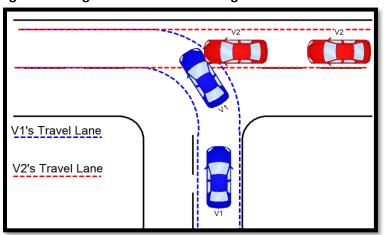


Figure 23: Diagram of a Vehicle Turning Left and its Extended Travel Lane

A motor vehicle is stopped in a travel lane and is impacted by another motor vehicle ricocheting off a vehicle. The Critical Precrash Event for the vehicle struck by the ricocheting vehicle is in the category of either: <u>Other</u> <u>Motor Vehicle In Lane</u> or <u>Other Motor Vehicle Encroaching Into Lane</u>. (Precrash General Rule #9)

## **This Vehicle Loss of Control Due to:**

**01 (Blow Out or Flat Tire)** is used when a vehicle in motion loses control as the result of an immediate tire disruption. Examples include blow out, rapid air loss, tread separation, etc.

**02 (Stalled Engine)** refers to a vehicle which is in motion and loses engine power. A stalled engine situation must precipitate a collision to be coded in this element. A vehicle that is stopped as the result of an engine malfunction does not take this attribute.

**03 (Disabling Vehicle Failure [e.g., Wheel Fell Off] [Specify:])** is selected when a mechanical malfunction, such as a component of the vehicle suspension or steering system, leads to the critical reason for the collision. (See "<u>Note: for attributes with "specify:</u>" designation" at the beginning of Remarks section for this element.)

**04 (Non-Disabling Vehicle Problem [e.g., Hood Flew Up] [Specify:])** is selected when some mechanical abnormality suddenly occurred to this vehicle which leads to the critical reason for the collision. The abnormality must not be disabling damage. For bald tires, see <u>**06 (Traveling Too Fast for Conditions)</u></u>. (See "<u>Note: for attributes with "specify:" designation</u>" at the beginning of Remarks section for this element.)</u>** 

**05 (Poor Road Conditions [Puddle, Pot Hole, Ice, Etc.] [Specify:])** captures control loss due to suddenly encountered environmental conditions of the roadway and not ongoing situations. These conditions must have initiated the precrash event which resulted in the collision. (See "<u>Note: for attributes with "specify:</u>" <u>designation</u>" at the beginning of Remarks section for this element.).

**06 (Traveling Too Fast for Conditions)** identifies this vehicle's movement and speed were not appropriate relative to its surroundings in which the subsequent loss of control lead to the collision. This attribute applies when the loss of control is due to a vehicle traveling at a speed that was unsafe for the road configuration or conditions, and has no bearing on the speed limit. The officer does not necessarily have to indicate that speed was a factor in the crash, and therefore this attribute is independent of **D22 Speeding Related.** This attribute may also be used in situations where there are no adverse weather and/or road surface conditions.

#### Examples include:

- A roadway departure on a curve where the driver failed to negotiate and departed the roadway resulting in an impact. If the driver merely steered straight while in a curve and departed the roadway, then the category This Vehicle Traveling may apply.
- The vehicle loses control (hydroplanes) on a wet roadway (can be due to bald tires).

**08 (Other Cause of Control Loss [Specify:])** is selected when it was determined that this vehicle's loss of control was the primary reason which made the event critical and the above attributes do not adequately identify the control loss condition. If control is lost due to driver illness such as heart attacks, diabetic comas, etc., then Critical Event - Precrash (Event) should be coded as **08 (Other cause of control loss [specify:])**. This attribute should not be used for drivers who are impaired by alcohol and/or drugs unless the driver's <u>Condition</u> (<u>Impairment) At Time Of Crash</u> equals <u>**01 (III, Blackout)**</u>. (See "<u>Note: for attributes with "specify:</u>" designation" at the beginning of Remarks section for this element.).

**09 (Unknown Cause of Control Loss)** is selected when it is known control loss made the situation critical, but it is unknown whether the vehicle or the environment caused the control loss.

These attributes identify situations where the critical factor leading to the collision involved the travel path of **this** vehicle.

**10 (Over the Lane Line on Left Side of Travel Lane)** is selected when this vehicle departs its lane to the left and is entering or had entered the adjoining lane, shoulder, or designated bike lane. The change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's left and is struck by a vehicle traveling within its travel lane in the opposite direction.

However, by modifying the scenario slightly, the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the left of the lead vehicle. If an animal runs into the roadway and is struck by this vehicle, then the correct choice would be <u>87 (Animal in</u> <u>Road)</u>.

**11 (Over the Lane Line on Right Side of Travel Lane)** is selected when this vehicle departs its lane to the right and is entering or had entered the adjoining lane, shoulder, or designated bike lane. To use this attribute, change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's right and is struck in the rear by a vehicle traveling within its travel lane in the same direction. The correct choice for this vehicle would be **11 (Over the Lane Line on Right Side of Travel Lane)**.

However, by modifying the scenario slightly the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the right of the lead vehicle. If an animal runs into the road and is struck by this vehicle, then the correct choice would be <u>87 (Animal in Road)</u>.

**12 (Off the Edge of the Road on the Left Side)** identifies a situation where the initial precrash event occurred beyond the left side shoulder area. This also includes departure into a median.

**13 (Off the Edge of the Road on the Right Side)** identifies a situation where the initial precrash event occurred beyond the right side shoulder area.

14 (End Departure) is used when the vehicle departs the end of the roadway (e.g., "T" intersection).

**15 (Turning Left)** is used when this vehicle attempts a left turn to or from its roadway or driveway to another roadway or driveway.

**16 (Turning Right)** is used when this vehicle attempts a right turn to or from its roadway or driveway to another roadway or driveway.

**17 (Crossing Over (Passing Through) Junction)** identifies this vehicle's travel as proceeding through the junction without any planned turning.

18 (This Vehicle Decelerating) is used when the vehicle is decelerating.

**19 (Unknown Travel Direction)** is used for those occasions where this vehicle's travel made the situation critical, but it is unknown which travel direction this vehicle was moving.

**20 (Backing)** is used when this vehicle was backing in a travel lane or backing into the roadway from a driveway, shoulder, or parking lane.

**21 (Making a U-Turn)** is used when this vehicle attempts to make a U-Turn. When it cannot be determined if the vehicle is making a left or a U-Turn, default to left turn.

## **Other Motor Vehicle in Lane**

These attributes identify situations where the critical factor leading to the collision involved the travel of the **other** vehicle in the same lane as **this** vehicle. **Note:** For Rear-End collision situations involving three vehicles see tables <u>Precrash Event Scenarios for Different Rear-End Collision Situations</u>.

**50 (Other Vehicle Stopped)** identifies a situation where the other vehicle is not in motion (i.e., stopped, parked, disabled) and in this vehicle's travel lane.

**51 (Traveling in Same Direction with Lower Steady Speed)** is used when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was traveling slower than this vehicle.

**52 (Traveling in Same Direction While Decelerating)** is used when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was decelerating. Deceleration can include intentional deceleration by braking or unintended deceleration caused by a prior event (e.g. tire blowout, prior collision).

**53 (Traveling in Same Direction with Higher Speed)** is used when the speed of the other vehicle was higher than this vehicle or accelerating. The other vehicle must be overtaking this vehicle.

**54 (Traveling in Opposite Direction)** is used when the other vehicle was in this vehicle's travel lane and traveling head-on in the opposite direction of this vehicle.

**55 (In Crossover)** is used when the other vehicle enters a crossover already occupied by this vehicle. A crossover is defined as a designated opening within a median used primarily for "U-turns."

**56 (Backing)** identifies a situation where the other vehicle was in the process of backing up while in this vehicle's travel lane.

**59 (Unknown Travel Direction of Other Motor Vehicle in Lane)** is used for situations where the other vehicle's activity (while in the same lane as this vehicle) precipitated the precrash event, but the travel direction and/or speed could not be determined.

## **Other Motor Vehicle Encroaching into Lane**

These attributes identify situations where the critical factor leading to the collision involved the **other** vehicle's movement into or across **this** vehicle's travel lane from another lane, intersection, driveway, or ramp.

When two vehicles are initially traveling on the same trafficway and one executes a left turn with the right-ofway (i.e. green arrow), use **Other Motor Vehicle Encroaching Into Lane -** <u>From opposite direction-over right</u> <u>lane line</u> for the turning vehicle's critical event. This applies to <u>Crash Types 68, 69</u>.

If the vehicles were initially on different trafficways (Crash Types <u>76, 77</u> and <u>82, 83</u>) the critical event for the vehicle turning left with the right-of-way should be **Other Motor Vehicle Encroaching -** <u>From crossing street</u> <u>across path</u>. (Precrash General Rule **#7**)

**60 (From Adjacent Lane (Same Direction) Over Left Lane Line)** is used when the other vehicle was traveling in the same direction as this vehicle and crosses the left lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its right lane line).

**61 (From Adjacent Lane (Same Direction) Over Right Lane Line)** is used when the other vehicle was traveling in the same direction as this vehicle and crosses the right lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its left lane line).

**62 (From Opposite Direction Over Left Lane Line)** identifies a situation where the other vehicle crosses the left lane line while traveling in the opposite direction from this vehicle.

**63 (From Opposite Direction Over Right Lane Line)** identifies a situation where the other vehicle crosses the right lane line while traveling in the opposite direction from this vehicle.

**64 (From Parking Lane/Shoulder, Median/Crossover, Roadside)** is selected when the other vehicle was departing one of these trafficway components and entering the travel lane of this vehicle.

**65 (From Crossing Street, Turning into Same Direction)** is used when the other vehicle was turning from another roadway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle.

**66 (From Crossing Street, Across Path)** is used when the other vehicle was continuing straight through the intersection and attempted to cross over this vehicle's roadway.

**67 (From Crossing Street, Turning into Opposite Direction)** is used when the other vehicle was entering an intersection from another roadway and was turning or attempting to turn onto this vehicle's roadway in the opposite travel direction of this vehicle.

**68 (From Crossing Street, Intended Path Not Known)** is used when the other vehicle's entrance into the intersection was the critical factor which led to the collision; however, the other vehicle's travel direction could not be determined.

**70 (From Driveway, Turning into Same Direction)** is used when the other vehicle was turning from a driveway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle.

**71 (From Driveway, Across Path)** is used when the other vehicle was entering this vehicle's roadway from a driveway and was continuing straight across to another driveway or roadway.

**72 (From Driveway, Turning into Opposite Direction)** is used when the other vehicle was entering this vehicle's roadway from a driveway and was attempting to turn into the opposite travel direction of this vehicle.

**73 (From Driveway, Intended Path Not Known)** is used to identify driveway-related precrash events where details surrounding the other vehicle's intended path are not known.

**74 (From Entrance to Limited Access Highway)** is used for entrance ramp situations where the other vehicle was attempting to enter (merge) onto the limited access highway that was being traveled by this vehicle.

**78 (Encroachment by Other Vehicle Details Unknown)** is used for situations where the other vehicle initiated the critical precrash event, but circumstances surrounding the other vehicle's encroachment are unknown.

## Pedestrian or Pedalcyclist or Other Non-Motorist

These attributes identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist, or other non-motorist. These selections include situations where a vehicle was exiting a driveway. A pedalcyclist is defined as a person riding a pedal powered conveyance (e.g., bicycle, tricycle, etc.). Other non-motorists include persons on personal conveyances (e.g., baby carriage, skate board, roller blades, motorized wheelchair, etc.) and any person riding on an animal or in an animal-drawn conveyance (e.g., on horseback, in a horse-drawn carriage, etc.).

**80 (Pedestrian in Road)** is used when a pedestrian was present (e.g., sitting, standing, walking, or running, etc.) in the road. For people not on foot (e.g. person on a skateboard or in a motorized wheelchair), use <u>83</u> (Pedalcyclist or Other Non-Motorist in Road).

**81 (Pedestrian Approaching Road)** identifies situations where a pedestrian was within the trafficway and moving toward the road or attempting to enter the road, but was not on the road.

**82 (Pedestrian Unknown Location)** is used when it was determined the presence or action of a pedestrian was the critical factor which lead to this vehicle's collision, but the location or action of the pedestrian was not known.

83 (Pedalcyclist or Other Non-Motorist in Road) is selected when a pedalcyclist or other non-motorist was present in the road (irrespective of relative motion). Other non-motorists include persons on personal conveyances (e.g., baby carriage, skate board, roller blades, motorized wheelchair, etc.) and any person riding on an animal or in an animal-drawn conveyance (e.g., on horseback, in a horse-drawn carriage, etc.).

**84 (Pedalcyclist or Other Non-Motorist Approaching Road)** identifies situations where the pedalcyclist or other non-motorist was within the trafficway and moving toward the road or attempting to enter the road, but was not on the road.

**85 (Pedalcyclist or Other Non-Motorist Unknown Location)** is used when it was determined the presence or action of a pedalcyclist or other non-motorist was the critical factor which led to this vehicle's collision, but the action of the pedalcyclist or other non-motorist was not known.

## **Object or Animal**

These attributes identify situations where the critical factor leading to the collision for this vehicle involved an object or animal.

87 (Animal in Road) is used when an animal was present (i.e., stationary or moving) in the road.

**88 (Animal Approaching Road)** identifies situations where an animal was within the trafficway and moving toward the road or attempting to enter the road, but not on the road.

**89 (Animal - Unknown Location)** is used when it was determined the presence or action of an animal was the critical factor which led to this vehicle's collision, but the action of the animal was not known.

**90 (Object in Road)** is used when an object was present in the road. An object is defined as being either fixed or non-fixed (only non-fixed objects are captured in this attribute). "Fixed" objects (e.g., trees, poles, fire hydrants, etc.) cannot be in the roadway. (Precrash General Rule #8)

**91 (Object Approaching Road)** identifies situations where an object was within the trafficway and moving toward the road, but not on the road.

**92 (Object Unknown Location)** is selected when it was determined the presence or movement of an object was the critical factor which led to this vehicle's collision, but details surrounding the location of the object were not known.

## Treat trains as "objects not fixed."

For example, a <u>simple single CCE</u> involving a train (car hits train or train hits car in crossing):

- If driver recognized impending danger of approaching train and tried to avoid <u>91 (Object</u> <u>Approaching Road)</u>
- If driver recognized impending danger of train in his path or didn't and hits the train in the crossing <u>90 (Object in Road)</u>
- If there are doubts/unclear circumstances 98 (Other Critical Precrash Event [specify:]).

## Other (Specify:)

These attributes identify situations where the critical factor leading to the collision for this vehicle was not previously listed.

**98 (Other Critical Precrash Event [Specify:])** is used when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the crash are not considered as "other critical precrash events".

## Examples include:

- The <u>first harmful event</u> for this vehicle is a non-collision harmful event.
- the vehicle is a driverless motor vehicle in-transport.
- a MVIT that becomes a contact vehicle by being struck by a "load" from another MVIT
- the vehicle was disabled in a previous crash
- an in-transport vehicle strikes or is struck by the door of a parked motor vehicle that is opened into the travel lane or some portion of the equipment of the parked motor vehicle (excluding the primary outline), e.g., extended mirrors used when hauling a camper or trailer. NOTE: This should not be used for loads of vehicles extending into the travel lane, e.g., attached trailers or oversized cargo. In these cases, the vehicle is in-transport and not parked.
- Unintentional Rolling Backward
- Height Clearance
- Mechanical problem with no control loss (e.g., stopped in the roadway with a stalled engine or broken axle, etc.).
- Vehicle stuck or stranded on the track and is struck by a train
- This Vehicle is backing into a driveway/parking stall

(See "Note: for attributes with "specify:" designation" at the beginning of Remarks section for this element.)

## Unknown:

99 (Unknown) is used when the critical precrash event that resulted in the collision is not known.

## **Consistency Checks:**

Check	IF	THEN
(3B8P)	CRITICAL EVENT – PRECRASH (EVENT) equals 20,	CRASH TYPE for this vehicle should equal 92.
(3D00)	CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT – PRECRASH (EVENT) should not equal 12-14, 54, 66-68, 71-73 or 80-85.
(3D10)	CRASH TYPE equals 50-67, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRITICAL EVENT – PRECRASH (EVENT) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92.
(3D70)	CRITICAL EVENT – PRECRASH (EVENT) equals 01-04,	CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE must not equal 00.
(3E00)	CRITICAL EVENT – PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should not equal 01 or 18.
(42AP)	NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO TRAFFICWAY equals 02, 04, 06-08, and ATTEMPTED AVOIDANCE MANEUVER equals 00 or 01,	CRITICAL EVENT – PRECRASH (EVENT) should equal 01-06, 08-14 or 19.
(671F)	the only harmful event in the SEQUENCE OF EVENTS for this vehicle equals 02 or 04,	CRITICAL EVENT – PRECRASH (EVENT) must equal 98.
(AZ2P)	FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT – PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
(AZ5P)	CRITICAL EVENT – PRECRASH (EVENT) equals 70-73 for a vehicle involved in the first harmful event,	RELATION TO JUNCTION (b) should equal 04 or 08.
(AZBP)	any DRIVER MANEUVERED TO AVOID equals 03,	CRITICAL EVENT – PRECRASH (EVENT) should equal 87-89.
(AZCP)	any DRIVER MANEUVERED TO AVOID equals 05,	CRITICAL EVENT – PRECRASH (EVENT) should equal 80-85.
(AZEP)	any DRIVER MANEUVERED TO AVOID equals 01,	CRITICAL EVENT – PRECRASH (EVENT) should equal 90-92.
(A41A)	FIRST HARMFUL EVENT equals 02, 04, 07, 16, 44 or 54,	CRITICAL EVENT - PRECRASH (EVENT) should equal 98 for the vehicles involved in the FIRST HARMFUL EVENT.
(B13P)	CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00-01,	CRITICAL EVENT-PRECRASH (EVENT) should not equal 12-14, 54, 66-68, 71-73 or 80-85.
(B15P)	CRITICAL EVENT – PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, and the vehicle is involved in the first harmful event,	CRASH TYPE should equal 15.

Check	IF	THEN
(B16P)	CRITICAL EVENT – PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the first harmful event,	CRASH TYPE should equal 12 or 15.
(B17P)	CONDITION (IMPAIRMENT) AT TIME OF CRASH equals 09 for this driver,	CRITICAL EVENT: PRECRASH (EVENT) should not equal 08 for this driver's vehicle.
(BZ10)	CRITICAL EVENT – PRECRASH (EVENT) equals 53,	AREAS OF IMPACT-INITIAL CONTACT POINT should not equal 12 for this vehicle.
(BZ20)	CRITICAL EVENT – PRECRASH (EVENT) equals 51, 52,	AREAS OF IMPACT-INITIAL CONTACT POINT should not equal 06 for this vehicle.
(BZ40)	CRITICAL EVENT - PRECRASH (EVENT) equals 01,	at least one SEQUENCE OF EVENTS must equal 61 for this vehicle.
(BZ50)	CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
(BZ51)	CRITICAL PRECRASH EVENT equals 80 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 5.
(BZ60)	CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.
(BZ70)	CRITICAL EVENT - PRECRASH (EVENT) equals 14,	at least one SEQUENCE OF EVENTS must equal 71 for this vehicle.
(FP7F)	UNIT TYPE equals 1, and CRITICAL EVENT – PRECRASH (EVENT) equals blank, case status is flawed.	
(U682)	UNLIKELY: CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle and CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) does not equal 01 for this vehicle's driver.	

## PC20 - Attempted Avoidance Maneuver

## FORMAT: 2 numeric SAS NAME: Vehicle.P\_Crash3 ELEMENT VALUES:

Codes	Attributes
00	No Driver Present / Unknown if Driver Present
01	No Avoidance Maneuver
05	Releasing Brakes
06	Steering Left
07	Steering Right
08	Braking and Steering Left
09	Braking and Steering Right
10	Accelerating
11	Accelerating and Steering Left
12	Accelerating and Steering Right
15	Braking and Unknown Steering Direction
16	Braking
98	Other Actions (Specify:)
99	Unknown/Not Reported

**Definition:** This element identifies movements/actions taken by the driver, within a critical crash envelope, in response to a <u>Critical Precrash Event</u>.

**Remarks:** Attempted avoidance maneuvers are movements/actions taken by the driver, within a critical crash envelope, in response to a Critical Precrash Event. See <u>Precrash Data Overview</u> for an expanded discussion on precrash definitions. Attempted avoidance maneuvers occur **after** the driver has realization of an impending danger. This element assesses what the driver's action(s) was in response to his/her realization.

Most crashes have only one critical crash envelope and thus only one Critical Precrash Event; however, multiple critical crash envelopes with their respective Critical Precrash Events, can exist.

This element may be used independently: (1) of any maneuvers associated with this driver's Crash Type, and (2) this vehicle's first associated crash event.

Select the attribute which best describes the actions taken by the driver in response to the Critical Precrash Event, within the critical crash envelope that occurred just prior to this vehicle's impact. When there was a known action (e.g., braking), but you cannot determine whether there was more than one action (e.g., braking and steering left), default to the known action (e.g., braking).

## Witness Statements:

When coding Attempted Avoidance Maneuver, witness statements, including those from vehicle passengers or pedestrians, may be used to provide information when police sources are unavailable. The officer's assessment on the **Police Crash Report** will take precedent over items reported in a witness statement document in all cases. The officer's assessment includes any statements from a witness included by the officer as part of the **Police Crash Report** narrative. In absence of indication on the **Police Crash Report**, information that is in direct contradiction in two witness statements will not be included.

**00 (No Driver Present/Unknown if Driver Present)** is pre-coded for in-transport motor vehicles when the element <u>Driver Presence</u> is coded as <u>**0 (No Driver Present/Not Applicable)**</u>.

**01 (No Avoidance Maneuver)** is selected whenever the driver did not attempt any evasive (pre-impact) maneuvers, i.e., the case materials indicate that there was no realization of danger or realization without time/ability to react or there is some indication on a field or within the narrative statements (supported by the diagram if present) that identifies no avoidance maneuver was attempted. Note: This attribute should not be assessed solely by the diagram.

**16 (Braking)** is used when there is indication that the brakes were applied.

**98 (Other Actions, [Specify:])** is used when the Police *Crash* Report indicates the driver took certain avoidance actions, but none of the specified attributes apply. This value also applies when there are reported movements / actions taken by the driver with no information provided about the driver's specific actions. (e.g., "The driver of Vehicle 2 attempted to avoid the collision, but was unsuccessful").

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

99 (Unknown/Not Reported) is used when:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials); or
- a field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials); or
- 3. police indicate unknown.

**Note:** If a state's crash report manual instructs to leave data blocks blank when there is no avoidance maneuver, then a blank in those data blocks are NOT considered **99 (Unknown/Not Reported)**.

Check	IF	THEN
(3BDP)	CRASH TYPE equals 46, 47, and ATTEMPTED	PRE-EVENT MOVEMENT (PRIOR TO
	AVOIDANCE MANEUVER equals 01 or 99,	RECOGNITION OF CRITICAL EVENT) must not
		equal 01.
(3BEP)	CRASH TYPE equals 01 or 06, and ATTEMPTED	PRE-IMPACT STABILITY should not equal 2-5 or
	AVOIDANCE MANEUVER equals 01,	7.
(3BHP)	ATTEMPTED AVOIDANCE MANEUVER does	PRE-IMPACT STABILITY must not equal 7.
	not equal 05-12, 15, 16, 98,	
(3C40)	CRASH TYPE equals 46,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should equal
		06, 15, 16, or ATTEMPTED AVOIDANCE
		MANEUVER should equal 07, 09 or 12.

## **Consistency Checks:**

Check	IF	THEN
(3C80)	CRASH TYPE equals 47,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should equal
		06, 15, 16, or ATTEMPTED AVOIDANCE
		MANEUVER should equal 06, 08 or 11.
(3D00)	CRASH TYPE equals 20-49, and ATTEMPTED	CRITICAL EVENT – PRECRASH (EVENT) should
	AVOIDANCE MANEUVER equals 00, 01,	not equal 12-14, 54, 66-68, 71-73 or 80-85.
(3D10)	CRASH TYPE equals 50-67, and ATTEMPTED	CRITICAL EVENT – PRECRASH (EVENT) should
	AVOIDANCE MANEUVER equals 00, 01,	not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71,
		80-85 or 87-92.
(42AP)	NUMBER OF MOTOR VEHICLES FORMS	CRITICAL EVENT – PRECRASH (EVENT) should
	SUBMITTED equals 001, and RELATION TO	equal 01-06, 08-14 or 19.
	TRAFFICWAY equals 02, 04, 06-08, and	
	ATTEMPTED AVOIDANCE MANEUVER equals	
	00 or 01,	
(AZ2P)	FIRST HARMFUL EVENT does not equal 02-07,	CRASH TYPE must equal 14 for the vehicle
	16, 44, 51, 72, and CRITICAL EVENT-	involved in the first harmful event.
	PRECRASH (EVENT) equals 14, and	
	ATTEMPTED AVOIDANCE MANEUVER equals	
	01,	
(AZ30)	PRE-EVENT MOVEMENT (PRIOR TO	ATTEMPTED AVOIDANCE MANEUVER must
	RECOGNITION OF CRITICAL EVENT) equals 00,	equal 00.
(B10P)	PRE-EVENT MOVEMENT (PRIOR TO	DRIVER MANEUVERED TO AVOID should equal
	<b>RECOGNITION OF CRITICAL EVENT) does not</b>	00.
	equal 17, ATTEMPTED AVOIDANCE	
	MANEUVER equals 01,	
(B13P)	CRASH TYPE equals 20-49, and ATTEMPTED	CRITICAL EVENT-PRECRASH (EVENT) should not
	AVOIDANCE MANEUVER equals 00, 01,	equal 12-14, 54, 66-68, 71-73 or 80-85.
(B15P)	CRITICAL EVENT-PRECRASH (EVENT) equals	CRASH TYPE should equal 15.
	91, and ATTEMPTED AVOIDANCE MANEUVER	
	equals 00, 01 and the vehicle is involved in	
	the first harmful event,	
(B16P)	CRITICAL EVENT-PRECRASH (EVENT) equals	CRASH TYPE should equal 12 or 15.
	90, and ATTEMPTED AVOIDANCE MANEUVER	
	equals 01, and the vehicle is involved in the	
	first harmful event,	
(V533)	CRASH TYPE equals 03, 08, 38, 40, 58 or 60,	ATTEMPTED AVOIDANCE MANEUVER must not
		equal 00 or 01.
(V535)	ATTEMPTED AVOIDANCE MANEUVER equals	PRE-EVENT MOVEMENT (PRIOR TO
	00,	RECOGNITION OF CRITICAL EVENT) must equal
		00.
(V59Q)	ATTEMPTED AVOIDANCE MANEUVER equals	DRIVER MANEUVERED TO AVOID should equal
	99,	00, 98 or 99.
(VH10)	PRE-IMPACT LOCATION equals 0,	ATTEMPTED AVOIDANCE MANEUVER must
· ·		equal 00.
(VH20)	ATTEMPTED AVOIDANCE MANEUVER equals	PRE-IMPACT LOCATION must equal 0.
· ·	00,	· ·

# PC21 - Pre-Impact Stability

## FORMAT: 1 numeric SAS NAME: Vehicle.PCrash4 ELEMENT VALUES:

Codes	Attributes	
0	No Driver Present / Unknown if Driver Present	
1	Tracking	
2	Skidding Longitudinally Rotation Less Than 30 Degrees	
3	Skidding Laterally Clockwise Rotation	
4	Skidding Laterally Counter-Clockwise Rotation	
5	Skidding Laterally, Rotation Direction Unknown	
7	Other Vehicle Loss-of-Control (Specify:)	
9	Precrash Stability Unknown	

Definition: This element assesses the stability of the vehicle after the critical event, but before the impact.

**Remarks:** The stability of the vehicle **prior** to an avoidance action is **not** considered except in the following situation:

A vehicle that is out of control (e.g., yawing clockwise) prior to an avoidance maneuver is coded as <u>7 (Other</u> <u>Vehicle Loss-of Control [Specify:]</u>) only if an avoidance action was taken in response to an impending danger.

Thus, this element focuses upon this vehicle's dynamics after the critical event.

**0 (No Driver Present/Unknown if Driver Present)** is pre-coded for in-transport motor vehicles when the element <u>Driver Presence</u> is coded as **0 (No Driver Present/Not Applicable)**.

**1 (Tracking)** is used when there is no brake lockup and the vehicle continued along its intended path without rotation. Stopped, slowing, turning, or accelerating to avoid a rear-end collision are examples. Only if the case materials include enough detail to determine all of the items from <u>Precrash General Rule #10</u>, code **1 (Tracking)** can be applied.

Even when the officer does not specifically mention "skidding" or "braking", narrative statements such as "the vehicle began to rotate", "the back end slid out", "the vehicle was sliding", etc., are valid for selecting attributes 2-5.

**2 (Skidding Longitudinally Rotation Less Than 30 degrees)** is selected when there is brake lockup or whenever tire marks are apparent without brake lockup (braking or non-braking) and rotation is less than 30 degrees clockwise or counterclockwise. If there is no information to support rotation greater than or equal to 30 degrees, then use this attribute. Also use this attribute when there is indication in the case materials that the vehicle was not tracking (e.g., sliding) but tire marks are not present, (e.g., wet, ice, snow covered, etc.).

**3 (Skidding Laterally Clockwise Rotation)** is selected when the vehicle rotates clockwise, relative to the driver's seating position. The vehicle must rotate 30 degrees or more. This attribute also applies when the driver attempts a steering input (e.g., steers right), but the vehicle rotates clockwise.

**4 (Skidding Laterally Counter-Clockwise Rotation)** is selected when the vehicle rotates counterclockwise, relative to the driver's seating position. The vehicle must rotate 30 degrees or more. This attribute also applies when the driver attempts a steering input (e.g., swerves left), but the vehicle rotates counter-clockwise.

**5 (Skidding Laterally, Rotation Direction Unknown)** is used when the vehicle rotates 30 degrees or more but it cannot be determined from the case materials whether it was clockwise or counter-clockwise rotation.

7 (Other Vehicle Loss-of-Control [Specify:]) is selected when a driver loses control of a vehicle prior to the critical event.

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

**9 (Precrash Stability Unknown)** is selected when the stability of the *vehicle* cannot be determined. If the case materials *do not provide enough information (e.g., in the diagram, narrative, etc.)* to determine precrash stability, code **9 (Precrash Stability Unknown)**.

Check	IF	THEN
(3BEP)	CRASH TYPE equals 01 or 06, and ATTEMPTED	PRE-IMPACT STABILITY should not equal 2-5 or
	AVOIDANCE MANEUVER equals 01,	7.
(3BHP)	ATTEMPTED AVOIDANCE MANEUVER does	PRE-IMPACT STABILITY must not equal 7.
	not equal 05-12, 15, 16, 98,	
(3D50)	PRE-IMPACT STABILITY equals 1,	CRASH TYPE should not equal 02, 07, 34, 36, 54
		or 56.
(AZ50)	PRE-EVENT MOVEMENT (PRIOR TO	PRE-IMPACT STABILITY must equal 0.
	RECOGNITION OF CRITICAL EVENT) equals 00,	
(AZ60)	PRE-IMPACT STABILITY equals 0,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) must equal
		00.
(VB60)	PRE-IMPACT STABILITY equals 0,	PRE-IMPACT LOCATION must equal 0.
(VB70)	PRE-IMPACT STABILITY is not equal to 0,	PRE-IMPACT LOCATION must not equal 0.
(VBA0)	PRE-IMPACT LOCATION equals 1,	PRE-IMPACT STABILITY should equal 1, 2 or 9.

#### **Consistency Checks:**

# **PC22** - Pre-Impact Location

## FORMAT: 1 numeric SAS NAME: Vehicle.PCrash5 ELEMENT VALUES:

Codes	Attributes
0	No Driver Present / Unknown if Driver Present
1	Stayed in Original Travel Lane
2	Stayed on Roadway, but Left Original Travel Lane
3	Stayed on Roadway, Not Known if Left Original Travel Lane
4	Departed Roadway
5	Remained off Roadway
6	Returned to Roadway
7	Entered Roadway
9	<u>Unknown</u>

**Definition:** This element assesses the location of the vehicle after the critical event, and immediately before the <u>First Harmful Event</u> for this vehicle.

**Remarks:** When determining Pre-Impact Location for crashes occurring in intersections, a vehicle's "travel lane" extends through the intersection area even if no lane line markings are present within the intersection. *Additionally*, for a vehicle that is turning, its original travel lane extends through the *junction* to the lane *or driveway access* into which it is turning.

Select the attribute which best describes the location of the vehicle (i.e., perimeter of the vehicle from the case diagram).

**0 (No Driver Present/Unknown if Driver Present)** is used when there is no driver in this vehicle.

**1 (Stayed in Original Travel Lane)** is selected when the vehicle remained within the boundaries of its initial travel lane.

**2 (Stayed on Roadway but Left Original Travel Lane)** is selected when the perimeter of the vehicle departed its initial travel lane; however, the vehicle remained within the boundaries of the roadway (travel lanes).

**3 (Stayed on Roadway, Not Known if Left Original Travel Lane)** is selected when it cannot be ascertained whether the vehicle remained within its initial travel lane. To use this attribute, the vehicle must have remained within the boundaries of the roadway.

4 (Departed Roadway) is selected when the vehicle departed the roadway as a result of a precrash motion. The roadway departure must not be related to the post-impact trajectory of a crash within the roadway. Use this attribute for vehicles crossing a median into oncoming traffic. *This attribute is selected when any part of the vehicle departed the roadway edge. (See the coding of Pre-Impact Location in Example 9 under the Precrash Data Overview Examples.)* 

**5 (Remained off Roadway)** the precrash motion occurred outside the boundaries of the roadway. This includes traveling on the shoulders, within the median, on the roadside, or off the trafficway.

**6 (Returned to Roadway)** is selected when the vehicle was on the roadway, went off the roadway and then returned to the same roadway during precrash motion.

**7 (Entered Roadway)** is selected when the vehicle was not previously on the roadway and then the vehicle enters the roadway during precrash motion.

**9 (Unknown)** the precrash motion of the vehicle cannot be determined.

#### **Consistency Checks:**

Check	IF	THEN				
(AZ70)	PRE-IMPACT LOCATION equals 0,	PRE-EVENT MOVEMENT (PRIOR TO				
		RECOGNITION OF CRITICAL EVENT) must equal 00.				
(AZ80)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00,	PRE-IMPACT LOCATION must equal 0.				
(BZ50)	CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.				
(BZ51)	CRITICAL PRECRASH EVENT equals 80 and PRE-IMPACT LOCATION does not equal 4,	at least one PERSON TYPE should equal 5.				
(BZ60)	CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not equal to 5,	at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.				
(BZ90)	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the first harmful event must equal 63.				
(BZ91)	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the first harmful event must equal 64.				
(PC20)	RELATION TO TRAFFICWAY equals 02-08 or 10,	PRE-IMPACT LOCATION of the vehicle(s) involved in the first harmful event should equal 0, 4, 5 or 9.				
(PC30)	PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 4, 5, and RELATION TO JUNCTION (b) does not equal 04,05,	RELATION TO TRAFFICWAY should not equal 01 or 11.				
(PC40)	PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 1- 3, 6,	RELATION TO TRAFFICWAY should equal 01 or 11.				
(PC50)	PRE-IMPACT LOCATION equals 2,	TOTAL LANES IN ROADWAY should not equal 1.				
(VB60)	PRE-IMPACT STABILITY equals 0,	PRE-IMPACT LOCATION must equal 0.				
(VB70)	PRE-IMPACT STABILITY is not equal to 0,	PRE-IMPACT LOCATION must not equal 0.				
(VBA0)	PRE-IMPACT LOCATION equals 1,	PRE-IMPACT STABILITY should equal 1, 2 or 9.				
(VH10)	PRE-IMPACT LOCATION equals 0,	ATTEMPTED AVOIDANCE MANEUVER must equal 00.				
(VH20)	ATTEMPTED AVOIDANCE MANEUVER equals 00,	PRE-IMPACT LOCATION must equal 0.				

# PC23 - Crash Type

## FORMAT: 2 numeric SAS NAME: Vehicle.Acc\_Type ELEMENT VALUES:

#### As assigned by the selection on the next screens

Codes	Attributes
00	No Impact
01-93	Crash Types
98	Other Crash Type
99	<u>Unknown</u>

**Definition:** This element describes the type of crash this in-transport vehicle was involved in based on the <u>First</u> <u>Harmful Event</u> and the precrash circumstances.

**Remarks:** The Crash Type is a numeric value assigned by selecting the **Crash Category** and the **Crash Configuration** on the next screens/pages. The number can be directly entered or edited here; however, the two-step process of selecting the Crash Category and Crash Configuration is preferred to visualize the crash scenario.

The first harmful event may include a collision between a vehicle and some object, accompanied by property damage or human injury. The object may be another vehicle, a person, an animal, a fixed object, the road surface, or the ground. If the first collision is a rollover, the impact is with the ground or road surface. The collision may also involve plowing into soft ground, if severe vehicle deceleration results in damage or injury. A road departure without damage or injury is **not** defined as a harmful event.

Please see <u>The following crash types require clarification</u> for guidance on a few specific crash types.

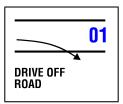
Cate- gory	Config- uration		C	CRASH 7	YPES (i	ncludes	inten	t)		
	A Right Roadside Departure	DRIVE OFF ROAD			AVOID CO WITH VEH.,	DLLISION		04 SPECIFIC OTHEF		05 SPECIFICS UNKNOWN
I Single Dr	<b>B</b> Left Roadside Departure	06 DRVE OFF ROAD			AVOID CO VITH VEH.,			09 SPECIFI OTHE		10 SPECIFICS UNKNOWN
	C Forward Impact	PARKED VEH.	12 A OBJECT	13 PEDEST ANIM		14 ND EPARTURE	6. N 22	<b>15</b> Specifi Othei	Construction of the second	<b>16</b> SPECIFICS UNKNOWN
II Same Trafficway Same Direction	<b>D</b> Rear End	20 21 21 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 21 21 21 21 21 21 21 21 21	24 SLOWEF 25, 26, 27		28 DECEI 29, 30,		9 (E 9 S	EACH - 3 PECIFIC OTHER	cs	(EACH - <b>33</b> ) SPECIFICS UNKNOWN
	E Forward Impact	34 CONTROL/ TRACTION LOSS TH	CONTROL/	AVOID				(EACH SPECI OTH	FICS	(EACH <b>- 43</b> ) SPECIFICS UNKNOWN
	F Angle, Sideswipe	44 45	- 4	6		SF	ACH - PECIFI OTHEI	cs	SF	ACH - 49) PECIFICS IKNOWN
icway ection	<b>G</b> Head-On	50 51	. SPE	(EACH - 52) SPECIFICS OTHER S			(EACH - 53) SPECIFICS UNKNOWN			
	<b>H</b> Forward Impact	54 CONTROL/ TRACTION LOSS	56 CONTRO TRACTION I	57 AV			D COLLIS	61 SION SI	ACH - PECIF OTHE	ICS SPECIFICS
	<b>I</b> Angle, Sideswipe	64 Lateral Move	s c	(EACH - 66) SPECIFICS OTHE		(EACH - 67				
IV e Trafficway cle Turning	J Turn Across Path	68 Initial Opposite Directions	<u>71</u>	70 73			(EA SP	CH - 74 ECIFICS	)	(EACH - 75) SPECIFICS UNKNOWN
	<b>K</b> Turn Into Path	an a	<sup>9</sup> 78	-	rn Into Op	I <u>83</u>	×82 irection	OTH	IFICS	(EACH - 85) SPECIFICS UNKNOWN
V Intersect Paths	<b>L</b> Straight Paths		Struck e Right	<b>88-</b> Strikir from the	g o	9 Struck n the lef		(EACH SPECIF OTHE	ICS	(EACH - 91) SPECIFICS UNKNOWN
VI Misc.	<b>M</b> Backing, Etc.	Backing Veh.	93 ► Other V or Obje						KNOWI	RASH TYPE N CRASH TYPE CT

## Crash Type Table

## **Category I. Single Driver**

## **Configuration A. Right Roadside Departure**

The vehicle departed the right side of the road with the first harmful event occurring off the road.



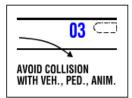
#### 01 Right Roadside Departure: Drive Off Road

Use **Right Roadside Departure: Drive Off Road** when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.)



## 02 Right Roadside Departure: Control/Traction Loss

Use **Right Roadside Departure: Control/Traction** when there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions). If doubt exists, use <u>01 (Right Roadside Departure, Drive</u> <u>Off Road)</u>. If the control/traction loss occurs as a result of an avoidance of something in the road, see remarks for CRASH TYPE <u>03 (Right Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal)</u> and <u>04</u> (<u>Right Roadside Departure: Specifics Other</u>) to establish which attribute applies.



#### 03 Right Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal

Use **Right Roadside Departure:** Avoid Collision with Vehicle, Pedestrian, Animal when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorists are included here.



## 04 Right Roadside Departure: Specifics Other

Use **Right Roadside Departure: Specifics Other** if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian or animal. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle.



## 05 Right Roadside Departure: Specifics Unknown

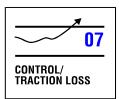
Use **Right Roadside Departure: Specifics Unknown** if the vehicle departed the right side of the road for unknown reasons.

## **Configuration B. Left Roadside Departure**

	1
$\geq$	06
DRIVE OFF Road	

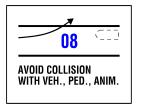
## 06 Left Roadside Departure: Drive Off Road

Use **Left Roadside Departure: Drive Off Road** when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.).



#### 07 Left Roadside Departure: Control/Traction Loss

Use Left Roadside Departure: Control/Traction Loss if there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions.) If doubt exists, use <u>06 (Left Roadside Departure, Drive</u> <u>Off Road)</u>. If the control/traction loss occurs as a result of an avoidance of something in the road, see remarks for CRASH TYPE <u>08 (Left Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal)</u> and <u>09 (Left Roadside Departure: Specifics Other)</u> to establish which attribute applies.



## 08 Left Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal

Use Left Roadside Departure: Avoid Collision with Vehicle, Pedestrian, Animal when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorists are included here.



## 09 Left Roadside Departure: Specifics Other

Use **Left Roadside Departure: Specifics Other** if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian or animal. Also, use "Specifics Other" for crashes involving a driverless in-transport vehicle.

10	
SPECIFICS UNKNOWN	

## 10 Left Roadside Departure: Specifics Unknown

Use Left Roadside Departure: Specifics Unknown if the vehicle departed the left side of the road for unknown reasons.

## **Configuration C. Forward Impact**

The vehicle struck an object on the road or off the end of a trafficway while moving forward. *Vehicle plane of contact is NOT a consideration.* 



## 11 Forward Impact: Parked Vehicle

Use **Forward Impact: Parked Vehicle** if the crash involves an impact with a parked vehicle *anywhere* on the road *while moving forward. Vehicle plane of contact is NOT a consideration*. For cases involving a parked vehicle opening a door into moving traffic or extended mirrors into the travel lane use <u>15 (Forward Impact: Specifics Other)</u>.

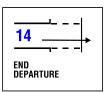
## 12 Forward Impact: Stationary Object

Use Forward Impact: Stationary Object if the crash involves an impact with a stationary object *anywhere* on the road *while moving forward. Vehicle plane of contact is NOT a consideration.* 



## 13 Forward Impact: Pedestrian/Animal

Use **Forward Impact:** Pedestrian/Animal if the first harmful event involves an impact with a pedestrian or animal *anywhere* on the road *while moving forward*. Pedestrians, bicyclists, and other cyclists and non-motorists are included here. Vehicle plane of contact is NOT a consideration. However, if a vehicle is backing up when it contacts a non-motorist select <u>CRASH TYPE 92 (Backing, Etc.: Backing Vehicle)</u>.



## 14 Forward Impact: End Departure

Use **Forward Impact: End Departure** when the vehicle ran off the end of the road and crashed into something *while moving forward. Vehicle plane of contact is NOT a consideration.* 



#### **15 Forward Impact: Specifics Other**

Use **Forward Impact: Specifics Other** for impacted (striking or struck) trains and non-stationary objects *anywhere* on the road *while moving forward*. *Vehicle plane of contact is NOT a consideration*. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle. Use this attribute for cases involving a parked vehicle opening a door into moving traffic, extended mirrors into the travel lane, or an object hanging over the road.



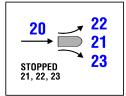
## 16 Forward Impact: Specifics Unknown

Use **Forward Impact: Specifics Unknown** when the *case materials* indicate a single driver was involved in a forward impact collision, but no further classification is possible. *Vehicle plane of contact is NOT a consideration.* 

## **Category II. Same Trafficway, Same Direction**

## **Configuration D. Rear-End**

The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV - Change in Trafficway, Vehicle Turning).



#### 20 Rear-End: Stopped

Use **Rear-End: Stopped** for a vehicle that impacts another vehicle from the rear when the impacted vehicle was stopped in the trafficway.

#### 21 Rear-End: Stopped, Straight

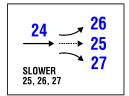
Use **Rear-End:** Stopped, Straight for a rear-impacted vehicle that was stopped in the trafficway, and was intending to proceed straight ahead.

#### 22 Rear-End: Stopped, Left

Use **Rear-End:** Stopped, Left for a rear-impacted vehicle that was stopped in the trafficway, intending to make a left turn.

#### 23 Rear-End: Stopped, Right

Use **Rear-End:** Stopped, Right for a rear-impacted vehicle that was stopped in the trafficway, intending to make a right turn.



#### 24 Rear-End: Slower

Use **Rear-End:** Slower for a vehicle that impacts another vehicle from the rear when the impacted vehicle was going slower than the striking vehicle.

#### 25 Rear-End: Slower, Going Straight

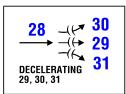
Use **Rear-End:** Slower, Going Straight for a rear-impacted vehicle that was going slower than the other vehicle while proceeding straight ahead.

#### 26 Rear-End: Slower, Going Left

Use **Rear-End:** Slower, Going Left for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn left.

#### 27 Rear-End: Slower, Going Right

Use **Rear-End:** Slower, Going Right for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn right.



#### 28 Rear-End: Decelerating (Slowing)

Use **Rear-End: Decelerating (Slowing**) for a vehicle which impacts another vehicle from the rear when the impacted vehicle was slowing down.

#### 29 Rear-End: Decelerating (Slowing), Going Straight

Use **Rear-End: Decelerating (Slowing), Going Straight** for a rear-impacted vehicle that was slowing down while proceeding straight ahead.

#### 30 Rear-End: Decelerating (Slowing), Going Left

Use **Rear-End: Decelerating (Slowing), Going Left** for a rear-impacted vehicle that was slowing down while intending to turn left.

#### 31 Rear-End: Decelerating (Slowing), Going Right

Use **Rear-End: Decelerating (Slowing), Going Right** for a rear-impacted vehicle that was slowing down while intending to turn right.

## 32 Rear-End: Specifics Other

Use **Rear-End:** Specifics Other for rear-end collisions which cannot be described in "20-31." Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

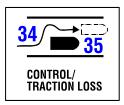


## 33 Rear-End: Specifics Unknown

Use **Rear-End:** Specifics Unknown when the *case materials* indicate a rear-end collision occurred, but no further classification is possible.

## **Configuration E. Forward Impact**

The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.



## 34 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a *collision in which a* vehicle's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

## 35 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.



#### 36 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a *collision in which a* vehicle's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while both are traveling on the same trafficway in the same direction.

#### 37 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while both are traveling on the same trafficway in the same direction.



## 38 Forward Impact: Avoid Collision with Vehicle

Use **Forward Impact:** Avoid Collision with Vehicle for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

#### 39 Forward Impact: Avoid Collision with Vehicle

Use **Forward Impact:** Avoid Collision with Vehicle for a vehicle that was impacted by the frontal area of another vehicle which was maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.



#### 40 Forward Impact: Avoid Collision with Object

Use **Forward Impact:** Avoid Collision with Object for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

#### 41 Forward Impact: Avoid Collision with Object

Use **Forward Impact:** Avoid Collision with Object for a vehicle that was impacted by the frontal area of another vehicle that was maneuvering to avoid a collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

## 42 Forward Impact: Specifics Other

Use **Forward Impact: Specifics Other** (for both vehicles) for a forward impact collision that occurred while both vehicles were traveling on the same trafficway, in the same direction, and the striking vehicle was attempting to avoid a vehicle or an object that cannot be described by "34 - 40."

Also, use this code for crashes involving a driverless in-transport vehicle that would otherwise qualify for this configuration.



## 43 Forward Impact: Specifics Unknown

Use **Forward Impact: Specifics Unknown** when the *case materials* indicate that a forward impact collision occurred while both vehicles were traveling on the same trafficway and in the same direction, but no further classification was possible.

## **Configuration F. Sideswipe/Angle**

The two vehicles are involved in an impact involving the side of one or both vehicles.

The following four attributes, **Sideswipe/Angle, Straight Ahead On Left, Sideswipe/Angle, Straight Ahead On Left/Right, Sideswipe/Angle, Changing Lanes To The Right** and **Sideswipe/Angle, Changing Lanes To The Left** identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes). From these four codes, four combinations are permitted. They are:

- 1. 44 (Sideswipe/Angle, Straight Ahead On Left) and 45 (Sideswipe/Angle, Straight Ahead On Left/Right).
- 2. 46 (Sideswipe/Angle, Changing Lanes To The Right) and 45 (Sideswipe/Angle, Straight Ahead On Left/Right).
- 3. 45 (Sideswipe/Angle, Straight Ahead On Left/Right) and 47 (Sideswipe/Angle, Changing Lanes To The Left).
- 4. 46 (Sideswipe/Angle, Changing Lanes To The Right) and 47 (Sideswipe/Angle, Changing Lanes To The Left).

When used in combination, these codes refer to a sideswipe or angle collision that involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (Sideswipe/Angle, Straight Ahead On Left and Sideswipe/Angle, Straight Ahead On Left/Right) intended to change its lane;
- the vehicle on the left (Sideswipe/Angle, Changing Lanes To The Right) was changing lanes to the right, and the vehicle on the right (Sideswipe/Angle, Straight Ahead On Left/Right) was not intending to change its lane;
- the vehicle on the left (Sideswipe/Angle, Straight Ahead On Left/Right) was not intending to change its lane, and the vehicle on the right (Sideswipe/Angle, Changing Lanes To The Left) was changing lanes to the left, and

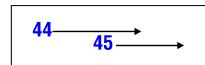
4. the vehicle on the left (Sideswipe/Angle, Changing Lanes To The Right) was changing lanes to the right, and the vehicle on the right (Sideswipe/Angle, Changing Lanes To The Left) was changing lanes to the left.

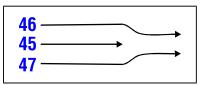
In addition, when:

- 1. the right sides of the two vehicles impact following a 180-degree rotation of the vehicle on the right, or
- 2. the left sides of the two vehicles impact following a 180-degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

- 1. their positions (i.e., left versus right) and
- 2. the intended lane of travel (straight ahead versus changing lanes) of their drivers.





#### 44 Sideswipe/Angle: Straight Ahead on Left

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

#### 45 Sideswipe/Angle: Straight Ahead on Left/Right

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

#### 46 Sideswipe/Angle: Changing Lanes to the Right

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.

#### 47 Sideswipe/Angle: Changing Lanes to the Left

See discussion under <u>Configuration F. Sideswipe/Angle</u>, above for an explanation of when this attribute applies.



#### 48 Sideswipe/Angle: Specifics Other

Use **Sideswipe/Angle: Specifics Other** if one vehicle was behind the other prior to a sideswipe/angle collision occurring while both vehicles were traveling on the same trafficway and in the same direction.

For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code <u>98 (Other crash type)</u>.

Use **Sideswipe/Angle: Specifics Other** for crashes involving a driverless in-transport vehicle.



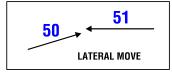
#### 49 Sideswipe/Angle: Specifics Unknown

Use **Sideswipe/Angle: Specifics Unknown** for sideswipe/angle collisions that occur while both vehicles are traveling on the same trafficway and in the same direction, when no further classification is possible.

## **Category III. Same Trafficway, Opposite Direction**

#### **Configuration G. Head-On**

The frontal area of one vehicle impacted the frontal area of another.



#### 50 Head-On: Lateral Move (Left/Right)

Use **Head-On: Lateral Move (Left/Right)** for a vehicle that LEAVES ITS LANE [moves laterally (sideways)] immediately before colliding head-on with another vehicle, when the vehicles are traveling on the same trafficway in opposite directions.

#### 51 Head-On: Lateral Move (Going Straight)

Use **Head-On: Lateral Move (Going Straight)** for a vehicle that collides head-on with another vehicle which has IMMEDIATELY LEFT ITS LANE (moved laterally), when the vehicles are traveling on the same trafficway in opposite directions.



#### 52 Head-On: Specifics Other

Use **Head-On: Specifics Other** for a head-on collision that cannot be described by "50-51", when the vehicles are traveling on the same trafficway in opposite directions. Clarification: Enter "52" for both vehicles involved in a head-on collision when one is traveling the wrong way on a one-way roadway.

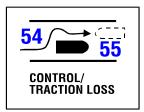
Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

#### 53 Head-On: Specifics Unknown

Use **Head-On: Specifics Unknown** when the *case materials* indicate a head-on collision occurred between two vehicles traveling on the same trafficway in opposite directions, when no further classification is possible.

#### **Configuration H. Forward Impact**

The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

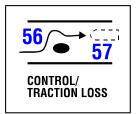


#### 54 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

#### 55 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.



#### 56 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

#### 57 Forward Impact: Control/Traction Loss

Use **Forward Impact: Control/Traction Loss** for a vehicle that is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

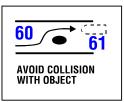


#### 58 Forward Impact: Avoid Collision with Vehicle

Use **Forward Impact: Avoid Collision with Vehicle** for a vehicle whose frontal area impacts another vehicle while maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

#### 59 Forward Impact: Avoid Collision with Vehicle

Use **Forward Impact: Avoid Collision with Vehicle** for a vehicle that was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.



#### 60 Forward Impact: Avoid Collision with Object

Use **Forward Impact: Avoid Collision with Object** for a vehicle that struck the front of another vehicle with the frontal plane while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

#### 61 Forward Impact: Avoid Collision with Object

Use **Forward Impact: Avoid Collision with Object** for a vehicle that was impacted by the frontal area of another vehicle that was maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.



#### 62 Forward Impact: Specifics Other

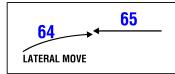
Use **Forward Impact: Specifics Other** for forward impact collisions occurring while the vehicles were traveling on the same trafficway in opposite directions that cannot be described by "<u>54-61</u>". Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle."

#### 63 Forward Impact: Specifics Unknown

Use **Forward Impact: Specifics Unknown** when the *case materials* indicate a forward impact collision occurred while the vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

#### **Configuration I. Sideswipe/Angle**

The two vehicles are involved in an impact involving the side of one or both vehicles.



#### 64 Sideswipe/Angle: Lateral Move (Left/Right)

Use **Sideswipe/Angle: Lateral Move (Left/Right)** identifies the vehicle which **infringed upon the other vehicle** (code "65") in a Category III, Configuration I collision; i.e., enter "64" for the vehicle which left its lane (moved laterally) leading to the collision.

#### 65 Sideswipe/Angle: Lateral Move (Going Straight)

Use **Sideswipe/Angle: Lateral Move (Going Straight)** for the vehicle that was infringed upon by the other vehicle (code "64") in a Category III, Configuration I collision.



#### 66 Sideswipe/Angle: Specifics Other

Use **Sideswipe/Angle: Specifics Other** for sideswipe/angle collisions occurring while both vehicles were traveling on the same trafficway in opposite directions that cannot be described by "64-65". Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle." However, if one vehicle rotates such that the impact is front to front or front to rear, and did not result from a steering maneuver around a noninvolved vehicle or an object (category H) then use code <u>98 (Other Crash Type)</u>.



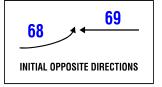
#### 67 Sideswipe/Angle: Specifics Unknown

Use **Sideswipe/Angle: Specifics Unknown** when the *case materials* indicate a sideswipe/angle collision occurred while both vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

## **Category IV. Changing Trafficway, Vehicle Turning**

#### **Configuration J. Turn Across Path**

The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway, a driveway or parking lot and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in <u>Category VI. Miscellaneous</u>.



#### 68 Turn Across Path: Initial Opposite Directions (Left/Right)

Use **Turn Across Path: Initial Opposite Directions (Left/Right)** identifies the vehicle which turned across the path of another vehicle (**Turn Across Path: Initial Opposite Directions [Going Straight]**) in a Category IV, Configuration J collision, in which the vehicles were initially traveling in opposite directions.

#### 69 Turn Across Path: Initial Opposite Directions (Going Straight)

Use **Turn Across Path: Initial Opposite Directions (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn Across Path: Initial Opposite Directions [Left/Right]**) across its Path, and in which the vehicles were initially traveling in opposite directions.

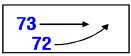


#### 70 Turn Across Path: Initial Same Directions (Turning Right)

Use **Turn Across Path: Initial Same Directions (Turning Right)** for a vehicle that turned right, across the path of another vehicle (**Turn Across Path: Initial Same Directions [Going Straight]**), when both vehicles were initially traveling in the same direction.

#### 71 Turn Across Path: Initial Same Directions (Going Straight)

Turn Across Path: Initial Same Directions (Going Straight) for a vehicle whose path was crossed by a vehicle turning right (Turn Across Path: Initial Same Directions (Turning Right), when both vehicles were initially traveling in the same direction.



72 Turn Across Path: Initial Same Directions (Turning Left)

Use **Turn Across Path: Initial Same Directions (Turning Left)** for a vehicle that turned left, across the path of another vehicle (**Turn Across Path: Initial Same Directions [Going Straight]**), when both vehicles were initially traveling in the same direction.

#### 73 Turn Across Path: Initial Same Directions (Going Straight)

Use **Turn Across Path: Initial Same Directions (Going Straight)** for a vehicle whose path was crossed by a vehicle turning left (**Turn Across Path: Initial Same Directions [Turning Left]**), when both vehicles were initially traveling in the same direction.



#### 74 Turn Across Path: Specifics Other

Use **Turn Across Path: Specifics Other** for collisions in which one vehicle turned across another's path, which cannot be described by "68-72". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.



#### 75 Turn Across Path: Specifics Unknown

Use **Turn Across Path: Specifics Unknown** when the *case materials* indicate one vehicle turned across another's path, causing a collision, but no further classification is possible.

#### **Configuration K. Turn Into Path**

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle. For the purposes of Crash Typing, "trafficway" as used here includes a driveway or parking lot.

Note: the focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

#### 76 Turn into Same Direction (Turning Left)

Use **Turn into Same Direction (Turning Left)** for a vehicle that turned left, into the path of another vehicle (**Turn into Same Direction [Going Straight]**), so that both vehicles were traveling in the same direction at the time of the collision.

#### 77 Turn into Same Direction (Going Straight)

Use **Turn into Same Direction (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn into Same Direction [Turning Left]**) turned left, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

#### 78 Turn into Same Direction (Turning Right)

Use **Turn into Same Direction (Turning Right)** for a vehicle that turned right, into the path of another vehicle (**Turn into Same Direction [Going Straight]**), so that both vehicles were traveling in the same direction at the time of the collision.

#### 79 Turn into Same Direction (Going Straight)

Use **Turn into Same Direction (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn into Same Direction [Turning Right]**) turned right, into its path, so that both vehicles were traveling in the same direction at the time of the collision.



#### 80 Turn into Opposite Directions (Turning Right)

Use **Turn into Opposite Directions (Turning Right)** for a vehicle that turned right, into the path of another vehicle (**Into Opposite Directions [Going Straight]**), so that the vehicles were traveling in opposite directions at the time of the collision.

#### 81 Turn into Opposite Directions (Going Straight)

Use **Turn into Opposite Directions (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn into Opposite Directions [Turning Right]**) turned right, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.



#### 82 Turn into Opposite Directions (Turning Left)

Use **Turn into Opposite Directions (Turning Left)** for a vehicle that turned left, into the path of another vehicle (**Turn into Opposite Directions [Going Straight]**), so that the vehicles were traveling in opposite directions at the time of the collision.

**Turn into Opposite Directions (Turning Left)** is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with "<u>Configuration</u> <u>L - Straight Paths</u>." The driver's intended path is the prime concern.

#### 83 Turn into Opposite Directions (Going Straight)

Use **Turn into Opposite Directions (Going Straight)** for a vehicle involved in a collision in which another vehicle (**Turn into Opposite Directions [Turning Left]**) turned left, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

#### 84 Turn into Path: Specifics Other

Use **Turn into Path: Specifics Other** for collisions in which one vehicle turned into another's path, which cannot be described by "76-83". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.



#### 85 Turn into Path: Specifics Unknown

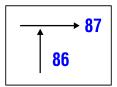
Use **Turn into Path: Specifics Unknown** when the *case materials* indicate one vehicle turned into another's path, causing a collision, but no further classification is possible.

## **Category V. Intersecting Paths**

(Vehicle Damage)

#### **Configuration L. Straight Paths**

The two vehicles were proceeding (or attempting to proceed) straight ahead.

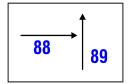


#### 86 Straight Paths: Striking from the Right

Use **Straight Paths: Striking from the Right** for a vehicle that strikes the right side of another vehicle (code "87") from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

#### 87 Straight Paths: Struck on the Right

Use **Straight Paths: Struck on the Right** for a vehicle that is struck on the right side by another vehicle (**Straight Paths: Striking from the Right**) from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.



#### 88 Straight Paths: Striking from the Left

Use **Straight Paths: Striking from the Left** for a vehicle that strikes another vehicle (**Straight Paths: Struck on the Left**) from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

#### 89 Straight Paths: Struck on the Left

Use **Straight Paths: Struck on the Left** for a vehicle that is struck on the left side by another vehicle (**Straight Paths: Striking from the Left**) from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.



#### 90 Straight Paths: Specifics Other

Use **Straight Paths: Specifics Other** for collisions in which two vehicles, both going straight, collide when their paths intersect, which cannot be described by "86-89". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.



#### 91 Straight Paths: Specifics Unknown

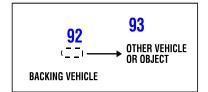
Use **Straight Paths: Specifics Unknown** when the *case materials* indicate two vehicles, both going straight, collided when their paths intersected, but no further classification is possible.

## **Category VI. Miscellaneous**

#### Configuration M. Backing, Etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

Any crash configuration that cannot be described in Category I. through V. is included here.

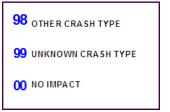


#### 92 Backing, Etc.: Backing Vehicle

Use **Backing, Etc.: Backing Vehicle** for a backing vehicle which was involved with another vehicle object or non-motorist. If both vehicles were backing, then code 92 for both vehicles. If the vehicle was driverless and rolling backwards use <u>98 (Other Crash Type)</u>.

#### 93 Backing, Etc.: Other Vehicle

Use **Backing**, Etc.: Other Vehicle for the in-transport vehicle that was involved with the backing vehicle (code 92). Attribute 93 can only apply when there are two motor vehicles in-transport.



#### 98 Other Crash Type

**Other Crash Type** is used for those events and collisions that do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road; U-turns; crashes initiated by objects set-inmotion by an in-transport motor vehicle; third or subsequent vehicles involved in a crash; or the second involved vehicle, when the first harmful event involves a vehicle-to-object collision or a non-collision.

#### 99 Unknown Crash Type

Use Unknown Crash Type when the crash category or configuration is unknown.

#### 00 No Impact

**No Impact** identifies the non-collision events fire, immersion, gas inhalation, jackknife, injured in vehicle, pavement surface irregularity, other non-collision, thrown or falling object, cargo equipment loss or shift, or fell/jumped from vehicle. Rollovers on the road should be coded **98 Other Crash Type.** 

#### The following crash types require clarification:

<u>No impact</u> identifies non-collision events (i.e., fire, immersion, gas inhalation, jackknife, non-collision injury, other non-collision or non-collision - no details). Rollovers on the road should be coded as <u>98 (Other Crash</u> <u>Type</u>).

<u>Right roadside departure, drive off road</u> and <u>Left roadside departure, drive off road</u> are used when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.).

<u>Right roadside departure, control/traction loss</u> and <u>Left roadside departure, control/traction loss</u> are used if there is some evidence that the vehicle lost traction or in some other manner "got away" from the driver (i.e., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions). If doubt exists, use <u>Right roadside departure, drive off road</u> or <u>Left roadside departure, drive off</u> <u>road</u> respectively.

<u>Right roadside departure; avoid collision with vehicle, pedestrian, animal</u> and <u>Left roadside departure; avoid</u> <u>collision with vehicle, pedestrian, animal</u> are used when the vehicle departed the road as a result of avoiding something in the road. "Phantom" situations are included here.

<u>Right roadside departure, specifics other</u> and <u>Left roadside departure, specifics other</u> are used for any other stationary or nonstationary objects if the avoidance characteristics of codes "03" or "08" are present.

Forward impact, parked vehicle, Forward impact, stationary object, and Forward impact, pedestrian/animal involves an impact with an object that can be located on either side of the road.

<u>Forward impact, stationary object</u> includes a hole in the road, an overhead object (e.g., overpass) or an object projecting over the road edge (e.g., support column of elevated railway).

**Forward impact, pedestrian/animal** is used when a pedestrian, non-motorist, or animal is involved with the first harmful event. Vehicle plane of contact is not a consideration.

**Forward impact, specifics other** is used for impacted (striking or struck) trains and nonstationary objects on the road.

Sideswipe/Angle, straight ahead on left, Sideswipe/Angle, straight ahead on left/right, Sideswipe/Angle, changing lanes to the right, and Sideswipe/Angle, changing lanes to the left identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- 1. "44" and "45",
- 2. "46" and "45",
- 3. "45" and "47", and
- 4. "46" and "47".

When used as a combination these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (codes "44" and "45") intended to change its lane;
- 2. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- 3. the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- 4. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

In addition, when:

- 1. the right sides of the two vehicles impact following a 180-degree rotation of the vehicle on the right, or
- 2. the left sides of the two vehicles impact following a 180-degree rotation of the vehicle on the left; select the appropriate combination ("44-45", "46-45", "45-47" or "46-47") depending upon:
- 3. their positions (i.e., left versus right), and
- 4. the intended lane of travel (straight ahead versus changing lanes) of their drivers.

<u>Sideswipe/Angle, specifics other</u> is used if one vehicle was behind the other prior to their Category II, Configuration F collision. For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code <u>98 (Other crash type)</u>.

<u>Sideswipe/Angle, lateral move (Left/Right)</u> identifies the vehicle that infringed upon the other (code 65) in a Category III, Configuration I collision.

Codes 68 through 85 (<u>Turn Across Path</u> and <u>Turn into Path</u>) are used in Configurations J and K where the vehicle's action is the controlling factor, and the plane of contact is irrelevant.

<u>Turn into Opposite Direction (Turning Left)</u> is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with <u>Configuration L. Straight</u> <u>Paths</u>. The driver's intended path is the prime concern.

Codes 86 through 89 (<u>Straight Paths</u>) must not be confused with crash types in <u>Configuration K. Turn into Path</u>. For these codes the vehicles are proceeding (or attempting to proceed) straight ahead, usually at a junction.

<u>Other Crash Type</u> is used for those events and collisions that do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road, U-turns, crashes initiated by objects set-inmotion by an in-transport motor vehicle, third or subsequent vehicles involved in a crash, or the second involved vehicle when the first harmful event involved a vehicle-to-object collision.

#### **Consistency Checks:**

Check	IF	THEN
(253P)	RELATION TO TRAFFICWAY equals 03,	CRASH TYPE should equal 06-10, 98 or 99 for the in-transport vehicles involved in the first harmful event.
(3B1P)	CRASH TYPE equals 21-23,	TRAVEL SPEED must equal 000 for this vehicle.
(3B2P)	CRASH TYPE equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60,	AREA OF IMPACT-INITIAL CONTACT POINT must equal 12 for this vehicle.
(3B3P)	CRASH TYPE equals 21-23, 25-27, 29-31, 35, 37, 39 or 41,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 6 for this vehicle.
(3B4P)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10,	CRASH TYPE must not equal 44-69, 71-73, 76, 77, 79, 81-83, 86-92.
(3B5P)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 11,	CRASH TYPE must not equal 44-67, 69-71, 73, 77-81, 83, 86-92.
(3B6P)	CRASH TYPE equals 87,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 01-05, 81-83 for this vehicle.
(3B7P)	CRASH TYPE equals 89,	AREAS OF IMPACT-INITIAL CONTACT POINT must equal 07-11, 61-63 for this vehicle.
(3B8P)	CRITICAL EVENT – PRECRASH (EVENT) equals 20,	CRASH TYPE for this vehicle should equal 92.
(3BAP)	UNIT TYPE equals 1, and DRIVER PRESENCE equals 0,	CRASH TYPE must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93 or 98.
(3BCP)	CRASH TYPE equals 34, 36, 38, 40, 54, 56, 58 or 60,	DRIVER MANEUVERED TO AVOID must not equal 00.
(3BDP)	CRASH TYPE equals 46, 47, and ATTEMPTED AVOIDANCE MANEUVER equals 01 or 99,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not equal 01.
(3BEP)	CRASH TYPE equals 01 or 06, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	PRE-IMPACT STABILITY should not equal 2-5 or 7.
(3BFP)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 08 or 09,	CRASH TYPE must not equal 46 or 47.
(3C00)	CRASH TYPE equals 68, 72, 76 or 82,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 98.
(3C10)	CRASH TYPE equals 70, 78 or 80,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 or 98.
(3C20)	this vehicle is involved in the First Harmful Event and its CRASH TYPE equals 29-31,	this vehicle's PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 02.
(3C30)	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 12,	CRASH TYPE should equal 98.
(3C40)	CRASH TYPE equals 46,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER should equal 07, 09 or 12.

Check	IF	THEN
(3C50)	CRASH TYPE equals 92,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should equal
		08, 09, 13, 98, 99.
(3C60)	CRASH TYPE equals 25-27, 29-31,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should not
		equal 05 or 07.
(3C70)	PRE-EVENT MOVEMENT (PRIOR TO	CRASH TYPE should equal 92 or 98.
	RECOGNITION OF CRITICAL EVENT) equals 13,	
(3C80)	CRASH TYPE equals 47,	PRE-EVENT MOVEMENT (PRIOR TO
		RECOGNITION OF CRITICAL EVENT) should equal
		06, 15, 16, or ATTEMPTED AVOIDANCE
		MANEUVER should equal 06, 08 or 11.
(3D00)	CRASH TYPE equals 20-49, and ATTEMPTED	CRITICAL EVENT – PRECRASH (EVENT) should
	AVOIDANCE MANEUVER equals 00, 01,	not equal 12-14, 54, 66-68, 71-73 or 80-85.
(3D10)	CRASH TYPE equals 50-67, and ATTEMPTED	CRITICAL EVENT – PRECRASH (EVENT) should
	AVOIDANCE MANEUVER equals 00, 01,	not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71,
		80-85 or 87-92.
(3D50)	PRE-IMPACT STABILITY equals 1,	CRASH TYPE should not equal 02, 07, 34, 36, 54
		or 56.
(3D60)	CRASH TYPE equals 46 or 47,	PRE-EVENT MOVEMENT (PRIOR TO
. ,		RECOGNITION OF CRITICAL EVENT) should not
		equal 01.
(426P)	MANNER OF COLLISION equals 02,	CRASH TYPE must not equal 64-67 for the
, ,		vehicles involved in the first harmful event.
(427P)	MANNER OF COLLISION equals 06,	CRASH TYPE must not equal 20-43 or 50-53 for
. ,		the vehicles involved in the first harmful event.
(428P)	CRASH TYPE equals 20-91,	NUMBER OF VEHICLE FORMS SUBMITTED must
. ,		be greater than 001.
(429P)	NUMBER OF VEHICLE FORMS SUBMITTED	CRASH TYPE must equal 00, 01-16, 92, 98, 99.
, ,	equals 001,	
(42BP)	there is only one vehicle involved in the First	the number of vehicles where CRASH TYPE is
. ,	Harmful Event where UNIT TYPE equals 1,	coded 00, 1-16, 92, 93 or 99 (excluding from the
		vehicles being counted, those where CRASH
		TYPE equals 98) must not equal 0 or be greater
		than 1.
(77AP)	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) must not equal 02.
(77BP)	CRASH TYPE equals 68-91,	RELATION TO JUNCTION (b) should not equal 01.
(77CP)	CRASH TYPE equals 14,	RELATION TO JUNCTION (b) should equal 01, 03,
		19.
(9BAP)	MANNER OF COLLISION equals 07, and PRE-	CRASH TYPE should equal 44-49, 98, 99 for the
/	EVENT MOVEMENT (PRIOR TO RECOGNITION	vehicles involved in the first harmful event.
	OF CRITICAL EVENT) equals 10 or 11 for	
	neither one of the vehicles involved in the	
	first harmful event,	

Check	IF	THEN
(9BCP)	MANNER OF COLLISION equals 08, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles involved in the first harmful event,	CRASH TYPE should equal 64-67, 98, 99 for the vehicles involved in the first harmful event.
(9BDP)	MANNER OF COLLISION equals 01,	CRASH TYPE should not equal 44-49 for the vehicles involved in the first harmful event.
(A3C0)	FIRST HARMFUL EVENT equals 02-07,16, 44, 51, 72,	CRASH TYPE must equal 00 for the vehicle involved in the first harmful event.
(A3D0)	FIRST HARMFUL EVENT equals 01-07, 16, 44, 51, 72,	CRASH TYPE must not equal 20-91.
(A3E0)	CRASH TYPE equals 13,	FIRST HARMFUL EVENT must equal 08, 09, 11, 15 or 49.
(A480)	CRASH TYPE equals 00,	FIRST HARMFUL EVENT must equal 02-07, 16, 44, 51, 72.
(A4A0)	CRASH TYPE equals 01-16,	FIRST HARMFUL EVENT must not equal 12.
(A4B0)	CRASH TYPE equals 01-10 or 14,	RELATION TO TRAFFICWAY must not equal 01, 02, 07 or 11. If the first harmful event occurs on a different road than the road it departed, see <u>98 (Other Crash Type)</u> .
(A4B2)	CRASH TYPE equals 11,	RELATION TO TRAFFICWAY must not equal 01, 03, 04, 05, 08, 10 or 11.
(A4B3)	CRASH TYPE equals 12 or 13,	RELATION TO TRAFFICWAY must not equal 03, 05, 08 or 10.
(A4B4)	CRASH TYPE equals 12 or 13,	RELATION TO TRAFFICWAY should not equal 4 unless the First Harmful Event occurs in a bicycle lane.
(A4BP)	FIRST HARMFUL EVENT equals 54 or 55,	CRASH TYPE must equal 98 for the vehicles involved in the first harmful event.
(A4DP)	CRASH TYPE equals 20-91,	FIRST HARMFUL EVENT must equal 12.
(A4EP)	CRASH TYPE equals 11,	FIRST HARMFUL EVENT must equal 14.
(A60F)	FIRST HARMFUL EVENT equals 14,	CRASH TYPE must equal 01-11, 14, 15, 92, 98, 99.
(A61F)	FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the first harmful event,	CRASH TYPE should equal 13 for the vehicle involved in the first harmful event.
(A61G)	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.

Check	IF	THEN
(A61H)	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON- MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61J)	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 08, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61K)	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A620)	CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3,	RELATION TO TRAFFICWAY should equal 03.
(A62F)	FIRST HARMFUL EVENT equals 18, 43, 73, <b>91,</b> or 93, and RELATION TO TRAFFICWAY equals 01 or 11,	CRASH TYPE should equal 12 or 15 for the vehicle involved in the first harmful event.
(A63F)	FIRST HARMFUL EVENT equals 01,	CRASH TYPE should equal 01-10, 98, 99 for the vehicle involved in the first harmful event.
(A65F)	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL equals 32 or 89 for an occupant of the parked vehicle involved in the first harmful event,	CRASH TYPE should equal 15, 92 or 98 for the in- transport vehicle involved in the First Harmful Event.
(A66F)	FIRST HARMFUL EVENT equals 14, and CRASH TYPE equals 01-10 or 14,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 32 or 89 for any occupant of the parked vehicle involved in the First Harmful Event.
(AZ2P)	FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT- PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01,	CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
(B13P)	CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00-01,	CRITICAL EVENT-PRECRASH (EVENT) should not equal 12-14, 54, 66-68, 71-73 or 80-85.
(B15P)	CRITICAL EVENT-PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,	CRASH TYPE should equal 15.

Check	IF	THEN
(B16P)	CRITICAL EVENT-PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the first harmful event,	CRASH TYPE should equal 12 or 15.
(BZ80)	MANNER OF COLLISION equals 00,	CRASH TYPE must equal 00, 01-16, 92, 98, 99 for the vehicle in the first harmful event.
(BZ90)	CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the first harmful event must equal 63.
(BZ91)	CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5,	at least one SEQUENCE OF EVENTS prior to the first harmful event must equal 64.
(FA1F)	CRASH TYPE for all in-transport vehicles not involved in the first harmful event must equal 98.	
(FP2F)	UNIT TYPE equals 1, and CRASH TYPE equals blank, case status is flawed.	
(V533)	CRASH TYPE equals 03, 08, 38, 40, 58 or 60,	ATTEMPTED AVOIDANCE MANEUVER must not equal 00 or 01.
(V700)	ROLLOVER equals 2,	CRASH TYPE should equal 01-10, 14, 98 or 99 for this vehicle.
(V79P)	ROLLOVER equals 2, and FIRST HARMFUL EVENT equals 01,	CRASH TYPE must equal 01-10, 14, 15 or 98 for the vehicle involved in the first harmful event.

## Person Level (Motor Vehicle Occupant) Data Elements

P1 – State Number – FARS Only P2 – Consecutive Number – FARS Only P3 – Vehicle Number – Person Level (MV Occupant) P4/NM3 – Person Number P5/NM5 – Age P6/NM6 – Sex P7 – Person Type P8/NM8 – Injury Severity P9 – Seating Position P10 – Restraint System/Helmet Use P11 – Any Indication of Mis-Use of Restraint System/Helmet Use P12 – Air Bag Deployed P13 – Ejection P14 – Ejection Path – FARS Only P15 – Extrication – FARS Only P16/NM15 – Police Reported Alcohol Involvement P17/NM16 – Method of Alcohol Determination by Police – FARS Only P18/NM17 – Alcohol Test P19/NM18 – Police Reported Drug Involvement P20/NM19 – Method of Drug Determination by Police – FARS Only P21/NM20 – Drug Test Alphabetical Drug Index Drugs by Category Type P22/NM21 – Transported to First Medical Facility by P23/NM22 – Died at Scene/En Route – FARS Only P24/NM23 – Death Date – FARS Only P25/NM24 – Death Time – FARS Only

P26 – Related Factors – Person (MV Occupant) Level

## P3 - Vehicle Number – Person Level (Motor Vehicle Occupant)

FORMAT: 3 numeric
SAS NAME: Vehicle.VEH\_NO; Person.VEH\_NO; Parkwork.VEH\_NO
ELEMENT VALUES:

• 001-999

Definition: This element identifies the vehicle number associated with this motor vehicle occupant.

**Remarks:** 001-999 is used for motor vehicle occupants (In-Transport, Parked/Stopped Off Roadway/ Working Motor Vehicles, and Motor Vehicles in Motion Outside the Trafficway).

Persons ejected or who fall from a motor vehicle in-transport are still considered occupants of that vehicle for the duration of the unstabilized situation.

#### **Consistency Check:**

Check	IF	THEN
(CSI5)	VEHICLE NUMBER at the Person Level is	VEHICLE NUMBER at the Person Level must
	greater than 000,	equal a VEHICLE NUMBER at the Vehicle Level.

## P4/NM3 - Person Number

#### FORMAT: 3 numeric SAS NAME: Person.PER\_NO ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number/ Computer Assigned

**Definition:** This element identifies a number for the motor vehicle occupant in consecutive order for the vehicle they occupied.

Remarks: Person Number is assigned using the *Police Crash Report's* person number.

Person Level (Motor Vehicle Occupant) must be numbered consecutively beginning with "001" for each motor vehicle occupant. Drivers do not have to be "001." Numbers must not be skipped.

Person Level (Not a Motor Vehicle Occupant) must be numbered consecutively beginning with "001" for persons not in motor vehicles. Numbers must not be skipped.

#### **Consistency Check:**

Check	Language
(CSI6)	For each VEHICLE NUMBER, PERSON NUMBERS must be consecutive, beginning with 001 and
	with no gaps.

## P5/NM5 - Age

#### FORMAT: 3 numeric SAS NAME: Person.Age ELEMENT VALUES:

Codes	Attributes
000	Less than One Year
001-120	Actual Age*
998	Not Reported
999	Unknown

**Definition:** This element identifies the person's age, in years, with respect to the person's last birthday.

**Remarks:** If the case materials do not show the age of injured or uninjured drivers or passengers and there is no other information about age, e.g., in the narrative/diagram, then use **998 (Not Reported)**.

#### 998 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **998 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**999 (Unknown)** is used if the investigating officer indicates that this occupant's age is unknown.

\* Values greater than "094" are unlikely occurrences, and they will raise an error flag.

\* Values greater than "120" are not permitted.

#### FARS SPECIAL INSTRUCTION:

For drivers, verify age with data on Licensing File. Licensing data takes precedence over crash report data.

Check	IF	THEN
(7P0F)	PERSON TYPE equals 01,	AGE must not be less than 002.
(8P0P)	PERSON TYPE equals 01, and AGE is less than 008,	BODY TYPE must not equal 01-17, 19-22, <b>28-34</b> , 39-42, 45, 48-52, 55, 58-67, 71, 72, 78-83, 89, 92, 93.
(9L0F)	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 12,	SEX must equal 2, and AGE must be greater than 012.
(D060)	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.

#### Consistency Checks:

Check	IF	THEN
(D620)	NON-CDL LICENSE TYPE equals 7,	AGE (for the driver) should equal 014-016.
(D630)	NON-CDL LICENSE TYPE equals 2,	AGE (for the driver) should equal 015-017.
(D640)	AGE equals 014-017, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 2, 7.
(D650)	AGE equals 018-120, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 1.
(P010)	PERSON TYPE equals 01,	AGE should not be less than 012.
(P020)	PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM/HELMET USE equals 04, 10-12,	AGE should be less than 010, or equal to 998 or 999.
(P1A0)	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.
(U120)	UNLIKELY: AGE should not be greater than 094, unless equal to 998, 999.	
(U360)	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.	

#### Consistency Check (FARS Only):

Check	IF	THEN
(5W0P)	RELATED FACTORS-PERSON LEVEL equals 18,	SEX must equal 2, and AGE must be greater than
		012.

## P6/NM6 - Sex

#### FORMAT: 1 numeric SAS NAME: Person.Sex ELEMENT VALUES:

Codes	Attributes
1	Male
2	Female
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the sex of the person involved in the crash.

**Remarks:** If the case materials do not show the sex of injured or uninjured drivers or passengers and there is no other information about sex, e.g., in the narrative/diagram, then use **8 (Not Reported).** 

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown) is used if the investigating officer indicates that this occupant's sex is unknown.

Check	IF	THEN
(9L0F)	PERSON TYPE equals 01, and RELATED	SEX must equal 2, and AGE must be greater than
	FACTORS-DRIVER LEVEL equals 12,	012.
(U340)	UNLIKELY: HIT-AND-RUN equals 0 or 9, and	
	SEX equals 9.	

#### **Consistency Checks (FARS Only):**

Check	IF	THEN
(5W0P)	RELATED FACTORS-PERSON LEVEL equals 18,	SEX must equal 2, and AGE must be greater than
		012.

## P7 - Person Type

#### FORMAT: 2 numeric SAS NAME: Person.PER\_TYP ELEMENT VALUES:

Codes	Attributes
01	Driver of a Motor Vehicle In-Transport
02	Passenger of a Motor Vehicle In-Transport
03	Occupant of a Motor Vehicle Not In-Transport
09	Unknown Occupant Type in a Motor Vehicle In-Transport

Definition: This element describes the role of this person involved in the crash.

**Remarks:** An involved person in a crash must maintain Person Type during the crash. Once the unstabilized situation begins, a driver, passenger, or non-motorist/non-occupant cannot change Person Type until the *situation* stabilizes.

If a person is entering or exiting a vehicle before the unstabilized situation begins, try to determine if the person has successfully changed type before control is lost. (e.g., a pedestrian getting into an automobile that begins to move, a passenger stepping off of a bus as it begins to pull away, etc.).

Attributes 01, 02, and 09 are used for occupants of a motor vehicle in-transport. This includes occupants of motor vehicles that are in motion outside the trafficway.

# 01 (Driver of a Motor Vehicle In-Transport) is used for a person who is in actual physical control of a motor vehicle or in the case of an out of control vehicle the person that was in control just prior to the unstabilized situation.

In FARS and CRSS, persons less than 12 years of age will raise an edit check. Persons less than 8 years of age are forbidden from operating motor vehicles except for V11 Body Types <u>88</u>, <u>90</u>, <u>91</u>. In these circumstances the vehicles are classified as <u>0 (no Driver Present/Not Applicable)</u> in the element <u>D4 Driver Presence</u> and any underage occupant seated in the driver's position on the crash report is coded as Person Type <u>2 (Passenger of</u> <u>a Motor Vehicle In-Transport)</u> with <u>P9 Seating Position</u> value <u>11 (Front Seat, Left Side)</u>. Persons who are less than 2 years of age are forbidden in FARS/CRSS from being a driver of any motor vehicle.

02 (Passenger of a Motor Vehicle In-Transport) is used for any occupant of a motor vehicle in transport other than the driver.

03 (Occupant of a Motor Vehicle Not In-Transport) is used for any occupant of a motor vehicle not in transport including someone sitting in the driver's seat position.

**09 (Unknown Occupant Type in a Motor Vehicle In-Transport)** is used when it cannot be determined if the person was the driver or passenger, but it is known that the person was an occupant of a motor vehicle in-transport.

#### **Consistency Checks:**

Check	IF	THEN	
(1Q0F)	PERSON TYPE equals 01, and BODY TYPE equals <b>80-84</b> , 88, 89,	SEATING POSITION must not equal 12-55, 99.	
(2M0F)	PERSON TYPE equals 01,	SEATING POSITION must not equal 21-55.	
(2Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01, 02, 04, 08, 10, 17, <b>33-34</b> , 39- 41, 45, 48, 90, 91,	SEATING POSITION must not equal 31-50.	
(3H0F)	DRIVER PRESENCE equals 1,	there must be one and only one Person Level form for that vehicle with PERSON TYPE equal to 01, or there must be no Person Level form for that vehicle with PERSON TYPE equal to 01 and at least two Person Level forms for that vehicle with PERSON TYPE equal to 09.	
(3M0F)	PERSON TYPE equals 01,	RESTRAINT SYSTEM/HELMET USE must not equal 04, 10-12.	
(3P0F)	PERSON TYPE equals 03-08, 10, 19	INJURY SEVERITY should not equal 6.	
(3Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01-17, 19, 20, 22, <b>28-34</b> , 39, 41, 42, 50-52, 55, 58, 59, 65, <b>80-97</b> ,	SEATING POSITION must not equal 50.	
(4H0F)	DRIVER PRESENCE equals 0, 9,	there must not be a Person Level form for that vehicle with PERSON TYPE equal to 01.	
(4Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals <b>80-84,</b> 88, 89,	SEATING POSITION must not equal 12, 14-19, 22-50.	
(4Q1F)	PERSON TYPE equals 02, 03, and BODY TYPE equals 21,	SEATING POSITION must not equal 50, 52.	
(570F)	FIRST HARMFUL EVENT equals 05, 06,	at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5 or blank.	
(5M0F)	PERSON TYPE equals 01,	all RELATED FACTORS-PERSON LEVEL (MV Occupant) must equal 00.	
(5M0G)	SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09,	RELATED FACTORS - PERSON (MV OCCUPANT) LEVEL should equal 86 or 92.	
(5M0H)	PERSON TYPE equals 1,		
(5N0F)	PERSON TYPE equals 02,	RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 21, 26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51-53, 57-70, 72-78, 80-83, 91.	
(5Q0F)	PERSON TYPE equals 02, and BODY TYPE equals 50-52, 55, 58, 59,	SEATING POSITION must not equal 11, 21-50, 98, 99.	
(5Z0F)	SEQUENCE OF EVENTS equals 08,	at least one person must have PERSON TYPE equal to 05, 10.	
(6Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 60-67, 71, 72, 78, 79,	SEATING POSITION must not equal 31-49.	

Check	IF	THEN
(7M0F)	PERSON TYPE equals 03,	RELATED FACTORS-PERSON LEVEL (MV
		Occupant) must not equal 21, 26, 28, 29, 33, 37,
		40-42, 44, 45, 47, 51, 52, 57-70, 72-78, 80-83,
		91.
(7M1F)	PERSON TYPE equals 03, and SEATING	DRUG TEST STATUS must not equal 8, any DRUG
	POSITION is not equal to 11 or 13, and	TEST TYPE must not equal 6, and any DRUG
	INJURY SEVERITY does not equal 4,	TEST RESULTS must not equal 095.
(7P0F)	PERSON TYPE equals 01,	AGE must not be less than 002.
(7Q0F)	PERSON TYPE equals 09, and BODY TYPE	SEATING POSITION must not equal 12-50, 52-54.
	equals 50-52, 55, 58, 59,	
(7Z0F)	any SEQUENCE OF EVENTS equals 05, 06,	at least one occupant of this vehicle (PERSON
		TYPES 01, 02, 09) must have INJURY SEVERITY
		equal to 1-5, or blank.
(8P0P)	PERSON TYPE equals 01, and AGE is less than	BODY TYPE must not equal 01-17, 19-22, <b>28-34</b> ,
	008,	39-42, 45, 48-52, 55, 58-67, 71, 72, 78-83, 89,
(0.1.5.5)		92, 93.
(9A5P)	PERSON TYPE equals 03,	UNIT TYPE must equal 2-4.
(9B7P)	UNIT TYPE equals 2-4,	PERSON TYPE of all occupants of this vehicle
		must equal 03.
(CLOP)	PERSON TYPE equals 09,	RELATED FACTORS-PERSON LEVEL (MV
		Occupant) must not equal 21, 26, 28, 29, 33, 37,
		40-42, 44, 45, 47, 51, 52, 56-70, 72-78, 80-83, 91.
(D060)	NON-CDL LICENSE STATUS equals 1-4, 6, or	AGE should not be less than 015.
(0000)	COMMERCIAL MOTOR VEHICLE LICENSE	
	STATUS equals 1-8, and PERSON TYPE equals	
	01,	
(D090)	VIOLATIONS CHARGED equals 11-19, and	POLICE REPORTED ALCOHOL INVOLVEMENT
()	PERSON TYPE equals 01, 03,	should equal 1, or POLICE REPORTED DRUG
		INVOLVEMENT should equal 1.
(D640)	AGE equals 014-017, and PERSON TYPE	NON-CDL LICENSE TYPE should equal 2, 7.
. ,	equals 01,	
(D650)	AGE equals 018-120, and PERSON TYPE	NON-CDL LICENSE TYPE should equal 1.
	equals 01,	
(FPOF)	PERSON TYPE is blank; case status is flawed.	
(P010)	PERSON TYPE equals 01,	AGE should not be less than 012.
(P01F)	PERSON TYPE equals 01-03, 09, and	EJECTION should equal 0 or 7.
	RESTRAINT SYSTEM/HELMET USE equals 01-	
	04, 08, 10-12, and BODY TYPE does not equal	
	80-89,	
(P020)	PERSON TYPE equals 02, 03, 09, and	AGE should be less than 010, or equal to 998 or
	RESTRAINT SYSTEM/HELMET USE equals 04,	999.
	10-12,	
(P030)	PERSON TYPE equals 01,	SEATING POSITION should not equal 12-19.
(P040)	PERSON TYPE equals 02, 09,	SEATING POSITION should not equal 11.

Check	IF	THEN
(P071)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS should not equal 9,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE should not equal 99, and
		ALCOHOL TEST RESULT should not equal 999.
(P072)	PERSON TYPE equals 02, 03, and INJURY	POLICE REPORTED ALCOHOL INVOLVEMENT
	SEVERITY equals 0, and ALCOHOL TEST	should equal 0, 8.
	RESULT equals 996,	
(P073)	PERSON TYPE equals 02, 04-08, 10, and	DRUG TEST STATUS should not equal 9, and any
	INJURY SEVERITY does not equal 4,	DRUG TEST TYPE should not equal 9, and any
		DRUG TEST RESULTS should not equal 999.
(P074)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS must not equal 8,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE must not equal 95, and
		ALCOHOL TEST RESULT must not equal 995.
(P075)	PERSON TYPE equals 02, 04-08, 10 or 19, and	DRUG TEST STATUS must not equal 8, any DRUG
	INJURY SEVERITY does not equal 4,	TEST TYPE must not equal 6, and any DRUG
		TEST RESULTS must not equal 095.
(P130)	BODY TYPE equals 60-67, 71, 72, 78, 79, and	FATAL INJURY AT WORK should equal 1.
	PERSON TYPE equals 01, 03, and INJURY	
	SEVERITY equals 4,	

## P8/NM8 - Injury Severity

#### FORMAT: 1 numeric SAS NAME: Person.Inj\_Sev ELEMENT VALUES:

Codes	Attributes
0	No Apparent Injury (O)
1	Possible Injury (C)
2	Suspected Minor Injury (B)
3	Suspected Serious Injury (A)
4	Fatal Injury (K)
5	Injured, Severity Unknown
6	Died Prior to Crash*
9	Unknown/Not Reported

**Definition:** This element describes the severity of the injury to this person in the crash.

**Remarks:** Enter the *most severe* police reported injury severity for this person (i.e., occupant, pedestrian or non-motorist). Most jurisdictions use the KABCO injury coding scheme.

- K = Fatal Injury (Killed)
- A = *Suspected Serious Injury* (Incapacitating Injury)
- B = Suspected Minor Injury (Non-incapacitating Injury)
- **C** = Possible Injury
- **O** = *No Apparent Injury* (No Injury)

## *If there are discrepancies between the injury severity reported in the police report fields and the narrative, use the following guidance.*

Report Field	Narrative	Guidance
Contains Coded Response	No Conflict with Coded Report Field	USE CODED REPORT FIELD
Not Coded	Silent on injuries	INJURY SEVERITY,
		9 (Unknown/Not Reported)
<b>Contains Coded Response</b>	Silent on injuries	USE CODED REPORT FIELD
Contains Coded Response	Includes clear descriptions of injuries more	USE NARRATIVE
	severe than Coded Response	
Not Coded	Includes some injury information.	USE NARRATIVE
	Unknown if information is complete.	
Contains Coded Response	Includes clear descriptions only of injuries	USE CODED REPORT FIELD
	less severe than Coded Response.	
	Unknown if information is complete.	

**0** (No Apparent Injury) is a situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.

**1 (Possible Injury)** is any injury reported or claimed that is not a fatal injury, suspected serious injury, or suspected minor injury. Examples include: momentary loss of consciousness, *possible concussion*, claim of injury limping, complaint of pain, or nausea. Possible injuries are those which are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.

**2 (Suspected Minor Injury)** is any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle). This does not include momentary unconsciousness. (See <u>1 (Possible Injury</u>).

**3 (Suspected Serious Injury)** is any injury other than fatal which results in one or more of the following:

- Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood
- Broken or distorted extremity (arm or leg)
- Crush injuries
- Suspected skull, chest, or abdominal injury other than bruises or minor lacerations
- Significant burns (second and third degree burns over 10% or more of the body)
- Unconsciousness when taken from the crash scene
- Paralysis

This does not include limping (the injury cannot be seen). (See <u>1 (Possible Injury)</u>).

**4 (Fatal Injury)** A fatal injury is any injury that results in death within 30 days after the motor vehicle crash in which the injury occurred. If the person did not die at the scene but died within 30 days of the motor vehicle crash in which the injury occurred, the injury classification should be changed from the attribute previously assigned to the attribute **4 (Fatal Injury)**.

#### 5 (Injured, Severity Unknown) It is known the person was injured but the severity of the injury is not known.

**6 (Died Prior to Crash)\*** refers to non-motor vehicle fatalities (e.g., a heart attack victim, a homicide victim, a suicide, or person involved in a legal intervention) that are involved in a motor vehicle traffic crash.

This attribute is used only if the police explicitly states the person died prior to the crash and the police report indicates the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, suicide, homicide, and legal intervention.

This attribute also applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack) or disease but is silent about the time of on-set or if on-set is the result of injuries sustained in the crash.

In suicide incidents, use the following criteria:

- 1. If the only fatality is the suicide victim and it can be ascertained that the crash was a suicide, do not code the case.
- If other fatalities occur, code the case as appropriate. The suicide victim's Injury Severity should be coded 6 (Died Prior to Crash) if the death occurred at the time of the crash (or prior) or <u>0 (No</u> <u>Apparent Injury</u>) if the death occurred after the crash.

This attribute does not apply if the police report specifically states that the cause of death is a result of crash-related injury or that on-set occurred after the crash.

\* This value is an unlikely occurrence and will raise an edit flag.

#### 9 (Unknown/Not Reported) is used when:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials); or
- a field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials); or
- 3. police indicate unknown.

Note: If a state's crash report manual instructs to leave data blocks blank when there is no injury, then a blank in those data blocks are NOT considered **9** (Unknown/Not Reported).

#### FARS SPECIAL INSTRUCTION:

Each case must have at least one Person Level form with Injury Severity attribute <u>4 (Fatal injury)</u>. See Definition: <u>ANSI D16.1</u>; 2.3.1 and 2.3.2

Check	IF	THEN
(1ROP)	SEATING POSITION equals 51, and BODY TYPE	INJURY SEVERITY must not equal 0, 9.
	equals 50-52, 55, 58, 59,	
(1R1P)	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
(1U1F)	INJURY SEVERITY equals 4,	DEATH DATE must not equal 888888888.
(1U2F)	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
(2U1F)	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 888888888.
(2U2F)	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
(2U3F)	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		should not equal 0.
(3P0F)	PERSON TYPE equals 03-08, 10, 19,	INJURY SEVERITY should not equal 6.
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person
		must be within 720 hours of the CRASH DATE
		and CRASH TIME.
(570F)	FIRST HARMFUL EVENT equals 05, 06,	at least one PERSON TYPE equal to 01-03, 09
		must have INJURY SEVERITY equal to 1-5, or
		blank.
(7E0P)	INJURY SEVERITY equals 4,	DEATH CERTIFICATE NUMBER must NOT equal
		0000-00-000000.
(7E1P)	INJURY SEVERITY equals 4,	RACE must not equal 00.
(7E2P)	INJURY SEVERITY equals 4,	HISPANIC ORIGIN must not equal 00.
(7E3P)	INJURY SEVERITY does not equal 4,	RACE AND HISPANIC ORIGIN must equal 00.
(7F0P)	DEATH CERTIFICATE NUMBER is not blank or	INJURY SEVERITY must equal 4.
	0000-00-000000,	
(7F1P)	RACE equals 00,	INJURY SEVERITY must not equal 4.
(7F2P)	HISPANIC ORIGIN equals 00,	INJURY SEVERITY must not equal 4.
(7F3P)	RACE is not equal to 00, and HISPANIC	INJURY SEVERITY must equal 4.
	ORIGIN is not equal to 00,	

#### **Consistency Checks:**

Check	IF	THEN
(7M1F)	PERSON TYPE equals 03, and SEATING	DRUG TEST STATUS must not equal 8, any DRUG
	POSITION is not equal to 11 or 13, and	TEST TYPE must not equal 6, and any DRUG TEST
	INJURY SEVERITY does not equal 4,	RESULTS must not equal 095.
(7R0P)	FATAL INJURY AT WORK equals 0, 1, 9,	INJURY SEVERITY must equal 4.
(7W0P)	FATAL INJURY AT WORK equals 8,	INJURY SEVERITY must not equal 4.
(7Z0F)	any SEQUENCE OF EVENTS equals 05, 06,	at least one occupant of this vehicle (PERSON
		TYPES 01, 02, 09) must have INJURY SEVERITY
		equal to 1-5, or blank.
(FP8F)	INJURY SEVERITY is blank; case status is	
	flawed.	
(P071)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS should not equal 9,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE should not equal 99, and
		ALCOHOL TEST RESULT should not equal 999.
(P072)	PERSON TYPE equals 02, 03, and INJURY	POLICE REPORTED ALCOHOL INVOLVEMENT
	SEVERITY equals 0, and ALCOHOL TEST	should equal 0, 8.
	RESULT equals 996,	
(P073)	PERSON TYPE equals 02, 04-08, 10, and	DRUG TEST STATUS should not equal 9, and any
	INJURY SEVERITY does not equal 4,	DRUG TEST TYPE should not equal 9, and any
		DRUG TEST RESULTS should not equal 999.
(P074)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS must not equal 8,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE must not equal 95, and
		ALCOHOL TEST RESULT must not equal 995.
(P075)	PERSON TYPE equals 02, 04-08, 10 or 19, and	DRUG TEST STATUS must not equal 8, any DRUG
	INJURY SEVERITY does not equal 4,	TEST TYPE must not equal 6, and any DRUG TEST
		RESULTS must not equal 095.
(P090)	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.
(P130)	BODY TYPE equals 60-67, 71, 72, 78, 79, and	FATAL INJURY AT WORK should equal 1.
	PERSON TYPE equals 01, 03, and INJURY	
	SEVERITY equals 4,	
(P1A0)	AGE is less than 012, and INJURY SEVERITY	FATAL INJURY AT WORK should equal 0.
	equals 4,	
(P300)	POLICE REPORTED ALCOHOL INVOLVEMENT	ALCOHOL TEST STATUS should not equal <b>0</b> .
	equals 1, and INJURY SEVERITY equals 4,	
(P53P)	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.
(U160)	UNLIKELY: INJURY SEVERITY equals 6.	
(U350)	UNLIKELY: INJURY SEVERITY equals 1-6, and	
	SEATING POSITION equals 98.	

#### Consistency Check (FARS Only):

Check	Language
(4U0F)	Each original submission must have at least one Person Level form with INJURY
	SEVERITY coded 4.

### **P9 - Seating Position**

#### FORMAT: 2 numeric SAS NAME: Person.Seat\_Pos ELEMENT VALUES:

Codes	Attributes
11	Front Seat, Left Side
12	Front Seat, Middle
13	Front Seat, Right Side
18	Front Seat, Other
19	Front Seat, Unknown
21	Second Seat, Left Side
22	Second Seat, Middle
23	Second Seat, Right Side
28	Second Seat, Other
29	Second Seat, Unknown
31	Third Seat, Left Side
32	Third Seat, Middle
33	Third Seat, Right Side
38	Third Seat, Other
39	Third Seat, Unknown
41	Fourth Seat, Left Side
42	Fourth Seat, Middle
43	Fourth Seat, Right Side
48	Fourth Seat, Other
49	Fourth Seat, Unknown
50	Sleeper Section of Cab (Truck)
51	Other Passenger in enclosed passenger or cargo area
52	Other Passenger in unenclosed passenger or cargo area
53	Other Passenger in passenger or cargo area, unknown whether or not enclosed
54	Trailing Unit
55	Riding on Exterior of Vehicle
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element identifies the location of this person in or on the vehicle.

**Remarks:** Seating Position is determined by the location of the occupant in relation to the seat row and the forward longitudinal axis of the vehicle. (See Figure 24)

More than one person may be assigned the same seating position; however, this is allowed only when a person is sitting on someone's lap (e.g., child on mother's lap). See Remarks under <u>Any Indication of Mis-Use of</u> <u>Restraint System/Helmet Use</u> and <u>Driver Level - Related Factors</u> for situations where the case materials identify improper usage of seating or restraints (e.g., two people sharing the same restraint, two people sitting abreast in the same seat, or on one another's lap, etc.).

**P9** 

If the *case materials do* not specifically state that one person was on the lap of another, then see the discussion and tables below to address these situations.

In seating rows designated for only two passengers, use **11 (Front Seat, Left Side)**, **13 (Front Seat, Right Side)**, **21 (Second Seat, Left Side)**, **23 (Second Seat, Right Side)**, **31 (Third Seat, Left Side)**, **33 (Third Seat, Right Side)**, **41 (Fourth Seat, Left Side)**, **43 (Fourth Seat, Right Side)** or **51 (Other Passenger in enclosed passenger or cargo area)**.

**11 (Front Seat, Left Side)** is typically thought of as the driver seating position. This is also used for an assumed driver of a hit-and-run vehicle unless evidence indicates a different position for the person or persons. <u>Note: For motorcycle occupants, see passage below.</u>

**18 (Front Seat, Other), 28 (Second Seat, Other), 38 (Third Seat, Other)** and **48 (Fourth Seat, Other)** are used to record the position of someone sitting on the floor or lying across the seat. In addition, enter these attributes when two or more persons are sitting abreast of one another in the same seating location (as opposed to on or in someone's lap), since only one occupant can be assigned the seat's position. These attributes are also used if the *re is* only *one* seat in the seating *row* (e.g., bucket, pedestal, etc.), and the occupant was in the area but not in the seat. This situation could occur because of vehicle design or seat removal.

19 (Front Seat, Unknown), 29 (Second Seat, Unknown), 39 (Third Seat, Unknown), and 49 (Fourth Seat, Unknown) are used to record the position of someone when the seating row is known; but, the seat position is not known and 18 (Front Seat, Other), 28 (Second Seat, Other), 38 (Third Seat, Other), and 48 (Fourth Seat, Other) do not apply. The tables below provide coding guidance for situations when more than one person is reported as occupying the same seat position. Note that if the report identifies that one person is sitting in another's lap (e.g., child on mother's lap) both occupants may be assigned the same seat position.

#### Multiple People in Front Left (Driver's Seat)

**Situation:** You know who is the driver; however, it is unknown if other person is seated side-by-side with driver or on the driver's lap:

Person	Seating Position	
The Driver	Front, Left (11)	
Other Person	Front, Unknown (19)	

Situation: You don't know who is the driver and it is unknown if side-by-side or on another's lap:

Person	Seating Position
Unknown	Front, Unknown (19)
Unknown	Front, Unknown (19)

#### **Multiple People in Other Seats**

**Situation:** If you know one is in another's lap – Both get same Seating Position.

**Situation:** If you don't know if they are sitting side-by-side or in another's lap – Both get that row, unknown.

Person	Seating Position
Person with restraint	As indicated
Other Person	That row, other

Situation: If you know they are sitting side-by-side and both had restraints:

Person	Seating Position
Oldest Person	As indicated
Other Person	That row, other

Situation: If you know they are sitting side-by-side and neither had restraints:

Person	Seating Position
Oldest Person	As indicated
Other Person	That row, other

**50 (Sleeper Section of Cab [Truck])** is used if the occupant's vehicle is a medium or heavy truck and has a cab sleeper, and this occupant is in the sleeper section at the time of the crash.

**51 (Other Passenger in Enclosed Passenger or Cargo Area)** is used when an occupant is in the fifth or higher numbered seat row, in an enclosed area where no defined seating exists or using a fold-down type seat in its folded-down position. This attribute is also used for bus passengers in undetermined seating (not driver) and for bus occupants that fall from an open door.

Note: Persons in treatment compartment of an ambulance, code as **51 (Other Passenger in Enclosed** Passenger or Cargo Area). (See examples under Related Factors - Person (MV Occupant) Level attribute <u>92</u> (Person in Ambulance Treatment Compartment).)

**52 (Other Passenger in Unenclosed Passenger or Cargo Area)** *is used* when an occupant is in the fifth or higher numbered seat *row*, in an unenclosed area where no defined seating exists or using a fold-down type seat in its folded-down position. Examples include passenger riding in an open pickup bed, top of open double-decker bus, etc.

If seating in the vehicle is longitudinal rather than lateral, use the basic idea of a vehicle interior being divided laterally into roughly equal thirds and visualize lateral rows of seats to determine what seat position is the best descriptor.

For rearward facing seats, use the basic idea described in the previous paragraph to describe the occupant's seat position.

If a seat row has more than three designated seat positions, the occupants should have their positions assigned as usual for the left and right positions, while the two center positions would be entered as Other (i.e., **18 (Front Seat, Other)**, **28 (Second Seat, Other)**, **38 (Third Seat, Other)**, **48 (Fourth Seat, Other)**, or **51 (Other Passenger in Enclosed Passenger or Cargo Area)**) depending upon the seat row.

#### Guidance for Body Type 80-90

For <u>BODY TYPE 80-90</u> (e.g., Motorcycles, ATV/ATC) enter the driver as **11** (Front Seat, Left Side); sidecar passengers as **13** (Front Seat, Right Side); any seated passengers behind the driver as **21** (Second Seat, Left Side), and a passenger on the lap of the driver (in front of) as **11** (Front Seat, Left Side). **55** (Riding on Exterior of Vehicle) is applicable to a motorcycle or ATC occupant riding on the fenders or handlebars.

**54 (Trailing Unit)** is used when an occupant is in or on a trailing unit (i.e., <u>Vehicle Trailing</u>, for this occupant's vehicle must be coded  $\geq$  1, one or more trailing units).

55 (Riding on Exterior of Vehicle) is used when an occupant is riding on a fender, the boot of a convertible, etc.

If the case materials do not show the seating row of a passenger and there is no other information about seating position, (e.g., in the narrative/diagram), then use **98 (Not Reported)**.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown) is used if the investigating officer indicates that this occupant's seating position is unknown.

Check	IF	THEN
(1Q0F)	PERSON TYPE equals 01, and BODY TYPE	SEATING POSITION must not equal 12-55, 99.
· >	equals <b>80-84</b> , 88, 89,	
(1ROP)	SEATING POSITION equals 51, and BODY TYPE equals 50-52, 55, 58, 59,	INJURY SEVERITY must not equal 0, 9.
(2M0F)	PERSON TYPE equals 01,	SEATING POSITION must not equal 21-55.
(2Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01, 02, 04, 08, 10, 17, <b>33-34</b> , 39-	SEATING POSITION must not equal 31-50.
	41, 45, 48, 90, 91,	
(3Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01-17, 19, 20, 22, <b>28-34</b> , 39, 41, 42, 50-52, 55, 58, 59, 65, <b>80-97</b> ,	SEATING POSITION must not equal 50.
(3ROP)	AIR BAG DEPLOYED does not equal <b>20,</b> 98, or 99,	SEATING POSITION should not equal 12, 22, 32, 41-55.
(3SOP)	SEATING POSITION equals 55,	EJECTION must equal 8.
(4Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals <b>80-84,</b> 88, 89,	SEATING POSITION must not equal 12, 14-19, 22-50.
(4Q1F)	PERSON TYPE equals 02, 03, and BODY TYPE equals 21,	SEATING POSITION must not equal 50, 52.
(4ROP)	SEATING POSITION equals 54,	VEHICLE TRAILING must not equal 0 or 9.
(5Q0F)	PERSON TYPE equals 02, and BODY TYPE equals 50-52, 55, 58, 59,	SEATING POSITION must not equal 11, 21-50, 98, 99.
(6Q0F)	PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 60-67, 71, 72, 78, 79,	SEATING POSITION must not equal 31-49.
(7M0F)	PERSON TYPE equals 03,	RELATED FACTORS-PERSON LEVEL (MV
		Occupant) must not equal 21, 26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51, 52, 57-70, 72-78, 80-83, 91
(7M1F)	PERSON TYPE equals 03, and SEATING	DRUG TEST STATUS must not equal 8, any DRUG
	POSITION is not equal to 11 or 13, and	TEST TYPE must not equal 6, and any DRUG TEST
	INJURY SEVERITY does not equal 4,	RESULTS must not equal 095.

#### **Consistency Checks:**

Check	IF	THEN	
(7Q0F)	PERSON TYPE equals 09, and BODY TYPE	SEATING POSITION must not equal 12-50, 52-54.	
	equals 50-52, 55, 58, 59,		
(P030)	PERSON TYPE equals 01,	SEATING POSITION should not equal 12-19.	
(P040)	PERSON TYPE equals 02, 09,	SEATING POSITION should not equal 11.	
(P060)	SEATING POSITION equals 18, 28, 38, 48, 50-	RESTRAINT SYSTEM/HELMET USE should not	
	55,	equal 01, 03.	
(P094)	EJECTION equals 8,	SEATING POSITION must equal 55, or BODY TYPE	
		must equal 80- <b>85, 87-89.</b>	
(P260)	SEATING POSITION equals 18, 19, or 99	AIR BAG DEPLOYED should equal 20, 98, 99.	
(P290)	AIR BAG DEPLOYED equals 01-03, 07-09, and	SEATING POSITION should equal 11, 13, 21, 23,	
	BODY TYPE equals 01-49, and MODEL YEAR	31 or 33.	
	equals 1998 or newer,		
(P320)	SEATING POSITION equals 22, 23, 31-53,	<b>RESTRAINT SYSTEM/HELMET USE must not</b>	
		equal 05, 16, 17, 19, 29.	
(P340)	SEATING POSITION equals 50, 52-55,	RESTRAINT SYSTEM/HELMET USE should equal	
		20.	
(U130)	UNLIKELY: SEATING POSITION equals 41-43,		
	48.		
(U350)	UNLIKELY: INJURY SEVERITY equals 1-6, and		
	SEATING POSITION equals 98.		
(V310)	SEATING POSITION equals 54 and VEHICLE	AIR BAG DEPLOYED must equal <b>20</b> .	
	TRAILING equals 1-4,		
(V320)	BODY TYPE equals 42, 50-79, and SEATING	AIR BAG DEPLOYED should equal <b>20, 98</b> .	
	POSITION does not equal 11, 13, 98,		
(V950)	VEHICLE MODEL YEAR is less than 1994, and	RESTRAINT SYSTEM/HELMET USE should not	
	SEATING POSITION equals 31, 33, 39,	equal 01, 03, and BODY TYPE should equal 12,	
		15, 16, 19-21.	

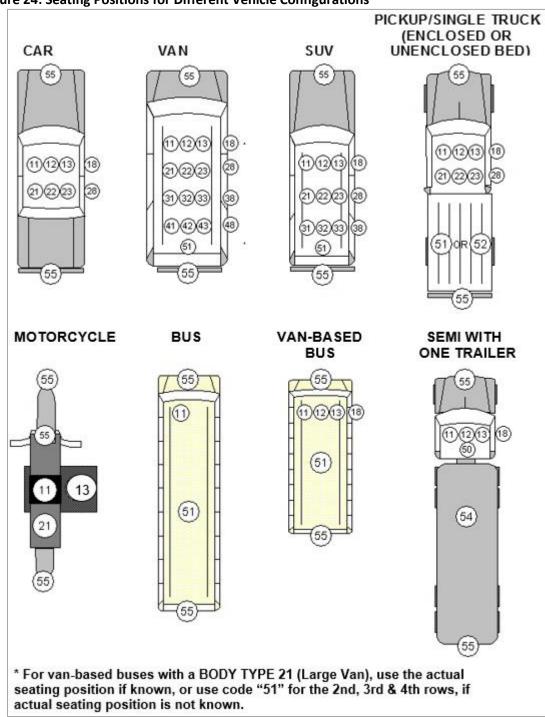


Figure 24: Seating Positions for Different Vehicle Configurations

## P10 - Restraint System/Helmet Use

#### FORMAT: 2 numeric SAS NAME: Person.REST\_USE ELEMENT VALUES:

Codes	Attributes
20	None Used/Not Applicable
03	Shoulder and Lap Belt Used
01	Shoulder Belt Only Used
02	Lap Belt Only Used
08	Restraint Used - Type Unknown
10	Child Restraint System - Forward Facing
11	Child Restraint System - Rear Facing
12	Booster Seat
04	Child Restraint Type Unknown
05	DOT-Compliant Motorcycle Helmet
16	Helmet, Other than DOT-Compliant Motorcycle Helmet
19	Helmet, Unknown if DOT-Compliant
17	No Helmet
29	Unknown if Helmet Worn
97	<u>Other</u>
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element records the restraint equipment in use by the occupant, or the helmet in use by a motorcyclist, at the time of the crash.

**Remarks:** Code this element regardless of whether the vehicle is equipped with manual systems, automatic belts or harnesses, air bags, or any combination of these. Whether the restraint was manual or automatic will be determined via the VIN. Even if the VIN is unknown, use this rule.

The child restraints/booster seats take precedence over the belt use. For a child in a child restraint system not using the 5-point harness or in a booster not using the belt restraint, code the child restraint system or booster and <u>indicate mis-use</u>.

20 (None Used/Not Applicable) is used when the case materials indicate that the occupant did not use a restraint. This includes situations where the occupant of that seat position did not use the available restraint, or that no restraint was available in the seat position of this occupant.

Use this attribute for persons who are riding in the sleeper section of the cab of a truck, for persons who are riding on the exterior of the vehicle, and for persons in unenclosed cargo areas, such as a bed of a pickup truck where a restraint would not be present to use, even if the corresponding Police Crash Report field is blank. In the case of a motorcycle occupant without a helmet, use <u>17 (No Helmet)</u>.

**03 (Shoulder and Lap Belt Used)** is used when the occupant restraint system consists of both the shoulder belt and lap belt portions and is connected to a buckle.

**01 (Shoulder Belt Only Used)** is used for a two-part occupant restraint system and only the shoulder belt portion is connected to a buckle.

#### Example:

You are coding a driver in the vehicle that is indicated by the *case materials* to have an automatic shoulder harness and a manual belt. The police state that the shoulder harness was used at the time of the crash, but the lap belt was not. Code as **01 (Shoulder Belt Only Used)**.

**02 (Lap Belt Only Used)** is used when the occupant is using a lap safety belt either because the motor vehicle is equipped only with a lap belt or because the shoulder belt is not in use.

**08 (Restraint Used - Type Unknown)** is used when the investigating officer indicates that some type of restraint was in use but the type of restraint is not clear.

The attribute scheme on some *Police Crash Reports* may offer a choice, such as "seatbelt/harness" or "lap/shoulder" but does not distinguish between "lap belt only," "shoulder belt only," or "combination lap and shoulder belt." If your *Police Crash Report* has such a coding scheme and the officer checks, for example, "seat belt/harness," then the attribute should be **08 (Restraint Used - Type Unknown)** unless the narrative clarifies which type of restraint was used.

**10 (Child Restraint System - Forward Facing)** is used when a child passenger is seated in a forward-facing child safety seat. This does not imply correct use or placement of the seat.

**11 (Child Restraint System - Rear Facing)** is used when a child passenger is seated in a rearward facing child safety seat. This does not imply correct use or placement of the seat.

**12 (Booster Seat)** is used when a child passenger is seated in a "belt-positioning seat" that positions a child on a vehicle seat to improve the fit of the child in a lap and shoulder seat belt system.

## 04 (Child Restraint Type Unknown) is used when a child passenger is seated in a child safety seat; however, the type used (e.g. forward, rear, or booster, etc.) is not known.

#### **Note About Motorcycle Helmets**

Motorcycle helmets that are compliant with Federal Motor Vehicle Safety Standards typically weigh approximately 3 pounds, have an inner liner at least one-inch thick of firm polystyrene foam, have an inside label that states the manufacturer, model and date of manufacture, and have a DOT sticker on the back of the helmet.

**05 (DOT-Compliant Motorcycle Helmet)** is a motorcycle helmet that is compliant with Federal Motor Vehicle Safety Standards. It must be specifically indicated to be "DOT-Compliant" in the case materials to code this attribute, otherwise use <u>19 (Helmet, Unknown if DOT-Compliant)</u>.

**16 (Helmet, Other than DOT-Compliant Motorcycle Helmet)** is a motorcycle helmet that is not a DOT-compliant helmet. This also would include bicycle helmets, skateboard helmets, and novelty helmets.

**19 (Helmet, Unknown if DOT-Compliant).** A motorcycle helmet was indicated to be worn by the motorcycle rider, but the investigating officer did not identify if it is a DOT-compliant motorcycle helmet.

**17 (No Helmet)** is used when the investigating officer indicates that the occupant of a motorcycle was not wearing a helmet.

**29 (Unknown if Helmet Worn)** is used when the case materials specifically indicate helmet use is unknown for a motorcycle, moped, ATV/ATC, or snowmobile occupant.

**97 (Other)** is used when the case materials indicated that some other type of restraint not listed was being used at the time of the crash.

If the case materials do not show the restraint system or helmet use of injured or uninjured driver or passengers and there is no other information about restraint system or helmet use (e.g., in the narrative/diagram), then use <u>98 (Not Reported)</u>.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **97 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown)** is used when the investigating officer indicates that the restraint system use was unknown for vehicle occupants other than motorcycle, moped, ATV/ATC, or snowmobile occupants.

#### Guidelines When Police and EMS/M.E. Differ:

Occasionally, information from EMS personnel or medical examiners (M.E.) includes statements about protection/restraint use or presence. If these people were in a position to have information when the investigating officer(s) could not (e.g., EMS arrived and removed victims from vehicles before police arrived or the medical examiner reports definite indications of belt usage), then the EMS/M.E. assessment may override the *Police Crash Report* assessment of Restraint System/Helmet Use. **Make sure to note the arrival times of Police and EMS before making a decision.** 

Rules of thumb are as follows, unless you have information to the contrary:

If the M.E./EMS report that a restraint was used but the **Police** report "NOT USED" or "UNKNOWN," then accept the M.E./EMS assessment. On the other hand, if the M.E./EMS report "NOT USED" but the **Police** report that a restraint was used, then try to verify the police assessment that a restraint was used. If the **Police** report that a restraint was used or was not used but the M.E./EMS report "UNKNOWN," then accept the Police assessment.

The vehicle's decoded VIN data provided in *MDE* may be used as a source to assist in coding this element when paired with reported information *on the Police Crash Report*.

#### **Consistency Checks:**

Check	IF	THEN	
(2R0P)	RESTRAINT SYSTEM/HELMET USE equals <b>01-</b> <b>04, 08-12, 20,</b>	BODY TYPE must not equal 80-83, 88, 89, 90, 91.	
(2R1P)	ANY INDICATION OF MIS-USE OF RESTRAINTRESTRAINT SYSTEM/HELMET USE mustSYSTEM /HELMET USE equals 1,01-05, 08-12, 19, 97.		
(2SOP)	RESTRAINT SYSTEM/HELMET USE equals 05, 16, 17, 19, or 29,AIR BAG DEPLOYED should equal <b>20, 98</b> .		
(2S1P)	RESTRAINT SYSTEM/HELMET USE equals <i>16,</i> <i>17, 20,</i>	Ils <b>16,</b> ANY INDICATION OF MIS-USE OF RESTRAINT SYSTEM/HELMET USE must equal 0.	
(3M0F)	PERSON TYPE equals 01,	RESTRAINT SYSTEM/HELMET USE must not equal 04, 10-12.	
(981P)	BODY TYPE equals <b>80-84</b> , 88, 89, 90, 91,	RESTRAINT SYSTEM/HELMET USE must equal 05, 16, 17, 19, 29, 97, 98.	
(982P)	BODY TYPE does not equal <b>80-91</b> ,	RESTRAINT SYSTEM/HELMET USE must not equal 05, 16, 17, 19, 29.	
(D570)	any VIOLATIONS CHARGED equals 83,	not all occupants of this vehicle should have RESTRAINT SYSTEM/HELMET USE equal to 01- 05, 08, 10-12, 16, 19.	
(P01F)	PERSON TYPE equals 01-03, 09, and RESTRAINT SYSTEM/HELMET USE equals 01- 04, 08, 10-12, and BODY TYPE does not equal 80-89,		
(P020)	PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM/HELMET USE equals 04, 10-12,	AGE should be less than 010, or equal to 998 or 999.	
(P050)	EJECTION equals 1,	RESTRAINT SYSTEM/HELMET USE should not equal 01-04, 08, 10-12.	
(P060)	SEATING POSITION equals 18, 28, 38, 48, 50- 55,	RESTRAINT SYSTEM/HELMET USE should not equal 01, 03.	
(P310)	EJECTION equals 1-3, and BODY TYPE does not equal 90, 91, <b>96,</b> 97,	RESTRAINT SYSTEM/HELMET USE must not equal 05, 16, 17, 19, 29.	
(P320)	SEATING POSITION equals 22, 23, 31-53,	RESTRAINT SYSTEM/HELMET USE must not equal 05, 16, 17, 19, 29.	
(P340)	SEATING POSITION equals 50, 52-55,	RESTRAINT SYSTEM/HELMET USE should equal <b>20</b> .	
(U170)	UNLIKELY: RESTRAINT SYSTEM/HELMET USE equals 01.		
(V050)	RESTRAINT SYSTEM/HELMET USE equals 05, 16, 17, 19, 29,	BODY TYPE must equal 80- <b>91</b> .	
(V950)	16, 17, 19, 29,VEHICLE MODEL YEAR is less than 1994, and SEATING POSITION equals 31, 33, 39,RESTRAINT SYSTEM/HELMET USE should requal equal 01, 03, and BODY TYPE should equal 15, 16, 19-21.		

#### Consistency Check (FARS Only):

Check	Language
(U520)	UNLIKELY: RESTRAINT SYSTEM/HELMET USE equals 98 if HIT AND RUN does not equal 1.

## P11 - Any Indication of Mis-Use of Restraint System/Helmet Use

#### FORMAT: 1 numeric SAS NAME: Person.REST\_MIS ELEMENT VALUES:

Codes	Attributes
0	No
1	Yes

Definition: This element indicates any mis-use of the restraint system or helmet used by this person.

#### **Remarks:**

**0** (No) is used when the case materials indicate that the restraints or helmet use were not mis-used. Also, included in **0** (No) is Unknown. If the investigating officer states that the restraints were being used but it couldn't be determined if they were mis-used, use this attribute. *This attribute also applies when this person was not using any type of restraint system or helmet.* 

**1 (Yes)** is used when the case materials indicate that the restraints or helmet use were mis-used at the time of the crash. *Do not use this attribute when the restraints or helmet were not used.* 

#### **Examples:**

- The investigating officer states in the crash report that the driver of Vehicle 1 had the shoulder belt portion of the seatbelt behind his back.
- The investigating officer states the operator of the motorcycle had the helmet on backwards.
- The investigating officer states in the crash report that two persons were secured in one restraint.
- The investigating officer states the child was in a booster seat but not using the vehicles restraint system.
- The investigating officer states the child restraint system was properly secured; however, the child was not using the 5-point harness system.
- The investigating officer states the child restraint system was not properly secured in the vehicle.

An indication of <u>1 (Yes)</u> requires a positive response in the case materials, if not default to <u>0 (No)</u>.

Check	IF THEN	
(2R1P)	ANY INDICATION OF MIS-USE OF RESTRAINT RESTRAINT SYSTEM/HELMET USE must	
	SYSTEM /HELMET USE equals 1,	01-05, 08-12, 19, 97.
(2S1P)	RESTRAINT SYSTEM/HELMET USE equals 16, ANY INDICATION OF MIS-USE OF RESTRAIN	
	17, 20, SYSTEM/HELMET USE must equal 0.	

#### FORMAT: 2 numeric SAS NAME: Person.AIR\_BAG ELEMENT VALUES:

Codes	Attributes	
01	Deployed-Front	
02	Deployed-Side (door, seatback)	
03	Deployed-Curtain (roof)	
07	Deployed-Other (knee, airbelt, etc.)	
08	Deployed-Combination	
09	Deployment-Unknown Location	
20	Not Deployed	
98	Not Reported	
99	Deployment Unknown	

Definition: This element is used to record air bag *deployment* for this person as reported in the case materials.

**Remarks:** Code this element regardless of the motor vehicle's Body Type or the age of the motor vehicle. *When* an air bag deployment is reported somewhere in the vehicle, and the narrative or other case materials do not specify/clarify a seating position or occupant associated with the deployment, then code <u>98 (Not Reported)</u> is applied.

#### Air Bag(s) Deployed for This Seat Position

01 (Deployed-Front), 02 (Deployed-Side), 03 (Deployed-Curtain), 07 (Deployed-Other), 08 (Deployed-Combination), and 09 (Deployment-Unknown Location) are used only if you have indication in the available information that an air bag deployed for this occupant's seat position (not for others in the vehicle.) There may be multiple air bags available for this occupant's seat position.

**<u>O1 (Deployed-Front)</u>**, **<u>O2 (Deployed-Side)</u>**, **<u>O3 (Deployed-Curtain)</u>**, **and** <u>O7 (Deployed-Other)</u> are used if case materials indicate that **an** air bag deployed for this person from only one of these **locations**.

01 (Deployed-Front) refers to an air bag forward of a first row occupant. The driver frontal air bag is located in the hub of the steering wheel. The right front passenger frontal air bag is located in the dashboard (instrument panel).

02 (Deployed-Side (door, seatback)) refers to an air bag mounted in the outboard side of the seat or in the door. Side impact air bags located between <u>seating positions</u> 11 and 13 within the inboard seatbacks or center console designed to mitigate occupant versus occupant injury are also collected in this attribute.

In a <u>convertible body type</u>, a head impact curtain may deploy upward from the top of the door panel near the lower edge of the side glazing. This type of head protection is coded <u>03 (Deployed-Curtain (roof)</u>), even though the air bag is located in the side door panel.

03 (Deployed-Curtain (roof)) refers to a head only, side impact air bag for outboard occupants. These are usually mounted in the roof rail above the side windows, deploying between the glazing and the occupant. These look like a curtain when deployed and are designed to help protect an adult's head in a side-impact crash. This includes a head impact curtain in a <u>convertible car body type</u>, which deploys upward from the door panel near the lower edge of the side glazing. A single curtain may cover one or all rows, or, a vehicle may have one for the first row with another covering multiple rearward rows.

The narrative may refer to these as a rollover curtain, roof bag, roof-rail bag, roof curtain, anti-ejection curtain, or a safety canopy. These rollover curtains are a special type of side curtain air bag with sensors that measure vehicle tilting and protect occupants from injury and ejection during a rollover crash.

07 (Deployed-Other (knee, airbelt, etc.)) is used if the case materials indicate the air bag type that deployed is other than the ones listed above. If multiple "other" types of air bags deploy, use code <u>08 (Deployed-Combination)</u> for this person.

Examples include:

- Inflatable Seat Belt/Airbelts Inflatable seat belts are currently available for outboard passengers beyond the first row. Some airbelts will deploy in either front or side collisions.
- Rear Impact Curtain This curtain helps protect the last row occupants during a rearward impact.
- Knee Air Bags/Knee Bolsters This deploys from the lower instrument panel/dashboard.
- Anti-slide/Anti-submarine/Seat Cushion Air Bag This inflates in the seat cushion to help maintain the occupant's seating position.

**08 (Deployed-Combination)** is used if case materials indicate that *multiple* air bags deployed *for* this seat position.

**09 (Deployment-Unknown Location)** is used if an air bag did deploy for this *seat position*, but the origin of the air bag is not known.

20 (Not Deployed) is used *if* the available information indicates *that no air bags deployed for this seat position*.

This includes when the case materials indicate there was no air bag available for this person. Crash Report terms that might be encountered include the following: Not Applicable, No Air Bag, Not Equipped, Not Present, None, Not Available/Unavailable, Not Installed, Prior Deployment – Not Replaced

#### 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these *situations*:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 3. When an air bag deployment is reported somewhere in the vehicle and the narrative or other case materials do not specify/clarify a seating position or occupant associated with the deployment, then code 98 (Not Reported) is applied.

**99 (Deployment Unknown)** is used if the investigating officer indicates that deployment of an air bag was unknown *for this person or for the vehicle and there is no further information in the case materials.* 

Check	IF	THEN
(2S0P)	RESTRAINT SYSTEM/HELMET USE equals 05,	AIR BAG DEPLOYED should equal <b>20, 98</b> .
	16, 17, 19 or 29,	
(2U0P)	BODY TYPE equals <b>80-97</b> ,	AIR BAG DEPLOYED should equal 20, 98.
(3R0P)	AIR BAG DEPLOYED does not equal 20, 98, or	SEATING POSITION should not equal 12, 22, 32,
	99,	41-55.
(P260)	SEATING POSITION equals 18, 19, or 99	AIR BAG DEPLOYED should equal 20, 98, 99.
(P290)	AIR BAG DEPLOYED equals 01-03, 07-09, and	SEATING POSITION should equal 11, 13, 21, 23,
	BODY TYPE equals 01-49, and MODEL YEAR	31 or 33.
	equals 1998 or newer,	
(V310)	SEATING POSITION equals 54 and VEHICLE	AIR BAG DEPLOYED must equal <b>20</b> .
	TRAILING equals 1-4,	
(V320)	BODY TYPE equals 42, 50-79, and SEATING	AIR BAG DEPLOYED should equal 20, 98.
	POSITION does not equal 11, 13, 98,	

## P13 - Ejection

#### FORMAT: 1 numeric SAS NAME: Person.Ejection ELEMENT VALUES:

Codes	Attributes
0	Not Ejected
1	Totally Ejected
2	Partially Ejected
3	Ejected - Unknown Degree
7	Not Reported
8	Not Applicable
9	Unknown if Ejected

**Definition:** This element describes the ejection status and degree of ejection for this person, excluding motorcycle occupants.

**Remarks:** Ejection refers to situations where forces from *a crash* cause occupants to be totally or partially thrown from the vehicle (including the bed of pickup trucks) during the course of the crash. This includes occupants of jeeps, go carts, snowmobiles, three- or four-wheel ATVs. **Note:** This variable excludes occupants of motorcycles.

Partial ejection refers to those instances where some part but not all of an occupant's body is, at some time during the crash sequence, outside the occupant compartment.

**0** (Not Ejected) is used if the case materials specifically so state for a given occupant.

If the case materials do not show the ejection status of uninjured drivers or passengers, and there is no other information about ejection (e.g., in the narrative/diagram), then use 7 (Not Reported).

**1 (Totally Ejected)** is used when the occupant's body is entirely outside the vehicle but may be in contact with the vehicle. This includes occupants who are not initially in the seating compartment of the vehicle (e.g., pickup beds, boot of a convertible, and persons riding on open tailgates).

**2 (Partially Ejected)** refers to those instances where some part but not all of an occupant's body is, at some time during the crash sequence, outside the occupant compartment. This does not apply to occupants who are not initially in the seating compartment of the vehicle (e.g., pickup beds, boot of a convertible, and persons riding on open tailgates), since any ejection for them is coded as <u>1 (Totally Ejected)</u>.

**3 (Ejected - Unknown Degree)** is used when the case materials indicate that an occupant is ejected but fails to discriminate between total and partial ejection.

#### 7 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **7 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

8 (Not Applicable) is used for persons who are riding on the exterior of a vehicle or for motorcycle occupants. Exterior of the vehicle includes running boards, roof, fenders and bumpers, but not the bed of pickup trucks, open tail gate or boot of a convertible.

9 (Unknown if Ejected) is used when the case materials specifically indicate unknown.

Check	IF	THEN	
(3S0P)	SEATING POSITION equals 55,	EJECTION must equal 8.	
(4S0P)	BODY TYPE equals <b>80-84,</b> 88, 89,	EJECTION must equal 8.	
(6S0P)	EJECTION equals 1,	EXTRICATION must not equal 1, 9.	
(BAOP)	EJECTION equals 0, 7, 8 or 9,	EJECTION PATH must equal 0.	
(BBOP)	EJECTION equals 1-3,	EJECTION PATH must equal 1-9.	
(BFOF)	PERSON TYPE equals 04-08, 10, 19,	EJECTION must equal 8.	
(P01F)	PERSON TYPE equals 01-03, 09, and RESTRAINT SYSTEM/HELMET USE equals 01- 04, 08, 10-12, and BODY TYPE does not equal	EJECTION should equal 0 or 7.	
	80-89 <i>,</i>		
(P050)	EJECTION equals 1,	RESTRAINT SYSTEM/HELMET USE should not equal 01-04, 08, 10-12.	
(P094)	EJECTION equals 8,	SEATING POSITION must equal 55, or BODY TYPE must equal 80- <b>85, 87-89.</b>	
(P310)	EJECTION equals 1-3, and BODY TYPE does	RESTRAINT SYSTEM/HELMET USE must not	
	not equal 90, 91, <b>96,</b> 97,	equal 05, 16, 17, 19, 29.	

## P14 - Ejection Path - FARS Only

#### FORMAT: 1 numeric SAS Name: Person.EJ\_PATH ELEMENT VALUES:

Codes	Attributes	
0	Ejection Path Not Applicable	
1	Through Side Door Opening	
2	Through Side Window	
3	Through Windshield	
4	Through Back Window	
5	Through Back Door/Tailgate Opening	
6	Through Roof Opening (sunroof, convertible top down)	
7	Through Roof (convertible top up)	
8	Other Path (e.g., back of pickup truck)	
9	Ejection Path Unknown	

**Definition:** This element identifies the path by which this person was <u>ejected</u> from the vehicle.

#### **Remarks:**

**0 (Ejection Path Not Applicable)** is used when the element <u>EJECTION</u> is coded <u>0 (Not Ejected)</u>, <u>7 (Not Reported)</u>, <u>8 (Not Applicable)</u>, or <u>9 (Unknown if Ejected)</u>. This attribute is an auto-fill in MDE.

#### 9 (Ejection Path Unknown) is used for ejected occupants when:

- 1. No field or coding block exists on the state's crash report to provide information to code ejection path AND no other information is available to code the element (e.g., narrative, diagram, case materials); or
- 2. a field or coding block exists on the state's crash report that would provide the information needed to code ejection path, but it has been left blank, AND no other information is available to code the element (e.g., narrative, diagram, case materials); or
- 3. the police indicate ejection path is unknown.

Path	Guideline
Through side door opening	all side doors
Through side window	all side windows, bus side windows
Through windshield	front windshield only
Through back window	standard rear window, back window of bronco, van
Through back door/tailgate	station wagon tailgate, back door of truck, back door of bronco, van
opening	
Through roof opening	(sunroof, convertible top down) t-top, targa top
Through roof	(convertible top up)
Other path	(back of pickup truck) torn-off roof, car cut in half
Ejection Path Unknown	driver's side, unspecified; passenger's side unspecified

#### Use the following table as a guideline:

Check	IF	THEN	
(BAOP)	EJECTION equals 0, 7, 8 or 9,	EJECTION PATH must equal 0.	
(BBOP)	EJECTION equals 1-3,	EJECTION PATH must equal 1-9.	

## P15 - Extrication - FARS Only

#### FORMAT: 1 numeric SAS NAME: Person.EXTRICAT ELEMENT VALUES:

Codes	Attributes
0	Not Extricated or Not Applicable
1	Extricated
9	Unknown

**Definition:** This element identifies if equipment or other force was used to remove this person from the vehicle.

**Remarks:** Extrication refers to the use of equipment or other force to remove persons from the vehicles; i.e., more than just lifting or carrying person out of wreckage.

**0 (Not Extricated or Not Applicable)** is used if there is no reason to believe an occupant was extricated. Do not assume **0 (Not Extricated or Not Applicable)** when the officer references "pinned," "wedged," or "trapped." See <u>9 (Unknown)</u>. This field is not applicable to motorcycle and ATV/ATC riders.

**1 (Extricated)** is used when the police officer uses the word "extricated" to indicate occupant removal. Use of the term "extricated" is sufficient information to use **1 (Extricated)** even if no mention of equipment is made. The only exception to this is if the analyst knows the officer used the term "extrication" not as intended for the purpose of this element. If the officer uses the term "pinned" or "wedged" or something similar, then the officer must indicate that equipment was used to remove the occupant in order to code attribute **1 (Extricated)**.

**9 (Unknown)** is to be used when the officer states that the occupant is "pinned" or "wedged," etc., and suggests that the occupant may have been removed with force, but does not make it clear whether equipment was used or not.

Check	IF	THEN	
(5S0P)	BODY TYPE equals <b>80-84</b> , 88, 89, or 90,	EXTRICATION must equal 0.	
(6S0P)	EJECTION equals 1,	EXTRICATION must not equal 1, 9.	

## P16/NM15 - Police Reported Alcohol Involvement

#### FORMAT: 1 numeric SAS NAME: Person.DRINKING ELEMENT VALUES:

Codes	Attributes
0	No (Alcohol Not Involved)
1	Yes (Alcohol Involved)
8	Not Reported
9	Unknown (Police Reported)

**Definition:** This data element reflects only **the judgment of law enforcement** as to whether alcohol was involved or not for this person.

**Remarks:** The phrase "alcohol involved" means that alcohol is present in the person or presumed to be present **by the police**. Consequently, this data element may not agree with the alcohol test results for this person. Involvement is not an indication that alcohol was in any way a cause of the crash.

If the case materials indicate that open or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement unless the police indicate that this was the basis for a determination of involvement. If the case materials indicate that a preliminary breath test (PBT) was given and the officer's judgment contradicts the preliminary test, the officer's judgment will be the determining factor.

#### **0 (No [Alcohol Not Involved])** applies if **the judgment of law enforcement** is that alcohol is not present.

In some circumstances, it is possible for the police to give sufficient information in the report fields (such as contributing circumstances, driver/pedestrian condition, alcohol presence or use, alcohol test, etc.) or narrative to indicate that they believe alcohol is not involved without specifically mentioning "no" alcohol. In such cases, use **0** (No [Alcohol Not Involved]). However, if there is any question that the officer's position on alcohol involvement is "no alcohol" because of lack of information, then use **8** (Not Reported).

**1 (Yes [Alcohol Involved])** applies only if **the judgment of the law enforcement** is that alcohol was present. For example, the police indicate alcohol involvement via:

- a specific data element on the police report form such as Driver Condition,
- the police charge the driver with an alcohol-related offense,
- the police mention in the narrative section of the report that the person had been drinking,
- the police report has a positive BAC test result (BAC>.00).

Some *Police Crash Reports* have a block labeled "Alcohol/Drugs." If use is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is present. If the police report indicates that a driver was charged with DWI/DUI (driving while intoxicated, driving while impaired or driving under the influence), and no clarification is offered to indicate if the DWI/DUI was alcohol related or other drug related (e.g., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

**8 (Not Reported)** applies when law enforcement makes no mention of alcohol involvement in either narrative or data fields. For example, there is a specific location on the police report for assessment of alcohol but the investigating officer fails to make either a positive or negative assessment by leaving the field blank. Also use **8** 

(Not Reported) if no block exists on the *Police Crash Report* for reporting alcohol presence and no other information is available.

There are instances when the police do not indicate in the **Police Crash Report** whether alcohol was involved or not, but they do mention that a test was given or ordered. For example, the police may only say that an evidential test was ordered for a driver without indicating that they suspected alcohol or providing a result. The use of passive alcohol sensors (PAS) may also be mentioned as used by the police, without mention of the result. Use **8 (Not Reported)** for these instances.

**9 (Unknown [Police Reported])** applies when law enforcement indicates in either narrative or data fields that alcohol involvement is "unknown" for this person. In general, crash reports have blocks to indicate either positive or negative alcohol involvement. However, if a crash report has a provision for the investigating officer to respond "unknown involvement," then enter this attribute.

#### FARS SPECIAL INSTRUCTION:

Important Guidelines:

- Do not change the coding of this element because a positive alcohol test is obtained from the coroner, medical examiner or state toxicology lab. A positive or negative BAC test submitted from the toxicology lab or coroner directly to the FARS analyst is not evidence of the officer's judgment.
- The Police *Crash* Report, including any supplemental reports or direct contact with the police are the only valid sources.

When Police-Reported Alcohol Involvement is <u>8 (Not Reported</u>) or <u>9 (Unknown [Police Reported]</u>), <u>Method of</u> <u>Alcohol by Police Determination</u> attributes "1-8" are allowed. However, this should only happen when the method is stated by the police, but the involvement is not mentioned at all or stated as unknown.

Check	IF	THEN
(4X4F)	any CONDITION (IMPAIRMENT) AT TIME OF	POLICE REPORTED ALCOHOL INVOLVEMENT
	CRASH (D23) equals 09,	(P16), or POLICE REPORTED DRUG
		INVOLVEMENT (P19) should equal 1 for this
		person.
(D090)	VIOLATIONS CHARGED equals 11-19, and	POLICE REPORTED ALCOHOL INVOLVEMENT
	PERSON TYPE equals 01, 03,	should equal 1, or POLICE REPORTED DRUG
		INVOLVEMENT should equal 1.
(P072)	PERSON TYPE equals 02, 03, and INJURY	POLICE REPORTED ALCOHOL INVOLVEMENT
	SEVERITY equals 0, and ALCOHOL TEST	should equal 0, 8.
	RESULT equals 996,	
(P110)	METHOD OF ALCOHOL DETERMINATION BY	POLICE REPORTED ALCOHOL INVOLVEMENT
	POLICE equals 1-5, 8,	should equal 0, 1.
(P200)	POLICE REPORTED ALCOHOL INVOLVEMENT	METHOD OF ALCOHOL DETERMINATION BY
	equals 8, 9,	POLICE should equal 9.
(P300)	POLICE REPORTED ALCOHOL INVOLVEMENT	ALCOHOL TEST STATUS should not equal <b>0</b> .
	equals 1, and INJURY SEVERITY equals 4,	

## P17/NM16 - Method of Alcohol Determination by Police - FARS Only

FORMAT: 1 numeric SAS NAME: Person.ALC\_DET ELEMENT VALUES:

Codes	Attributes
1	Evidential Test (breath, blood, urine)
2	Preliminary Breath Test (PBT)
3	Behavioral
4	Passive Alcohol Sensor (PAS)
5	<u>Observed</u>
8	Other (e.g., Saliva test)
9	Not Reported

**Definition:** This element describes **the method by which the police made the determination** as to whether alcohol was involved or not for this person.

**Remarks:** This variable is coded for each person involved in the crash. The Police *Crash* Report and supplements are the source of information.

The purpose of this variable is to record the method by which the police made the determination *in <u>Police-</u>* <u>Reported Alcohol Involvement</u> as to whether alcohol was involved or not.

It is used primarily when the <u>Police-Reported Alcohol Involvement</u> variable is coded as <u>0 (No [Alcohol Not Involved]</u>) or <u>1 (Yes [Alcohol Involved]</u>).

Whenever <u>Police-Reported Alcohol Involvement</u> is <u>O (No [Alcohol Not Involved]</u>), try to find out how the police knew this. When Police-Reported Alcohol Involvement is <u>1 (Yes [Alcohol Involved]</u>), try to determine how the police knew this.

If <u>Police-Reported Alcohol Involvement</u> is <u>8 (Not Reported</u>) or <u>9 (Unknown [Police Reported]</u>), then Method of Alcohol Determination **by Police** is <u>9 (Not Reported</u>). If more than one method is used by the police to determine alcohol involvement, choose the method the police refer to when they record their assessment. If more than one method is used and they do not state which method was the basis for their alcohol determination, code the highest-ranking method used from the hierarchy (the highest ranking is "1"; the lowest is "5").

1 (Evidential Test [breath, blood, urine]) is used if <u>Police-Reported Alcohol Involvement</u> is <u>O (No [Alcohol Not Involved]</u>) or <u>1 (Yes [Alcohol Involved]</u>) and the police indicate that they ordered an evidential test and their determination of alcohol involvement was based on the results of that test.

An evidential test can be a breath test on a state-approved breath test device, a blood test, or a urine test. No other tests are considered evidential.

#### Ordering a test is not the same as knowing the results of that test.

In order to code that the police determined their opinion based on an evidential test, there must be information that the officer had received the test results. If they haven't received test results (e.g., results are pending), then their method of determination of alcohol or drug presence was made using some method other than an evidential test.

2 (Preliminary Breath Test [PBT]) is used if <u>Police-Reported Alcohol Involvement</u> is <u>O (No [Alcohol Not</u> <u>Involved]</u>) or <u>1 (Yes [Alcohol Involved]</u>) and the police indicate that alcohol involvement was based upon the results of a preliminary breath test, or PBT. Preliminary breath testing devices are not yet considered evidential tests, but merely as tools for the police to help them determine whether alcohol is present or not. Many PBTs only indicate whether alcohol is present in the breath by pass (green) or fail (red) lights. Other PBTs indicate the approximate BAC in numbers. Some PBTs are of evidential quality in some States. But if the device was used only as a preliminary test and not the evidential test, then this value should be coded.

The key to coding this is the definite indication **by the police** that a PBT **was used** and was the basis (or the clinching evidence) that a driver had been drinking or not.

**3 (Behavioral)** is used if <u>Police-Reported Alcohol Involvement</u> is <u>**0 (No [Alcohol Not Involved])**</u> or <u>**1 (Yes [Alcohol Involved])**</u> and the police indicate that the basis for that alcohol assessment was the behavior by the driver during a field sobriety test.

Examples of field sobriety tests include the gaze nystagmus test, walking in a straight line, one leg stand, etc. **Do not confuse 3 (Behavioral) with <u>5 (Observed)</u>.** 

**4 (Passive Alcohol Sensor [PAS])** is used if <u>Police-Reported Alcohol Involvement</u> is <u>**0 (No [Alcohol Not Involved])**</u> or <u>**1 (Yes [Alcohol Involved])**</u> and the police indicate that alcohol involvement was based upon the results of a passive alcohol sensor, or "sniffer."

The PAS devices available and in use by police are devices that look like flashlights and when held within 6 inches of the driver's mouth will detect alcohol in the breath while the driver is talking. The PAS is not considered an evidential test nor a PBT. It is not really a test, but a detector or an extension of the police officer's senses. The PAS devices are usually PASS/FAIL indicators with a red light indicating alcohol on the breath.

The key to coding this attribute is the indication by the police that a PAS was used and was the basis for coding **0 (No [Alcohol Not Involved])** or **1 (Yes [Alcohol Involved])** for <u>Police-Reported Alcohol Involvement</u>.

**5 (Observed)** is used if <u>Police-Reported Alcohol Involvement</u> is <u>O (No [Alcohol Not Involved])</u> or <u>1 (Yes [Alcohol Involved]</u>) and the police indicate that the basis for their alcohol assessment was some observation of the driver. Do Not Confuse **5 (Observed)** with <u>3 (Behavioral)</u>.

Examples of observations would be:

- smelling alcohol on the driver's breath
- staggering, slurring of speech
- the driver admitting he had been drinking
- other observations described by the police that would **not** be considered field sobriety tests

Be careful not to simply assume that this is the appropriate code when some other method may have been used (e.g., breath test, PBT, PAS).

8 (Other [e.g., Saliva test]) is used if <u>Police-Reported Alcohol Involvement</u> is <u>O (No [Alcohol Not Involved]</u>) or <u>1</u> (<u>Yes [Alcohol Involved]</u>) and the police indicate that the basis for alcohol determination was something other than the codes "1, 2, 3, 4, and 5" described above.

Examples of Other methods include:

- 1. results of a saliva test
- 2. results of other tissue tests

The key to coding this attribute is the description by the police of some other method of alcohol determination that does not fall into codes "1-5."

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code 8 (Other [e.g., Saliva test]) if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **9 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

**9 (Not Reported)** is coded if <u>Police-Reported Alcohol Involvement</u> is <u>8 (Not Reported)</u> or <u>9 (Unknown [Police Reported]</u>). It is also coded if <u>Police-Reported Alcohol Involvement</u> is <u>0 (No [Alcohol Not Involved]</u>) or <u>1 (Yes [Alcohol Involved]</u>) and there is no indication in the police report or any documents as to how the police made the alcohol assessment.

#### Witness Statements:

Witness Statements may or may not be used by the police to make a determination of alcohol involvement. If the police did use witness statements alone to make a determination of alcohol involvement, use <u>8 (Other)</u>.

If the police mention, but did not use witness statements and there is no other indication of how a determination was made, use <u>9 (Not Reported)</u>.

There are instances when the police do not indicate in the *Police Crash Report* whether alcohol was involved or not, but they do mention that a test was given or ordered.

**FOR EXAMPLE:** The police may only say that an evidential test was ordered for a driver without indicating that they suspected alcohol or what the result was. The use of passive alcohol sensors (PAS) may also be mentioned as used by the police, without mention of the result.

**Codes 1-8** may be used for Method of Alcohol Determination by Police when <u>Police-Reported Alcohol</u> <u>Involvement</u> is coded as <u>8 (Not Reported)</u> or <u>9 (Unknown [Police Reported]</u>), if this fits the case.

This should only happen when the method is stated by the police, but the involvement is not mentioned at all or stated as unknown.

Check	IF	THEN		
(P110)	METHOD OF ALCOHOL DETERMINATION BY	POLICE REPORTED ALCOHOL INVOLVEMENT		
	POLICE equals 1-5, 8,	should equal 0, 1.		
(P200)	POLICE REPORTED ALCOHOL INVOLVEMENT	METHOD OF ALCOHOL DETERMINATION BY		
	equals 8, 9,	POLICE should equal 9.		
(U681)	UNLIKELY: METHOD OF ALCOHOL			
	DETERMINATION BY POLICE equals 8.			

## P18/NM17 - Alcohol Test

**FORMAT:** 3 sets, 1 set, 1 numeric, 1 set, 2 numeric, 1 set, 3 numeric **SAS NAME:** Person.ALC\_STATUS, Person.ATST\_TYP, Person.ALC\_RES **ELEMENT VALUES:** 

#### Subfield 1 – Test Status

CRSS Codes	FARS Codes	Attributes
0	0	Test Not Given
2	2	Test Given
8	8	Not Reported
9	9	Unknown if Tested

#### Subfield 2 – Test Type

CRSS Codes	FARS Codes	Attributes
00	00	Test Not Given
01	01	Blood
02	02	Breath Test (AC)
10	10	Preliminary Breath Test (PBT)
03	03	<u>Urine</u>
XX	04	Vitreous
XX	05	Blood Plasma/Serum
XX	06	Blood Clot
XX	07	Liver
08	08	Other Test Type
98	98	Unknown Test Type
95	95	Not Reported
99	99	Unknown if Tested

#### Subfield 3 – Test Result

CRSS Codes	FARS Codes	Attributes
000-939	000-939	Actual Value
940	940	.94 or Greater
996	996	Test Not Given
997	997	AC Test Performed, Results Unknown
998	998	Positive Reading with No Actual Value
995	995	Not Reported
999	999	Unknown if Tested

Definition for Alcohol Test Status: This element identifies if an alcohol (ethanol) test was given to this person.

**Definition for Alcohol Test Type:** This element identifies the type of the alcohol (ethanol) test that was used for this person.

Definition for Alcohol Test Result: This element identifies the alcohol (ethanol) test result for this person.

**Remarks:** When completing this element, you must have the data to fill **ALL** three subfields. Otherwise, leave all three subfields **blank** until all the data has been acquired to complete all three subfields.

For alcohol tests that were initiated but not completed because of a contaminated or insufficient sample, code:

- Test Status as 2 (Test Given)
- the applicable Test Type,
- and code Test Results as 997 (AC Test Performed, Results Unknown).

In a circumstance where the crash report provides results from a lower order test (e.g., breath or urine) and blood was also drawn to be tested, but blood test results will not be received, it is preferred that we record the known result from the breath or urine test rather than **997 (AC Test Performed, Results Unknown)**.

#### Subfield 1 – Test Status

Indicates whether or not a test was performed on this person to detect the presence of alcohol (ethanol).

**0 (Test Not Given)** is used when the case materials indicate an alcohol test was not given.

**NOTE:** Most states' practice is that "live" non-drivers are not routinely tested for alcohol. Consequently, for live non-drivers MDE will auto-fill Test Status, Test Type, and Test Result as **0 (Test Not Given)**. If you happen to obtain an alcohol test result for a "live" non-driver, enter **Test Status** as **2 (Test Given)** and the appropriate test type and results.

2 (Test Given) is used when the case materials indicate an alcohol test was given.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown if Tested) is used when the case materials specifically indicated "Unknown if Tested."

#### Subfield 2 – Test Type

#### **Coding Hierarchy:**

When more than one alcohol test exists, use the following hierarchy for Test Type:

#### Breath Test Types (Presumed Live Subject)

- <u>02 (Breath Test(AC))</u> or Evidential Breath Test
- <u>10 (Preliminary Breath Test (PBT))</u> See Note

#### **Blood Test Types**

- <u>01 (Blood)</u> or Whole Blood
- 05 (Blood Plasma)\*

- 05 (Blood Serum)\*
- 06 (Blood Clot)\*

#### Other Test Types

- 04 (Vitreous)\*
- 03 (Urine)
- 07 (Liver)\*
- 08 (Other Test Type)

#### \*Attributes 04 - 07 do not apply for CRSS coding purposes.

#### Note:

The rationale is that a Preliminary Breath Test will be performed on a live subject prior to any other test type and, therefore, will automatically be closer in time to the crash. If a Preliminary Breath Test was performed on-scene while a Blood Test was performed much later on a live subject, then the Preliminary Breath Test is preferred. If the Blood Test is performed on a sample that is drawn at the scene or close to the crash time, whether the subject is living or dead, then the usual procedure applies to update a PBT result with an evidential Blood Test result (See <u>10 (Preliminary Breath Test)</u> below).

In a circumstance where the crash report identifies results from a test (e.g., *urine or other*) but blood was also drawn to be tested, but blood test results will not be received, it is preferred that we record the known result from the *urine or other* test rather than <u>997 (AC Test Performed, Results Unknown)</u>.

# The same is correct in a circumstance where you have information that casts clear doubt on the validity or reliability of the Blood Test and you have results from a test of another type. For example, the blood test was spoiled or contaminated.

01 (Blood) is used when the case materials indicate this was the type of test used to obtain a BAC.

Note that there are test types for **01 (Blood)**, **05 (Blood Plasma/Serum)**, and **06 (Blood Clot)**. If the Coroner, Medical Examiner, or State Lab reports that the test was a "blood" test (whole blood), this most likely does not refer to Blood Plasma, *Blood Serum*, or Blood Clot, but you should try to verify this. If the test was performed on blood, or if you know the results are already converted to a BLOOD ALCOHOL CONCENTRATION (BAC), then code TEST TYPE as **01 (Blood)**.

02 (Breath Test [AC]) is used when the case materials indicate this was the type of test used to obtain a BAC.

**02 (Breath Test [AC])** is used if you have a result from an **evidential** breath test (a breath test performed on a State-approved breath test device).

#### Evidential Breath Test devices may be Stationary or Portable (Hand-Held).

Usually, results from a <u>Preliminary Breath Test (PBT) device</u> are not considered evidential. *These are always hand-held devices. If* the device was used only as a preliminary test and not an evidential test, then do not use code **02 (Breath Test [AC]).** 

**03 (Urine)** is used when the case materials indicate this was the type of test used to obtain a BAC.

**08 (Other Test Type)** is used when the case materials indicate a type of test used to obtain a BAC was recorded as "Other" or is indicated to be of a type other than the available attributes. This attribute would not apply to behavioral tests (field sobriety) or observations.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **08 (Other Test Type)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code <u>95 (Not Reported)</u> if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

**10 (Preliminary Breath Test [PBT])** is used when the case materials indicate this was the type of test used to obtain a BAC and no other test is available. Update **Test Type** and corresponding **Result** if a PBT is followed by an evidential test, other than a PBT. *A negative result from a PBT (no alcohol detected) is coded as 000.* 

**98 (Unknown Test Type)** is used when the case materials indicate a test was given and the type of test is reported as unknown or pending and the type is unobtainable.

#### 95 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **95 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

99 (Unknown if Tested) is used when the case materials specifically indicated "Unknown if Tested."

#### Subfield 3 – Test Result

*All* three decimal places *should* be coded in this field. *Blood, Urine, and Vitreous test results should be represented as g/dL (North American standard).* If three decimal places are not available, code the first two digits and zero fill the remaining place. For example, a reported BAC of .09 becomes .090.

g/dL	Translate to g/dL with 3 digits	Record in FARS/CRSS	
.2 g/dL	.200 g/dL	200	
.17 g/dL	.170 g/dL	170	

#### Example Test Results are in g/dL

#### Example Test Results are in mg/dL (1mg = .001g)

mg/dL (1mg = .001g)	Translate to g/dL with 3 digits	Record in FARS/CRSS
86 mg/dL	.086 g/dL	086
140 mg/dL	.140 g/dL	140

#### Example Test Results are in Other or No Units

Other Units	Translate to g/dL with 3 digits	Record in FARS/CRSS		
.08 is considered g/dl	.080	080		
.1% is considered g/dl	.100	100		

**997 (AC Test Performed, Results Unknown)** refers to alcohol content tests that were performed but the results are reported as unknown or pending and are unobtainable (includes a "Contaminated Sample" or "Insufficient Sample"). AC Test Performed, Results Unknown can be used for any Test Type.

#### FARS SPECIAL INSTRUCTION:

As a general coding guideline, **do not** prematurely use Test Result "AC Test Performed, Results Unknown." It is recommended that you leave the information blank for drivers and non-motorists until the test results are received from the state lab, coroner or police. You need to be reasonably certain that you will **never** receive the test results to use attribute "**997**" at the time of the initial coding and case entry.

#### 995 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **995 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

999 (Unknown if Tested) is used when the case materials specifically indicate "Unknown if Tested."

**998 (Positive Reading with No Actual Value)** can be used for any Test Type code where the result is indicated to be positive without a numeric value to record. This should only be used when a final test result is returned as "positive" with no actual result to record. This can occur when a screening test is used and it is the only test result available.

Some *portable (hand held) breath-test devices are only Preliminary Breath Tests (PBTs) and* indicate whether alcohol is present in the breath by positive (green) or negative (red) lights. Other *portable breath test devices* indicate the approximate BAC in numbers. *When a PBT result only indicates "positive" for alcohol, with no actual BAC value, 998 (Positive Reading with No Actual Value)* should be used. A negative PBT result should be interpreted as .000.

Before recording this value make sure that this is the *appropriate value based on the <u>hierarchy</u> outlined under Subfield 2 Test Type.* 

#### **State Law Versus Practice:**

You may be aware that your State laws require testing of certain classes of crash victims. However, you may also know that the practice in your State is that the law is not observed. In such cases, you are not bound only by what the law says. You may consider State practices in your coding decisions.

**Example 1:** Your state law may require all fatalities to be tested for BAC, but you know that this does not happen in your State and you are unable to locate alcohol test information for this person:

 In such a case, you cannot rely on the law for your coding decisions. Therefore, you should use <u>999</u> (Unknown If Tested) rather than <u>997 (AC Test Performed, Results Unknown)</u>, or **996 (Test Not Given)**. (Test Status equals <u>9 (Unknown if Tested)</u> and Test Type equals <u>99 (Unknown if Tested)</u>). **Example 2:** Most states' practice is that "live" non-drivers are not routinely tested for alcohol. Consequently, for live non-drivers when there is no mention of a test ordered by the police in the Police *Crash* Report:

• Code Test Status as **0 (Test Not Given)** and MDE will auto-fill Test Type as **00 (Test Not Given)** and Test Result as **996 (Test Not Given)**. However, if you happen to obtain an alcohol test result later, you may enter the appropriate test type and results.

#### **Computed Estimates of BACs:**

An expert may calculate an estimate of what the BAC would have been at the time of the crash (i.e., toxicologist uses the lapse time from crash and the victim's weight to calculate the BAC). You may accept these results if the following are **all** true:

- Results were reported by someone with the authority in your state to make this determination; and
- the result is considered official in your state; and
- you can support the result with official documentation or it is reported on the *Police Crash Report* (may vary from state-to-state).

Check	IF	THEN			
(5T7P)	ALCOHOL TEST STATUS equals <b>0</b> ,	ALCOHOL TEST TYPE must equal 00, and			
		ALCOHOL TEST RESULT must equal 996.			
(5T8P)	ALCOHOL TEST STATUS equals 9,	ALCOHOL TEST TYPE must equal 99, and			
		ALCOHOL TEST RESULT must equal 999.			
(5T9P)	ALCOHOL TEST STATUS equals 2,	ALCOHOL TEST TYPE must equal 01-10, 95, 98,			
		and ALCOHOL TEST RESULT must equal 000-940, 997, 998.			
(5TCP)	ALCOHOL TEST STATUS equals 8,	ALCOHOL TEST TYPE must equal 95, and			
		ALCOHOL TEST RESULT must equal 995.			
(P071)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS should not equal 9,			
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE should not equal 99, and			
		ALCOHOL TEST RESULT should not equal 999.			
(P074)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS must not equal 8,			
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE must not equal 95, and			
		ALCOHOL TEST RESULT must not equal 995.			
(P080)	ALCOHOL TEST RESULTS should not equal 340-940.				
(P300)	POLICE REPORTED ALCOHOL INVOLVEMENT	ALCOHOL TEST STATUS should not equal <b>0</b> .			
	equals 1, and INJURY SEVERITY equals 4,				
(U689)	UNLIKELY: ALCOHOL TEST Subfield 3-Test				
	Result equals 001-009.				
(U691)	UNLIKELY: ALCOHOL TEST Subfield 3-Test				
	Result equals 010-019.				
(U692)	UNLIKELY: ALCOHOL TEST Subfield 3-Test				
	Result equals 020-029.				
(U693)	UNLIKELY: ALCOHOL TEST Subfield 3-Test				
	Result equals 030-039.				

## P19/NM18 - Police Reported Drug Involvement

#### FORMAT: 1 numeric SAS NAME: Person.DRUGS ELEMENT VALUES:

Codes	Attributes
0	No (Drugs Not Involved)
1	Yes (Drugs Involved)
8	Not Reported
9	Unknown (Police Reported)

**Definition:** This data element reflects only the **judgment of law enforcement** as to whether drugs were involved or not for this person.

**Remarks:** This data element reflects only the **judgment of law enforcement** as to whether drugs were involved or not for this person.

The phrase "drug involvement" means that drugs are present in the person or presumed to be present by the police. This includes prescription and over-the-counter medications, as well as illicit substances (e.g., marijuana, cocaine, heroin, etc.). It is not an indication that the drug usage was in any way a cause of the crash.

If case materials indicate that drugs were found in the vehicle, then this information does not by itself constitute involvement unless the police indicate that this was the basis for a determination of involvement.

Some *Police Crash Reports* have a block labeled "Alcohol/Drugs." If use is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol, not drugs. If the police report indicates that a driver was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or drug related (e.g., a specific data element, mentioned in the narrative section, BAC results), then interpret as alcohol presence.

0 (No [Drugs Not Involved]) applies if the judgment of law enforcement is that drugs are not present.

In some circumstances, it is possible for the police to give sufficient information in the report fields (such as contributing circumstances, driver/pedestrian condition, substance use, drug test, etc.) or narrative to indicate that they believe drugs are not involved without specifically mentioning no drugs. In such cases, you may use **0 (No [Drugs Not Involved])**. However, if there is any question that the officer's position on drug involvement is No because of a lack of information, then it is best to use <u>8 (Not Reported)</u>.

**1 (Yes [Drugs Involved])** applies only if the police assessment is that drugs were present. For example, the police indicate drug involvement via:

- a specific data element on the police report form such as Driver Condition,
- the police charge the driver with a drug related offense,
- the police mention in the narrative section of the report that the person had been under the influence of a drug,
- the police report has a positive test result reported for drugs.

**8 (Not Reported)** applies when law enforcement makes no mention of drug involvement in either narrative or data fields. For example, there is a specific location on the police report for assessment of drugs but the investigating officer fails to make either a positive or negative assessment by leaving the field blank. Also, use **8** 

(Not Reported) if no block exists on the *Police Crash Report* for reporting drug presence and no other information is available.

There are instances when law enforcement does not indicate in the **Police Crash Report** whether drugs were involved or not, but they do mention that a test was given or ordered. For example, the police may only say that an evidential test was ordered for a driver without indicating that they suspected drugs or providing a result. Use **8 (Not Reported)** for these instances.

**9 (Unknown [Police Reported])** applies when law enforcement indicates in either narrative or data fields that drug involvement is "unknown" for this person. In general, police reports have blocks to indicate either positive or negative drug involvement. However, if a crash report has a provision for the investigating officer to respond "unknown involvement," then enter this attribute.

#### FARS SPECIAL INSTRUCTION:

Important Guidelines:

- Do not change the coding of this element because a positive drug test is obtained from the coroner, medical examiner or state toxicology lab. A positive or negative test result submitted from the toxicology lab or coroner directly to the FARS analyst is **not** evidence of the officer's judgment.
- The crash report, including any supplemental reports or direct contact with law enforcement, are the only valid sources.

When Police Reported Drug Involvement is <u>8 (Not Reported</u>) or <u>9 (Unknown [Police Reported]</u>), all <u>Method of</u> <u>Drug Determination</u> attributes are allowed. However, this should only happen when the method is stated by the police, but the involvement is not mentioned at all or stated as unknown.

Check	IF	THEN
(4X4F)	any CONDITION (IMPAIRMENT) AT TIME OF	POLICE REPORTED ALCOHOL INVOLVEMENT
	CRASH (D23) equals 09,	(P16), or POLICE REPORTED DRUG
		INVOLVEMENT (P19) should equal 1 for this
		person.
(BQ0P)	METHOD OF DRUG DETERMIN-ATION BY	POLICE REPORTED DRUG INVOLVEMENT must
	POLICE equals 8,	equal 0, 1, 8, 9.
(BROP)	METHOD OF DRUG DETERMIN-ATION BY	POLICE REPORTED DRUG INVOLVEMENT must
	POLICE equals 1-7,	equal 0, 1, 8.
(D090)	VIOLATIONS CHARGED equals 11-19, and	POLICE REPORTED ALCOHOL INVOLVEMENT
	PERSON TYPE equals 01, 03,	should equal 1, or POLICE REPORTED DRUG
		INVOLVEMENT should equal 1.
(P140)	POLICE REPORTED DRUG INVOLVEMENT	METHOD OF DRUG DETERMINATION BY POLICE
	equals 8, 9,	should equal 8.
(P150)	POLICE REPORTED DRUG INVOLVEMENT	DRUG TEST STATUS should not equal 0.
	equals 1,	
(P160)	POLICE REPORTED DRUG INVOLVEMENT	not all DRUG TEST RESULTS should equal 001.
	equals 1, and METHOD OF DRUG DETERMIN-	
	ATION BY POLICE equals 2,	
(P170)	METHOD OF DRUG DETERMIN-ATION BY	POLICE REPORTED DRUG INVOLVEMENT should
	POLICE equals 1-7,	equal 0, 1.

## P20/NM19 - Method of Drug Determination by Police - FARS Only

FORMAT: 1 numeric SAS NAME: Person.DRUG\_DET ELEMENT VALUES:

Codes	Attributes
1	Evidential Test (Blood, Urine)
2	Drug Recognition Expert (or Evaluator) (DRE) determination
3	Behavioral
7	<u>Other</u>
8	Not Reported

**Definition:** This element identifies the method by which the police made the determination as to whether drugs were involved or not for this person.

**Remarks:** This element is coded for each person involved in the crash. The Police *Crash* Report and supplements are the source of information.

The purpose of this element is to record the method by which the police made the determination as to whether drugs were involved or not.

It is used primarily when the <u>Police Reported Drug Involvement</u> element is coded as <u>0 (No [Drugs Not Involved])</u> or <u>1 (Yes [Drugs Involved])</u>.

Whenever <u>Police Reported Drug Involvement</u> is <u>0 (No [Drugs Not Involved]</u>), try to find out how the police knew this. When <u>Police Reported Drug Involvement</u> is <u>1 (Yes [Drugs Involved]</u>), try to determine how the police knew this.

If <u>Police Reported Drug Involvement</u> is <u>8 (Not Reported</u>) or <u>9 (Unknown [Police Reported]</u>), then Method of Drug Determination by Police is <u>8 (Not Reported</u>). If more than one method is used by the police to determine drug involvement, choose the method the police refer to when they record their assessment. If more than one method is used and they do not state which method was the basis for their determination, code the highest-ranking method used from the hierarchy (the highest ranking is "**1**"; the lowest is "**7**").

1 (Evidential Test [Blood, Urine]) is used if <u>Police Reported Drug Involvement</u> is <u>0 (No [Drugs Not Involved])</u> or <u>1</u> (<u>Yes [Drugs Involved]</u>) and the police indicate that they ordered an evidential test and their determination of drug involvement was based on the results of that test.

**Ordering a test is not the same as knowing the results of that test.** In order to code that the police determined their opinion based on an evidential test, there must be information that the officer had received the test results. If they haven't received test results (e.g., results are pending), then their method of determination of alcohol or drug presence was made using some method other than an evidential test.

2 (Drug Recognition Expert (or Evaluator) [DRE] determination) is used if <u>Police Reported Drug Involvement</u> is <u>0</u> (<u>No [Drugs Not Involved</u>]) or <u>1 (Yes [Drugs Involved]</u>) and the police indicate that drug involvement was based upon the results of expert opinion of a person trained to recognize impairment in drivers under the influence of drugs other than, or in addition to, alcohol.

The key to coding this attribute is the definite indication **by the police** that a **DRE was used** and was the basis (or the clinching evidence) that a driver had been using drugs or not.

**3 (Behavioral)** is used if <u>Police Reported Drug Involvement</u> is <u>O (No [Drugs Not Involved])</u> or <u>1 (Yes [Drugs Involved]</u>) and the police indicate that the basis for that drug assessment was the behavior by the driver during their contact with the person such as a field sobriety test.

**7 (Other)** is used if <u>Police Reported Drug Involvement</u> is <u>**0 (No [Drugs Not Involved])**</u> or <u>**1 (Yes [Drugs Involved])**</u> **and** the police indicate that the basis for Drug determination was something other than the codes "1, 2, or 3" described above.

Examples of 7 (Other) include:

- 1. Observations of drugs or drug use paraphernalia
- 2. Detecting the odor of marijuana
- 3. Admission by the person that they used drugs

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **7 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

8 (Not Reported) is coded if <u>Police Reported Drug Involvement</u> is <u>8 (Not Reported</u>) or <u>9 (Unknown [Police</u> <u>Reported]</u>). It is also coded if <u>Police Reported Drug Involvement</u> is <u>0 (No [Drugs Not Involved]</u>) or <u>1 (Yes [Drugs</u> <u>Involved]</u>) and there is no indication in the police report or any documents as to how the police made the drug assessment.

#### Witness Statements:

Witness Statements may or may not be used by the police to make a determination of drug involvement. If the police did use witness statements alone to make a determination of drug involvement, use <u>7 (Other)</u>.

If the police mention, but did not use witness statements and there is no other indication of how a determination was made, use <u>8 (Not Reported)</u>.

There are instances when the police do not indicate in the *Police Crash Report* whether drugs were involved or not, but they do mention that a test was given or ordered.

FOR EXAMPLE: The police may only say that an evidential test was ordered for a driver without indicating that they suspected drugs or what the result was.

Codes 1-7 may be used for Method of Drug Determination by Police when <u>Police Reported Drug Involvement</u> is coded as <u>8 (Not Reported)</u> or <u>9 (Unknown [Police Reported]</u>), if this fits the case.

This should only happen when the method is stated by the police, but the Involvement is not mentioned at all or stated as unknown.

Check	IF	THEN
(BQ0P)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT
	POLICE equals 8,	must equal 0, 1, 8, 9.
(BROP)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT
	POLICE equals 1-7,	must equal 0, 1, 8.
(P140)	POLICE REPORTED DRUG INVOLVEMENT	METHOD OF DRUG DETERMINATION BY
	equals 8, 9,	POLICE should equal 8.
(P160)	POLICE REPORTED DRUG INVOLVEMENT	not all DRUG TEST RESULTS should equal
	equals 1, and METHOD OF DRUG	001.
	DETERMINATION BY POLICE equals 2,	
(P170)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT
	POLICE equals 1-7,	should equal 0, 1.

## P21/NM20 - Drug Test

**FORMAT:** 1 set 1 numeric; 3 sets, 1 numeric, 3 sets, 3 numeric

SAS NAME: Person.DSTATUS, Person.DRUGTST1, Person.DRUGTST2, Person.DRUGTST3, Person.DRUGRES1, Person.DRUGRES2, Person.DRUGRES3

#### **ELEMENT VALUES:**

#### Subfield 1 – Test Status

CRSS Codes	FARS Codes	ttributes				
0	0	Test Not Given				
2	2	Test Given				
8	8	Not Reported				
9	9	Unknown if Tested				

#### Subfield 2 – Test Type

CRSS Codes	FARS Codes	Attributes			
0	0	Test Not Given			
1	1	Blood			
2	2	<u>Urine</u>			
3	3	Both: Blood and Urine Tests			
7	7	Unknown Test Type			
8	8	Other Test Type			
6	6	Not Reported			
9	9	Unknown if Tested			

#### Subfield 3 – Test Result\*\*

CRSS Codes	FARS Codes	Attributes
000	000	Test Not Given
001	001	Tested, No Drugs Found/Negative
XXX	100-295	Narcotic*
XXX	300-399	Depressant*
XXX	400-495	Stimulant*
XXX	500-595	Hallucinogen*
XXX	600-695	Cannabinoid*
XXX	700-795	Phencyclidine (PCP)*
XXX	800-895	Anabolic Steroid*
XXX	900-995	Inhalant*
XXX	996	Other Drug
997	997	Tested for Drugs, Results Unknown
998	998	Tested for Drugs, Drugs Found, Type Unknown/Positive
095	095	Not Reported
999	999	Unknown If Tested

#### \* See Specific Drug Listings

\*\* Test Result does not include Aspirin, Nicotine, or Ethanol. Alcohols reported other than ethanol would be classified under <u>996 (Other Drug)</u>. In addition, exclude drugs explicitly indicated to have been administered after the crash.

**Remarks:** When completing this element, you must have the data to fill **ALL** three subfields. Otherwise, leave all three subfields **blank** until all the data has been acquired to complete all three subfields.

For drug tests that were initiated but not completed because of a contaminated or insufficient sample, code:

- Test Status as 2 (Test Given)
- the applicable <u>Test Type</u>,
- and code Test Results as <u>997(Tested for Drugs, Results Unknown)</u>.

#### Subfield 1 - Drug Test Status

**Definition for Drug Test Status:** This element identifies if a chemical test for the presence of drugs was given to this person.

**0 (Test Not Given)** is used when the case materials indicate a drug test was not given. If Test Status is **0 (Test Not Given)** then Test Type and Test Result will also be **0 (Test Not Given)** and **000 (Test Not Given)**.

Most states' practice is that "live" non-drivers are not routinely tested for drugs. Consequently, for live nondrivers MDE will auto-fill **Test Status**, **Test Type**, and **Test Result** as **Test Not Given**. If you happen to obtain a drug test result for a "live" non-driver, enter **Test Status** as **Test Given** and the appropriate test type and results.

2 (Test Given) is used when the case materials indicate a drug test was given.

#### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 8 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown if Tested) is used when the case materials specifically indicate "Unknown if Tested."

#### Subfield 2 - Drug Test Type:

You may record up to 3 separate drug test types and their corresponding result.

**Definition for Drug Test Type:** This element identifies the type of chemical test for the presence of drugs that was used for this person.

1 (Blood) is used when the case materials indicate this was the type of test used to detect the presence of drugs.

2 (Urine) is used when the case materials indicate this was the type of test used to detect the presence of drugs.

**3 (Both: Blood and Urine Tests)** is used when the case materials indicate this testing combination was used to detect the presence of drugs. Typically, this would be found on a toxicology report. Use this attribute when this combination yields the same drug test results.

7 (Unknown Test Type) is used when the case materials indicate a test was given and the type of test is reported as unknown or pending and the type is unobtainable.

**8 (Other Test Type)** is used when the case materials indicate a type of test used to detect the presence of drugs was recorded as "Other" or is indicated to be of a type other than the available attributes.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **8 (Other Test Type)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **6** (Not Reported) if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

#### 6 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 6 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

9 (Unknown if Tested) is used when the case materials specifically indicate "Unknown if Tested."

#### **Subfield 3 - Drug Test Result**

**Definition for Drug Test Result:** This element identifies the result of a chemical test for the presence of drugs for this person.

**\*\*NOTE:** This element excludes Nicotine, Aspirin and Ethanol. In addition, exclude drugs explicitly indicated to have been administered after the crash. Alcohols reported other than ethanol would be classified under <u>996</u> (Other Drug).

#### FARS SPECIAL INSTRUCTION:

You may record up to 3 separate drug test results and their corresponding test type. Use the translation table to assign the three-digit code. If the drug is not on the list, use <u>996 (Other Drug)</u>, except for confirmed as "post-crash" administered. Caffeine and mild analgesics are coded <u>996 (Other Drug)</u>. When four or more drugs are present, use the categories as a hierarchy (ex. narcotics (100-295) over depressants (300-395) over stimulants (400-495), etc.)

**000 (Test Not Given)** is used when the case materials indicate a drug test was not given. If Test Status is **0 (Test Not Given)** then Test Type and Test Result will also be **0 (Test Not Given)** and **000 (Test Not Given)**.

**001 (Tested, No Drugs Found/Negative)** is used when the case materials indicate that a test for the presence of drugs was "negative" or that no drugs were found.

**997 (Tested for Drugs, Results Unknown)** refers to drug tests that were performed but the results are reported as unknown or pending and are unobtainable. **997 (Tested for Drugs, Results Unknown)** can be used for any Test Type.

#### FARS SPECIAL INSTRUCTION:

As a general coding guideline, do not prematurely use Test Result 997 (Tested for Drugs, Results Unknown). It is recommended that you leave the information **blank** until the test results are received from the state lab, coroner, or police. You need to be reasonably certain that you will never receive the test results to use attribute "997" at the time of the initial coding and case entry. Examples of this situation would be if the test results are returned indicating a "Contaminated Sample" or "Insufficient Sample."

**998 (Tested for Drugs, Drugs Found, Type Unknown/Positive)** can be used for any Test Type code where the result is indicated to be positive without an actual drug identified to record.

This should only be used when a final test result is returned as "positive" with no actual result to record. This can occur when a screening test is used and it is the only test result available. Before recording this value make sure that this is the **final** test result and no actual value was available from a follow-up confirmatory test.

#### 095 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **095 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

999 (Unknown if Tested) is used when the case materials specifically indicated "Unknown if Tested."

### Examples for Interpreting Drug Tests

IF YOU HAVE:	Status	Type 1	Result 1	Type 2	Result 2	Type 3	Result 3
Both Blood and Urine tests and	2	3	151	0	000	0	000
the results are the same for							
both. <i>Example: Blood</i> –							
Fentanyl; Urine – Fentanyl							
Both Blood and Urine tests and	2	1	333	2	407	0	000
the results are different for							
both. Example: Blood –							
Hexobarbital; Urine – Cocaine							
Both Blood and Urine tests and	2	6	128	6	509	0	000
the results are given but not							
linked to either tests. Example:							
Results – Codeine and Ibogaine							
Blood or Urine tests and other	2	1	321	8	407	0	000
test, such as vitreous. Example:							
Blood – Diazepam; Vitreous –							
Cocaine							
Urine test only and the results:	2	2	304	0	000	0	000
Example: Urine –							
Benzodiazepines							
Vitreous and other tests only.	2	8	401	8	996	0	000
Example: Vitreous –							
Amphetamine and Verapamil							
Not tested for drugs.	0	0	000	0	000	0	000
Not Reported for drugs	8	6	095	0	000	0	000
Unknown if tested for drugs.	9	9	999	0	000	0	000
Tested for Drugs, Results	2	1	997	0	000	0	000
Unknown. Example: Blood test							
– Yes; Results – Unavailable							
Tested for Drugs, Drugs Found,	2	2	998	0	000	0	000
Type of Drug Unknown.							
Example: Urine test – Yes;							
Drugs found – Yes							

Check	IF	THEN
(7M1F)	PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG TEST TYPE must not equal 6, and any DRUG TEST RESULTS must not equal 095.
(BT1P)	DRUG TEST STATUS equals <b>0</b> ,	all DRUG TEST TYPE must equal 0, and all DRUG TEST RESULT should equal 000 for this person.
(BT2P)	DRUG TEST STATUS equals 8,	DRUG TEST TYPE 1 must equal 6, and DRUG TEST RESULT 1 must equal 095, and remaining DRUG TEST TYPES and DRUG TEST RESULTS must be 0 filled.
(BT3P)	DRUG TEST STATUS equals 2,	at least one DRUG TEST TYPE must equal 1-8, and one corresponding DRUG TEST RESULT must equal 001, 095, 100-295, 300-395, 400-495, 500-595, 600- 695, 700-795, 800-895, 900-995, 996-998.
(BT6P)	DRUG TEST STATUS equals 9,	DRUG TEST TYPE 1 must equal 9, and DRUG TEST RESULT 1 must equal 999, and remaining DRUG TEST TYPES and DRUG TEST RESULTS must be 0 filled.
(BT7P)	DRUG TEST STATUS equals 2, and DRUG TEST RESULT one equals 001, 095, 100- 295, 300-395, 400-495, 500-595, 600- 695, 700-795, 800-895, 900-995, 996, 997, 998,	DRUG TEST RESULT two and three must not equal 999.
(BT8P)	More than one of the same DRUG TEST RESULT values must not be coded for the same person except for 000, 996.	
(BT9P)	DRUG TEST RESULT 1 equals 000, 001, 997, 998, 095, or 999,	DRUG TEST RESULT 2 and DRUG TEST RESULT 3 must equal 000.
(P073)	PERSON TYPE equals 02, 04-08, 10, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS should not equal 9, and any DRUG TEST TYPE should not equal 9, and any DRUG TEST RESULTS should not equal 999.
(P075)	PERSON TYPE equals 02, 04-08, 10 or 19, and INJURY SEVERITY does not equal 4,	DRUG TEST STATUS must not equal 8, any DRUG TEST TYPE must not equal 6, and any DRUG TEST RESULTS must not equal 095.
(P150)	POLICE REPORTED DRUG INVOLVEMENT equals 1,	DRUG TEST STATUS should not equal 0.
(P160)	POLICE REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG DETERMINATION BY POLICE equals 2,	not all DRUG TEST RESULTS should equal 001.

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	<b>410</b>
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Ethchlorvynol	322
Ether	925
Ethinamate	324
Ethyl Ioflazepate	325
Ethylmorphine combination	247
product 15 mg/du	
Ethylmorphine preparations 100	248
mg/100 ml or 100 gm	
Ethylamine	700
Ethylestrenol	806
Ethylmethylthiambutene	146
Ethylmorphine	147
Etonitazene	148
Etorphine	149
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Fiorinal	326
Fludiazepam	327

Drug	Code
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Flurazepam	384
Formebulone (Formebolone)	808
Frying Pan Lubricants	944
Furazabol	841
Furethidine	153
Gamma Hydroxybutyric (GHB)	377
Gamma Hydroxybutyric Acid	391
preparations	
Glass Chillers	943
Glutethimide	330
Hair spray	941
Halazepam	331
"Hallucinogens, Type Unknown"	595
Haloxazolam	332
Hashish	602
Hashish Oil	601
Heroin (Diacetylmorphine)	154
Hexobarbital	333
Hydrocodone	155
Hydrocodone & isoquinoline	249
alkaloid<15 mg/du	
Hydrocodone combination	250
product<15 mg/du	
Hydromorphinol	156
Hydromorphone	157
Hydroxy-Nortestosterone	842
Hydroxypethidine	158
Hydroxytestosterone	843
Hydroxyzine	334
Ibogaine	509
"Inhalants, Type Unknown"	995
Insecticides	942
Isomethadone	159
Ketamine	522
Ketazolam	335
Ketobemidone	160
Lacquer Thinners	904
Levo-alphacetylmethadol	228
Levomoramide	161
Levophenacylmorphan	162
Levomethorphan	163
Levorphanol	229
Levorphanol Tartrate	164
Lisdexamfetamine	436

Drug	Code
Loprazolam	336
Lorazepam	337
Lormetazepam	338
Lysergic Acid	511
	527
Lysergic Acid Amide	
Lysergic Acid Diethylamide (LSD)	528
Marijuana/Marihuana	603
Marinol	604
Mazindol	415
Mebutamate	339
Mecloqualone	340
Medazepam	341
Mefenorex	416
Meperidine (Pethidine)	165
Meperidine intermediate-A	251
Meperidine intermediate-B	252
Meperidine intermediate-C	253
Mephobarbital	342
(Methylphenobarbital)	
Meprobamate	343
Mescaline	512
Mestanolone	844
Mesterolone	809
Metazocine	166
Methadone	167
Methadone intermediate	254
Methamphetamine	417
Methandienone	810
Methandranone	811
Methandriol	812
Methandrostenolone	813
Methaqualone	344
Metharbital	345
Methcathinone	432
Methenolone	814
Methohexital	346
Methoxyamphetamine (PMA)	514
Methoxy-Methylenedioxy-	437
amphetamine	437
Methoxy-NN-disopropyltryptamine	537
	442
Methylaminorex	
Methyldesorphine	168
Methyldienolone	845
Methyldihydromorphine	169
Methyl-dimethoxyamphetamine	530

Drug	Code
Methylenedioxy-N-	531
ethylamphetamine	
Methylenedioxyamphetamine	515
(MDA)	
Methylenedioxymethamphetamine	513
(MDMA)	
Methylfentanyl	170
Methylone	435
Methlphenidate	418
Methyl-phenyl-	171
propionoxypiperidine (MPPP)	
Methyltestosterone	815
Methylthiofentanyl	230
Methyltrienolone	846
Methyprylon	347
Metopon	172
Mibolerone	816
Midazolam	348
Modafinil	433
Moramide - intermediate	173
Morpheridine	174
Morphine	177
Morphine combination product/	255
50 mg/ 100 ml or gm	
Morphine methylbromide	176
Morphine methylsulfonate	175
Morphine-N-oxide	231
Myrophine	178
Nabilone	516
Nalorphine	179
Nandrolone	817
"Narcotics, Type Unknown"	295
N-Benzylpiperazine	439
N-Ethyl-1-phenylcyclohexy-lamine	533
N-Ethyl-3piperdyl benzilate	508
N-Ethylamphetamine	419
N-Hydroxymethylenedioxy-	538
amphetamine	
Nicocodeine	180
Nicomorphine	181
Nimetazepam	349
Nitrazepam	350
Nitrous Oxide	924
N-Methylpiperidyl benzilate	539
N, N-Dimethylamphetamine	438
(Dimethylamphetamine)	

Drug	Code
Noracymethadol	182
Norandrostenediol	847
Norandrostenedione	848
Norbolethone	849
Norclostebol	850
Nordiazepam	351
Norethandrolone	818
Norlevorphanol	183
Normethadone	184
Normethandrolone	851
Normorphine	185
Norpipanone	186
Opium	187
Opium combination product 25	256
mg/du	
Opium extract	232
Opium fluid extract	233
Opium, granulated	258
Opium Poppy	234
Opium, powdered	259
Opium preparations – 100 mg/ 100	257
ml or 100 gm	
Opium Tincture	235
Oripavine	260
"Other"	996
Oxandrolone	819
Oxazepam	352
Oxazolam	353
Oxycodone	189
Oxymesterone	820
Oxymetholone	821
Oxymorphone	188
Paint and Paint Removers	902
Para-fluorofentanyl	190
Parahexyl (Synhexyl)	701
Paraldehyde	354
Paregoric	191
Parepectolin	192
"PCP, Type Unknown"	795
Pemoline	420
Pentazocine	193
Pentobarbital	355
Pentobarbital & noncontrolled	393
active ingred.	
Pentobarbital suppository dosage form	394

Drug	Code
Petrichloral	356
"Petroleum Products (gasoline,	903
kerosene)"	
Peyote	517
Phenadoxone	195
Phenampromide	196
Phenanthrine	197
Phenazocine	198
Phencyclidine	702
Phencyclidine Analogs	703
Phenylcyclohexyl-Pyrrolidine	709
Phenylethyl-phenyl-	236
acetoxypiperidine (PEPAP)	
Phencyclohexylamine	357
Phendimetrazine	421
Phenmetrazine	422
Phenobarbital	358
Phenomorphan	199
Phenoperidine	200
Phentermine	423
Phenylacetone (P2P)	518
Phenylcyclohexylamine	704
Pholcodine	202
Piminodine	203
Pinazepam	359
Piperidinocyclohexane-carbonitrile	705
(PCC)	
Pipradrol	424
Piritramide	204
Plastic Cement (airplane glue)	901
Poppy Straw	237
Poppy Straw Concentrate	238
Prazepam	360
Pregabalin	396
Proheptazine	205
Properidine	206
Propiram	207
Propoxyphene (Dextropropoxy-	208
phene, bulk (non-dosage forms))	
Propylhexedrine	425
Psilocybin	519
Psilocyn	520
Pyrovalerone	426
"Pyrrolidine (PCPy, PHP, TCPy)"	706
Quazepam	361
Racemethorphan	209

Drug	Code
Racemoramide	210
Racemorphan	210
Remifentanil	239
Secobarbital	<b>362</b>
Secobarbital & noncontrolled	397
	597
active ingred. Secobarbital suppository dosage	398
form	590
Sibutramine	385
SPA	427
Stanolone	822
Stanozolol	823
Stenbolone	852
Stimulant compounds previously	440
excepted	440
"Stimulants, Type Unknown"	495
Sufentanil	212
Sulfondiethylmethane	363
Sulfonethylmethane	364
Sulfonmethane	365
Talbutal	366
Temazepam	367
Tested; Drugs Found; Type	998
Unknown/Positive	550
Tested; Results unknown	997
Testolactone	824
Testosterone	825
Tetrahydrocannabinols (THC)	605
Tetrahydrogestrinone	853
Tetrazepam	368
Thebacon	213
Thebaine	214
Thenylfentanyl	369
Thiamylal	370
Thienyl-cyclohexyl-piperidine	708
Thienyl Cyclohexyl Pyrrolidine	710
Thiofentanyl	215
Thiopental(Pentothal)	371
Thiophene	707
Tiletamine/Zolazepam (Telazol)	372
Tilidine	216
Traizolam	373
Trenbolone	826
Trimeperidine	217
Trimethoxy amphetamine	521
Tybamate	374
,	1

Drug	Code
Unknown if Tested for Drugs	999
Vinbarbital	434
Volatile Solvents (toluene)	900
Zaleplon	386
Zolpidem	387
Zopiclone	399

# Drugs by Category Type

<u> 100 - 295</u>	Narcotics
<u>300 - 399</u>	Depressants
<u>400 - 495</u>	<u>Stimulants</u>
<u>500 - 595</u>	Hallucinogens
<u>600 - 695</u>	Cannabinoid
<u>700 - 795</u>	PCP
<u>800 - 895</u>	Anabolic Steroids
<u>900 - 995</u>	Inhalant
<u>095, 996 - 999</u>	Not Reported/Other/Unknown

# 100-295 Narcotics

Code	Drug
	Drug
100	Acetaminophen + Codeine
101	Acetorphine
102	Acetyl-alpha-methylfentanyl
103	Acetyldihydrocodeine
104	Acetylmethadol
105	Alfentanil
106	Allylprodine
107	Alpha-Methylfentanyl
108	Alphamethythiofentanyl
109	Alpha-meprodine
110	Alphamethadol
111	Alphaprodine
112	Anileridine
113	APC + Codeine
114	Aspirin + Codeine
117	Benzylmorphine
118	Beta-hydroxyfentanyl
119	Betacetylmethadol
120	Beta-meprodine
121	Betamethadol
122	Betaprodine
123	Bezitramide
124	Buprenorphine
125	Carfentanil
126	Clonitazene
127	Codeine methylbromide
128	Codeine
129	Cyprenorphine
130	Desomorphine
131	Dextromoramide
133	Diampromide
134	Diethylthiambutene
135	Difenoxin
136	Dihydrocodeine
137	Dihydromorphine
138	Dimenoxadol
139	Dimepheptanol (Racemethadol)
140	Dimethylthiambutene
140	Dioxaphetyl Butyrate
141	Diphenoxylate
142	Dipipanone
143	Diprenorphine Hydrochloride
145	Drotebanol
145	Ethylmethylthiambutene
140	

Code	Drug
147	Ethylmorphine
148	Etonitazene
149	Etorphine
150	Etoxeridine
151	Fentanyl
152	Fiorinal + Codeine
153	Furethidine
154	Heroin (Diacetylmorphine)
155	Hydrocodone
156	Hydromorphinol
157	Hydromorphone
158	Hydroxypethidine
159	Isomethadone
160	Ketobemidone
161	Levomoramide
162	Levophenacylmorphan
163	Levomethorphan
164	Levorphanol Tartrate
165	Meperidine (Pethidine)
166	Metazocine
167	Methadone
168	Methyldesorphine
169	Methyldihydromorphine
170	Methylfentanyl
171	Methyl-phenyl-propionoxypiperidine
	(MPPP)
172	Metopon
173	Moramide - intermediate
174	Morpheridine
175	Morphine methylsulfonate
176	Morphine methylbromide
177	Morphine
178	Myrophine
179	Nalorphine
180	Nicocodeine
181	Nicomorphine
182	Noracymethadol
183	Norlevorphanol
184	Normethadone
185	Normorphine
186	Norpipanone
187	Opium
188	Oxymorphone
189	Oxycodone

Code	Drug
190	Para-fluorofentanyl
191	Paregoric
192	Parepectolin
193	Pentazocine
195	Phenadoxone
196	Phenampromide
197	Phenanthrine
198	Phenazocine
199	Phenomorphan
200	Phenoperidine
202	Pholcodine
203	Piminodine
204	Piritramide
205	Proheptazine
206	Properidine
207	Propiram
208	Propoxyphene (Dextropropoxy-phene,
	bulk (non-dosage forms))
209	Racemethorphan
210	Racemoramide
211	Racemorphan
212	Sufentanil
213	Thebacon
214	Thebaine
215	Thiofentanyl
216	Tilidine
217	Trimeperidine
218	Butorphanol
220	Alphacetylmethadol
221	Beta-Hydroxy-3-methylfentanyl
222	Codeine & Isoquinoline
223	Codeine-N-oxide
224	Dextropropoxyphene (dosage forms)
226	Dihydroetrophine
227	Diprenorphine
228	Levo-alphacetylmethadol
229	Levorphanol
230	Methylthiofentanyl
231	Morphine-N-oxide
232	Opium extract
233	Opium Fluid Extract

Code	Drug
234	Opium Poppy
235	Opium Tincture
236	Phenylethyl-phenyl-acetoxypiperidine
230	(PEPAP)
237	Poppy Straw
238	Poppy Straw Concentrate
239	Remifentanil
240	Codeine combination product 90
	mg/du
241	Codeine preparations – 200 mg/100 ml or 100 gm
242	Difenoxin 1 mg/25ug AtSO4/du
242	Difenoxin preparations – 0.5 mg/25 ug
245	AtSO4/du
244	Dihydrocodeine combination product
	90 mg/du
245	Dihydrocodeine preparations 10
	mg/100 ml or 100 gm
246	Diphenoxylate preparations 2.5 mg/25
	ug AtSO4
247	Ethylmorphine combination product 15
	mg/du
248	Ethylmorphine preparations 100
	mg/100 ml or 100 gm
249	Hydrocodone & isoquinoline
	alkaloid<15 mg/du
250	Hydrocodone combination product<15
	mg/du
251	Meperidine intermediate-A
252	Meperidine intermediate-B
253	Meperidine intermediate-C
254	Methadone intermediate
255	Morphine combination product/ 50
	mg/100 ml or gm
256	Opium combination product 25 mg/du
257	Opium preparations – 100 mg/ 100 ml
	or/100 gm
258	Opium, granulated
259	Opium, powdered
260	Oripavine
295	"Narcotics, Type Unknown"

# 300-399 Depressants

Code	Drug
300	Alprazolam
301	Amobarbital
302	Barbital
303	Barbiturates
304	Benzodiazepines
305	Benzylfentanyl
306	Bromazepam
307	Butabarbital (secbutabarbital)
308	Butalbital
309	Camazepam
310	Carbamate
311	Chloral betaine
312	Chloral Hydrate
313	Chlordiazepoxide
314	Chlorhexadol
315	Clobazam
316	Clonazepam
317	Clorazepate Dipotassium
318	Clotiazepam
319	Cloxazolam
320	Delorazepam
321	Diazepam
322	Estazolam
323	Ethchlorvynol
324	Ethinamate
325	Ethyl Ioflazepate
326	Fiorinal
327	Fludiazepam
328	Flunitrazepam
330	Glutethimide
331	Halazepam
332	Haloxazolam
333	Hexobarbital
334	Hydroxyzine
335	Ketazolam
336	Loprazolam
337	Lorazepam
338	Lormetazepam
339	Mebutamate
340	Mecloqualone
341	Medazepam
342	Mephobarbital (Methylphenobarbital)
343	Meprobamate

Code	Drug
344	Methaqualone
345	Metharbital
346	Methohexital
340	Methyprylon
347	Midazolam
349	Nimetazepam
350	Nitrazepam
351	Nordiazepam
352	Oxazepam
353	Oxazolam
354	Paraldehyde
355	Pentobarbital
356	Petrichloral
357	Phencyclohexylamine
358	Phenobarbital
359	Pinazepam
360	Prazepam
361	Quazepam
362	Secobarbital
363	Sulfondiethylmethane
364	Sulfonethylmethane
365	Sulfonmethane
366	Talbutal
367	Temazepam
368	Tetrazepam
369	Thenylfentanyl
370	Thiamylal
371	Thiopental (Pentothal)
372	Tiletamine/ Zolazepam (Telazol)
373	Traizolam
374	Tybamate
376	Carisoprodol
377	Gamma-Hydroxybutyric Acid (GHB)
378	Amobarbital & non-controlled active
	ingred.
379	Aprobarbital
380	Barbituric Acid Derivative
383	Dexfenfluramine
384	Flurazepam
385	Sibutramin
386	Zaleplon
387	Zolpidem
388	Amobarbital suppository dosage form
500	Amosuratur suppository dosage form

Code	Drug
389	Butobarbital (butethal)
390	Embutramide
391	Gamma Hydroxybutyric Acid
	preparations
393	Pentobarbital & noncontrolled active
	ingred.
394	Pentobarbital suppository dosage
	form

# 400-495 Stimulants

Code	Drug
400	Amphetamine Sulfate
401	Amphetamine
402	Benzoylecgonine
403	Benzphetamine
404	Cathine (Norpseudoephedrine)
405	Chlorphentermine
406	Clortermine
407	Cocaine
408	Dextroamphetamine
409	Diethylpropion
410	Ecgonine
411	Fencamfamin
412	Fenethylline
413	Fenfluramine
414	Fenproporex
415	Mazindol
416	Mefenorex
417	Methamphetamine
418	Methylphenidate
419	N-Ethylamphetamine
420	Pemoline
421	Phendimetrazine
422	Phenmetrazine

Code	Drug
395	"Depressants, Type Unknown"
396	Pregabalin
397	Secobarbital & noncontrolled active ingred.
398	Secobarbital suppository dosage form
399	Zopiclone

Code	Drug
423	Phentermine
424	Pipradrol
425	Propylhexedrine
426	Pyrovalerone
427	SPA
428	Aminorex
429	Cathinone
430	Coca Leaves
431	Dichloralphenazone
432	Methcathinone
433	Modafinil
434	Vinbarbital
435	Methylone
436	Lisdexamfetamine
437	Methoxy-
	Methylenedioxyamphetamine
438	N, N-Dimethylamphetamine
	(Dimethylamphetamine)
439	N-Benzylpiperazine
440	Stimulant compounds previously
	excepted
495	"Stimulants, Type Unknown"

# 500-595 Hallucinogens

Code	Drug
500	Amphetamine Variants
501	Bufotenine
503	Diethyltryptamine (DET)
504	Dimethoxyamphetamine (DMA)
505	Dimethyltryptamine (DMT)
506	DMA

Code	Drug
507	Dronabinol
508	N-Ethyl-3piperdyl benzilate
509	Ibogaine
511	Lysergic Acid
512	Mescaline

Code	Drug
513	Methylenedioxymethamphetamine
	(MDMA)
514	Methoxyamphetamine (PMA)
515	Methylenedioxyamphetamine (MDA)
516	Nabilone
517	Peyote
518	Phenylacetone (P2P)
519	Psilocybin
520	Psilocyn
521	Trimethoxy amphetamine
522	Ketamine
523	Alpha-Ethyltryptamine
524	Bromo-dimethoxyamphetamine
525	Bromo-dimethoxyphenethylamine
527	Lysergic Acid Amide

Code	Drug
528	Lysergic Acid Diethylamide (LSD)
529	Methylaminorex
530	Meth-dimethoxyamphetamine
531	Methylenedioxy-N-ethylamphetamine
533	N-Ethyl-1-phenylcyclohexylamine
534	Alpha-methyltryptamine
535	Dimethoxyethylamphetamine
536	Dimethoxy-(n)-
	propylthiophenethylamine
537	Methoxy-NN-diisopropyltryptamine
538	N-Hydroxymethylenedioxy-
	amphetamine
539	N-Methylpiperidyl benzilate
595	"Hallucinogens, Type Unknown"

# 600-695 Cannabinoid

Code	Drug
600	Delta 9
601	Hashish Oil
602	Hashish
603	Marijuana/Marihuana

# 700-795 PCP

Code	Drug
700	Ethylamine
701	Parahexyl (Synhexyl)
702	Phencyclidine
703	Phencyclidine Analogs
704	Phenylcyclohexylamine
705	Piperidinocyclohexane-carbonitrile
	(PCC)

Code	Drug
706	"Pyrrolidine (PCPy, PHP, TCPy)"
707	Thiophene
708	Thienyl Cyclohexyl/piperidine
709	Phenylcyclohexyl-Pyrrolidine
710	Thienyl Cyclohexyl Pyrrolidine
795	"PCP, Type Unknown"

Tetrahydrocannabinols (THC)

"Cannabinoid, Type Unknown"

Code

604

605

695

Drug

Marinol

# 800-895 Anabolic Steroids

Code	Drug
800	Boldenone
801	Chlorotestosterone
803	Dehydrochloromethyltestosterone
804	Dihydrotestosterone
805	Drostanolone
806	Ethylestrenol
807	Fluoxymesterone

Code	Drug
808	Formebulone (Formebolone)
809	Mesterolone
810	Methandienone
811	Methandranone
812	Methandriol
813	Methandrostenolone
814	Methenolone

Code	Drug
815	Methyltestosterone
816	Mibolerone
817	Nandrolone
818	Norethandrolone
819	Oxandrolone
820	Oxymesterone
821	Oxymetholone
822	Stanolone
823	Stanozolol
824	Testolactone
825	Testosterone
826	Trenbolone
827	Clostebol
828	Alpha, Beta-dihydroxy-alpha-
	androstane
829	Alpha-methyl-alpha-beta-dihydroxy-
	alpha-androstane
830	Alpha-methyl-beta-beta-dihydroxy-
	alpha-androstane
831	Alpha-methyl-beta-beta-dihydroxy-
	androstene
832	Alpha-methyl-delta 1-
	dihydrotestosterone
833	Alpha-methyl-hydroxynandrolone
834	Androstanedione

Code	Drug
835	Androstenediol
836	Androstenedione
837	Beta, beta-dihydroxy-alpha-
	androstane
838	Bolasterone
839	Calusterone
840	Delta 1-dihydrotestosterone
841	Furazabol
842	Hydroxy-Nortestosterone
843	Hydroxytestosterone
844	Mestanolone
845	Methyldienolone
846	Methyltrienolone
847	Norandrostenediol
848	Norandrostenedione
849	Norbolethone
850	Norclostebol
851	Normethandrolone
852	Stenbolone
853	Tetrahydrogestrinone
854	Boldione
855	Desoxymethyltestosterone
856	Dienedione
895	"Anabolic Steroid, Type Unknown"

# 900-995 Inhalant

Code	Drug
900	Volatile Solvents (toluene)
901	Plastic Cement (airplane glue)
902	Paint and Paint Removers
903	"Petroleum Products (gasoline,
	kerosene)"
904	Lacquer Thinners
920	Anesthetic Gases
921	Amyl Nitrite
923	Butly Nitrite
924	Nitrous Oxide
925	Ether

Code	Drug
926	Chloroform
940	Aerosols (hydrocarbon gases)
941	Hair spray
942	Insecticides
943	Glass Chillers
944	Frying Pan Lubricants
945	Cyclohexl Nitrite
946	Enflurane
947	Halothane
995	"Inhalants, Type Unknown"

# 095, 996-999 Not Reported/ Other/ Unknown

Code	Drug
095	Not Reported
996	Other
997	Tested; Results Unknown

Code	Drug	
998	Tested; Drugs Found; Type	
	Unknown/Positive	
999	Unknown if Tested for Drug	

# P22/NM21 - Transported to First Medical Facility by

FORMAT: 1 numeric SAS NAME: Person.Hospital ELEMENT VALUES:

Codes	Attributes
0	Not Transported
1	EMS Air
5	EMS Ground
3	EMS Unknown Mode
2	Law Enforcement
4	Transported Unknown Source
6	<u>Other</u>
8	Not Reported
9	<u>Unknown</u>

**Definition:** This element identifies the method of transportation this person was provided to receive treatment *or be evaluated for a possible injury* at the first hospital or medical facility.

**Remarks:** Medical Facility refers to an injury treatment facility. The treatment facility is the first medical facility to which the person is taken. Use appropriate attribute, even if the person dies en route to the treatment facility. A morgue is not an injury treatment facility.

**0** (Not Transported) is used for victims who are dead on the scene and for those who are not taken (or do not go) to a treatment facility or hospital for treatment. For example, an uninjured occupant rides along with an injured person to a treatment facility. **0** (Not Transported) would be used if the person did not go to a treatment facility directly from the scene, but was transported at a later time for injuries sustained in this crash. *If the case materials state the person was transported but does not specifically state that the transport was from the scene, then consider the person transported directly from the scene of the crash.* 

If a person is moved from the crash scene by emergency services personnel (EMS, Rescue Squad, fire department, law enforcement) as part of the transport process, consider the person as transported. For example, an injured person that is driven by emergency services to a location to be air lifted should be coded as <u>1 (EMS Air)</u>.

There can also be situations where a person leaves the crash scene (e.g. walks for help) or is moved from a crash scene by a party other than emergency services. For example, in a remote or inaccessible location a private citizen drives an injured person to an accessible location before obtaining help and acquiring emergency services assistance from this new location. Consider these situations as <u>0 (Not Transported)</u> for treatment even if the person was eventually transported for treatment from this new location.

**1 (EMS Air)** includes any air transport device. This code would be used any time air transport was used for this person. For example, if there is an indication that both air and ground transportation were used, code **1 (EMS Air)**.

5 (EMS Ground) includes transport by private and county/city-owned ambulance or rescue squad vehicles.

**3 (EMS Unknown Mode)** is used when a person is transported to a treatment facility by EMS, but the mode of transportation is not known.

2 (Law Enforcement) includes transport by state, county or local law enforcement agency vehicles.

**4 (Transported Unknown Source)** is used if you know the person was transported to a treatment facility, but you do not know the source.

**6 (Other)** includes transport by private citizens or individuals who drive themselves to the hospital or treatment facility. May be indicated on your crash report as "POV" (Privately/Personally Owned Vehicle).

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **6** (Other) if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **8 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

### 8 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code **8 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials).
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**9 (Unknown)** is used when it is reported as "unknown" whether or not this victim was taken (or went) to a hospital/treatment facility for treatment.

Check	IF	THEN
(2U3F)	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		should not equal 0.
(A551)	EMS TIME AT HOSPITAL equals 8888, 9997,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	9998,	should not equal 1, 3, 5 for any PERSON.
(P090)	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.
(P091)	TRANSPORTED TO FIRST MEDICAL FACILITY	EMS TIME AT HOSPITAL should not equal 8888,
	BY equals 1, 3, 5,	9997, 9998.
(P093)	all persons TRANSPORTED TO FIRST MEDICAL	NOTIFICATION TIME EMS, ARRIVAL TIME EMS,
	FACILITY BY equals 2, 4,	EMS TIME AT HOSPITAL must equal 8888.
(P095)	TRANSPORTED TO FIRST MEDICAL FACILITY	EMS TIME AT HOSPITAL must not equal 0000-
	BY equals 0 for every person in the case,	2399, 9999.
(P50P)	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.

Check	IF	THEN
(P51P)	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 1-6.

# Consistency Checks (FARS Only):

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME and DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.
(P52P)	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 8 or 9.
(P55P)	TRANSPORTED TO FIRST MEDICAL FACILITY	DIED AT SCENE/EN ROUTE must equal 0, 9.
	BY equals 9,	

# P23/NM22 - Died at Scene/En Route - FARS Only

# FORMAT: 1 numeric SAS NAME: Person.DOA ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
7	Died at Scene
8	Died En Route
9	Unknown

**Definition:** This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.

# **Remarks:**

**0** (Not Applicable) is used for non-fatalities and victims dying at locations other than the scene or en route (e.g., hospital, at home, etc.).

7 (Died at Scene) is used for victims who are dead on the scene of the crash.

**8 (Died En Route)** is used for victims who die en route to a hospital or treatment facility by EMS or other transport.

**9 (Unknown)** is used when you know the victim is a fatality, but you don't know if they died at the scene, en route, or at another location (e.g., home).

Check	IF	THEN
(1R1P)	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
(P50P)	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.
(P510)	EMS TIME AT HOSPITAL equals 8888, 9997,	DIED AT SCENE/EN ROUTE should not equal 8
	9998,	for any PERSON.
(P51P)	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 1-6.
(P56P)	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the
		CRASH TIME.
(P530)	EMS TIME AT HOSPITAL equals 9996,	DIED AT SCENE/EN ROUTE must equal 8 for at
		least one person.
(P53P)	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.
(P54P)	DIED AT SCENE/EN ROUTE equals 8,	EMS TIME AT HOSPITAL should not equal 8888,
		9997, 9998.

# Consistency Checks (FARS Only):

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME and DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.
(P52P)	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 8 or 9.
(P55P)	TRANSPORTED TO FIRST MEDICAL FACILITY	DIED AT SCENE/EN ROUTE must equal 0, 9.
	BY equals 9,	

# P24/NM23 - Death Date - FARS Only

# **FORMAT:** 2 sets of 2 numeric, 1 set of 4 numeric **SAS NAME:** Person.DEATH\_DA; Person.DEATH\_MO; Person.DEATH\_YR **ELEMENT VALUES:**

#### Month:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-12	Month of the Year
99	Unknown

#### Day:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-31	Day of the Month
99	Unknown

#### Year:

Codes	Attributes
8888	Not Applicable (Non-fatal)
	Actual Year of Death
9999	Unknown

**Definition:** This element records the month, day, and year of this person's death.

**Remarks:** The death must occur within **thirty 24-hour time periods** from time of the crash in order to be an applicable FARS death.

This element, although it contains three (3) pieces of information, should be treated as one element. Therefore, never leave any one portion blank when another is not.

Normally, the medical examiner or coroner is source of data for death date. If there are no data inconsistencies or errors, use the official death date as recorded on the Death Certificate. Do not change the official death date without good cause.

Check	IF	THEN
(1U1F)	INJURY SEVERITY equals 4,	DEATH DATE must not equal 888888888.
(1V0P)	DEATH MONTH or DAY equals 88, or DEATH	all must equal 8s.
	YEAR equals 8888,	
(2U1F)	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 88888888.
(2V0P)	DEATH DAY is 01-31, and DEATH MONTH is	DEATH DAY must be a valid day for DEATH
	01-12,	MONTH.
(3U0P)	DEATH DATE equals CRASH DATE, and CRASH	DEATH TIME must not be less than CRASH TIME.
	TIME is not equal to 9999,	

Check	IF	THEN
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person
		must be within 720 hours of the CRASH DATE
		and CRASH TIME.
(4V2F)	CRASH MONTH equals 12, and DEATH	DEATH YEAR must equal CRASH YEAR plus 1.
	MONTH equals 01,	
(4V3F)	CRASH MONTH equals 12,	DEATH MONTH must equal 01, 12, 88, 99.
(4V4F)	CRASH MONTH equals 02-11, and DEATH	DEATH MONTH must equal CRASH MONTH or
	MONTH is not equal to 88 or 99,	CRASH MONTH plus 1.
(4V5F)	CRASH MONTH equals 01, and DEATH	DEATH MONTH must equal CRASH MONTH or
	MONTH is not equal to 88 or 99,	CRASH MONTH plus 1 or CRASH MONTH plus 2.
(4V6P)	DEATH MONTH is not equal to blanks,	DEATH DAY and DEATH YEAR must not equal
		blanks.
(4V7P)	DEATH DAY is not equal to blanks,	DEATH MONTH and DEATH YEAR must not equal
		blanks.
(4V8P)	DEATH YEAR is not equal to blanks,	DEATH MONTH and DEATH DAY must not equal
		blanks.
(6V0P)	DEATH DATE must not be less than CRASH	
	DATE.	
(7V0F)	DEATH YEAR equals 9999,	CRASH MONTH must not be 01-11.
(8V0P)	DEATH YEAR equals 9999,	DEATH MONTH and DEATH DAY must equal 99.
(9V0P)	DEATH MONTH equals 99,	DEATH DAY must equal 99.

# Consistency Checks (FARS Only):

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME AND DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.

# P25/NM24 - Death Time - FARS Only

# FORMAT: 4 numeric SAS NAME: Person.DEATH\_HR; Person.DEATH\_MN; Person.DEATH\_TM ELEMENT VALUES:

Codes	Attributes
8888	Not Applicable (Non-fatal)
0000-2359	Valid Military Time
0099-2399	Known Hour but Unknown Minutes
9999	Unknown

**Definition:** This element identifies the hour and minute of this person's death utilizing the 24-hour clock format.

**Remarks:** If minutes are unknown, code the actual hour and "99" for the minutes. One minute after midnight is coded **0001**."

Normally, the medical examiner or coroner is the source of data for death time. If there are no data inconsistencies or errors, use the official death time as recorded on the Death Certificate. Do not change the official death time without good cause.

If it is known that the person died at the scene and the official death time or "pronounced death time" (on the Death Certificate) is known to be in error, or is greater than 30 minutes after the crash time then <u>CRASH TIME</u> is the appropriate DEATH TIME to be used.

# How to Code Midnight:

In general, code midnight as **0000**. However, there may be confusion over which day midnight falls into. Crash Time is recorded between 00:00-23:59. Midnight is coded as 00:00 to represent the beginning of a new day. This may not be the practice followed in your sources. Therefore, you have to determine which part of the day is being considered in your sources.

# End of Day

If your data sources give you a Crash Date and are consistent in talking about the end of that day, when they give the time of the crash as "midnight," "12:00-midnight," "24:00" or "00:00," then you should code Crash Time as **2359**.

# **Beginning of Day**

If your sources give a Crash Date and are consistent in referring to the beginning or early moments of that day when they give a crash time, code midnight as **0000**.

consistenc	,	
Check	IF	THEN
(1U2F)	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
(2U2F)	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
(3U0P)	DEATH DATE equals CRASH DATE, and CRASH	DEATH TIME must not be less than CRASH TIME.
	TIME is not equal to 9999,	
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person
		must be within 720 hours of the CRASH DATE
		and CRASH TIME.

Check	IF	THEN
(P56P)	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the
		CRASH TIME.

# Consistency Checks (FARS Only):

Consistency Checks (FARS Only):		
Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME AND DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.

# P26 - Related Factors – Person (Motor Vehicle Occupant) Level

**FORMAT:** 2 numeric occurring 3 times **SAS NAME:** Person.P\_SF1, Person.P\_SF2, Person.P\_SF3 **ELEMENT VALUES:** 

Codes	Attributes	
00	None	
05	Interfering with Driver	
*08	Mentally Challenged	
09	Construction/Maintenance/Utility Worker	
10	Alcohol and/or Drug Test Refused	
*18	Mother of Dead Fetus/Mother of Infant Born Post Crash	
21	Overloading or Improper Loading of Vehicle With Passengers or Cargo	
*26	Following Improperly	
89	Parked Motor Vehicle with Equipment Extending into the Travel Lane	
*28	Improper Lane Usage	
*29	Intentional Illegal Driving on Road Shoulder, in Ditch, on Sidewalk or on Median	
32	Opening Vehicle Closure into Moving Traffic or While Vehicle is in Motion	
*33	Passing Where Prohibited by Posted Signs, Pavement Markings or School Bus Displaying Warning	
	Not to Pass	
*37	Traveling on Prohibited Trafficways	
*40	Passing Through or Around Barrier	
*41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them	
*42	Failure to Signal Intentions	
*44	Driving Too Fast for Conditions or in Excess of Posted Maximum	
*45	Driving Less Than Posted Minimum	
*47	Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane	
*51	Operator Inexperience	
*52	Unfamiliar with Roadway	
56	Non-Driver Flees Scene	
*57	Improper Tire Pressure	
*59	Overcorrecting	

# Vision Obscured by:

Codes	Attributes
*60	Rain, Snow, Fog, Smoke, Sand, Dust
*61	Reflected Glare, Bright Sunlight, Headlights
*62	Curve, Hill, or Other Design Features (including traffic signs, embankment)
*63	Building, Billboard, Other Structures
*64	Trees, Crops, Vegetation
*65	Motor Vehicle (including load)
*66	Parked Vehicle
*67	Splash or Spray of Passing Vehicle
*68	Inadequate Lighting System
*69	Obstructing Angles on Vehicle
*70	Mirrors

Codes	Attributes
*72	Other Visual Obstruction

#### **Skidding, Swerving Sliding, Due to:**

Codes	Attributes
*73	Severe Crosswind
*74	Wind from Passing Truck
*75	Slippery or Loose Surface
*76	Tire Blowout or Flat
*77	Debris or Objects in Road
*78	Ruts, Holes, Bumps in Road
*80	Vehicle in Road
*81	Phantom Vehicle
*82	Pedestrian, Pedal Cyclists, or Other Non-Motorist
*83	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road

#### **Other Factors:**

Codes	Attributes
86	Emergency Services Personnel
87	Police or Law Enforcement Officer
*88	Seat Back Not in Normal Upright Position, Seat Back Reclined
91	Portable Electronic Devices
92	Person in Ambulance Treatment Compartment
99	<u>Unknown</u>

#### **\*FARS ONLY ATTRIBUTES**

**Definition:** This element identifies factors related to motor vehicle occupants other than drivers expressed by the investigating officer.

**Remarks:** Code information provided by the investigating officer associated with this person from the narrative, contributing factors/circumstances field, or citations/violations section of the case materials.

In addition to passengers in motor vehicles in-transport (<u>Unit Type</u> 1), this element includes any occupants in motor vehicles that are not in-transport (Unit Types 2, 3, 4). The attributes that are applicable to each is limited by <u>Person Type (P7)</u>.

The following lists those related factors that may be used for each <u>PERSON TYPE (P7)</u>:

Person Type	Valid Related Factors
01 (Driver of a Motor Vehicle In-Transport)	00
02 (Passenger of a Motor Vehicle In-	
Transport)	00, 05, 08, 09, <b>10,</b> 18, 32, 56, 86-89, 92, 99
03 (Occupant of a Motor Vehicle Not In-	00, 05, 08, 09, <b>10,</b> 18, 21, 26, 28, 29, 32, 33, 37, 40-42, 44, 45,
Transport)	47, 51, 52, 56-70, 72-78, 80-83, 86-89, 91, 92, 99
09 (Unknown Occupant Type in a Motor	
Vehicle In-Transport	00, 05, 08, 09, <b>10,</b> 18, 32, 86-89, 92, 99

For forms with <u>PERSON TYPE</u> **01 (Driver of a Motor Vehicle In-Transport)**, zero-fill all three fields. The related factors for drivers are captured in the <u>Related Factors-Driver Level</u>.

# **Coding Hierarchy:**

When more than three attributes apply, select the attributes that have not been previously captured under other related elements.

**00 (None)** is used when no applicable related factors are noted in the case materials. Zero-fill all fields. Also, use **00 (None)** to complete the remaining fields when you will be recording less than three related factors. DO NOT leave any remaining fields blank.

**05 (Interfering with Driver)** is used when the case materials identify that the occupant of a motor vehicle intransport was interfering with the driver.

**Examples include:** 

- Obstructing the driver's view.
- Striking the driver with their body or other object.
- Rambunctious individuals who cause the driver to be inattentive, even without touching the driver or controls in the vehicle.
- A motorcycle passenger (or other cyclist) shifting their weight or affecting the driver's control.

**\*08 (Mentally Challenged)** is used when the case materials identify the occupant of the motor vehicle has a documented mental illness or intellectual disorder noted by the officer.

**09 (Construction/Maintenance/Utility Worker)** is used if the case materials identify this person was an occupant of a working motor vehicle. This includes highway department, contractor, or utility company personnel.

10 (Alcohol and/or Drug Test Refused) is used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to administer a test post-refusal. Because of this, it is possible to code 10 (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

**18 (Mother of Dead Fetus/Mother of Infant Born Post Crash)** is used when the case materials identify that this occupant is the mother of a fetus that died in or as a result of this crash or it is identified that this occupant gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate individual and, thus, is not counted as a separate occupant in the crash.

**21 (Overloading or Improper Loading of Vehicle with Passengers or Cargo)** is used when the case materials identify this occupant improperly loaded the vehicle occupants or cargo into or on the vehicle. This may only be used on the PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11</u> (Front Seat, Left Side).

# Examples include:

- The vehicle had more than 3 passengers in the front seat.
- There were persons riding on the exterior of the vehicle.
- The vehicle was carrying occupants that were sitting or standing on the rails, tailgate of a pickup or improperly sitting in the bed of a pickup.
- More than one person secured in a belt restraint.
- An unsecured or uncovered load violation.
- The vehicle's trunk was open with extra-large cargo protruding.
- The case materials state the vehicle was overweight, over length or illegally or improperly oversize.

\*26 (Following Improperly) is used when the case materials identify this occupant followed too closely. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle</u> Not In-Transport) and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

Examples include:

- Following a fire truck too closely.
- Failure to maintain a safe passing distance between trucks.
- Following another vehicle in a caravan too closely to allow entry by a merging vehicle.
- Following too close, generally. Also code for cases where the case materials document the vehicle was following too closely for weather conditions.

**89 (Parked Motor Vehicle with Equipment Extending into the Travel Lane)** is used when the case materials identify this occupant parked a vehicle but extended equipment (e.g., extended mirrors) attached to the vehicle was still in the travel lane. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03</u> (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION <u>11 (Front Seat, Left Side)</u>.

**NOTE:** This should not be used for loads of vehicles extending into the travel lane such as attached trailers or oversized cargo. In these cases, the vehicle is in-transport and not parked.

\*28 (Improper Lane Usage) is used when the case materials identify this occupant failed to properly keep their vehicle in the appropriate lane of travel. This attribute does not apply to vehicles that run off the roadway or that cross the median. Also do not use this value for a vehicle that leaves its lane because of a previous impact or at the direction of a flagman or police officer. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

Examples include:

- A vehicle that "drove left of center" striking an oncoming vehicle (includes both crossing a painted centerline and failing to maintain the proper side of a two-lane roadway with no painted centerline).
- A vehicle that goes straight in a turn lane.
- A vehicle that was using more than one lane on its side of a multi-lane highway.
- Trucks, buses, or slow vehicles failing to keep right for faster moving traffic.

For situations where the vehicle is on the wrong side as a result of a passing maneuver, see <u>33 (Passing Where</u> <u>Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass</u>).

\*29 (Intentional Illegal Driving on Road Shoulder, In Ditch, on Sidewalk or on Median) is used when the case materials identify this occupant was intentionally illegally driving in a location off of the roadway (e.g. shoulder, median, roadside, etc.) This attribute should not be used when the vehicle enters one of these locations as part of an avoidance maneuver or as a result of a critical or harmful event. Also do not use this value for a vehicle that leaves its lane at the direction of a flagman or police officer. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

**32 (Opening Vehicle Closure into Moving Traffic or While Vehicle is in Motion)** is used when the case materials identify this occupant improperly opened their door into moving traffic.

# **Examples include:**

- An occupant opens a side door into moving traffic.
- An occupant opening the door at a stop light.
- An occupant of a parked motor vehicle opening a door into the travel lane.

\*33 (Passing Where Prohibited by Posted Signs, Pavement Markings or School Bus Displaying Warning Not to Pass) is used when the case materials identify this occupant passed improperly by executing a passing maneuver where prohibited as designated by traffic controls or rules of the road. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

Examples include:

- A vehicle passing stopped a school bus.
- A vehicle crossing over the solid line to pass another vehicle.
- Passing a vehicle stopped to allow a pedestrian movement.

**\*37 (Traveling on Prohibited Trafficways)** is used when the case materials identify this occupant was driving on an open trafficway that prohibited travel for the kind of vehicle they were operating. For example, driving a truck where prohibited, or operating a vehicle with hazardous materials cargo where prohibited. For trucks or slower vehicles using the left lane when prohibited, use <u>28 (Improper Lane Usage)</u>. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

\*40 (Passing Through or Around Barrier) is used when the case materials identify this occupant drove out of our around a "demarcated" area. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle. For example, a working vehicle backing out of the closed portion of the work zone into an open travel lane.

\*41 (Failure to Observe Warnings or Instructions on Vehicles Displaying Them) is used when the case materials identify this occupant failed to heed warnings or follow instructions displayed on other vehicles. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

# Examples include:

- Construction instructions such as arrows directing traffic mounted on a vehicle
- Instructions on or warnings by emergency vehicles (ambulances, fire trucks, police cars)
- Failure to observe a wide right-turn warning on trucks or buses
- Failure to heed hazard lights on a disabled vehicle or a school bus arm

**\*42 (Failure to Signal Intentions)** is used when the case materials identify this occupant failed to signal their intentions. This attribute includes a failure to signal by either lamp turn signal or hand. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

\*44 (Driving Too Fast for Conditions or In Excess of Posted Maximum) is used when the case materials identify this occupant was operating the vehicle too fast for certain road conditions or exceeding the posted speed limit. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor</u> <u>Vehicle Not In-Transport</u>) and in SEATING POSITION <u>11 (Front Seat, Left Side</u>) in a working motor vehicle.

\*45 (Driving Less Than Posted Minimum) is used when the case materials identify this occupant was driving too slowly, or so as to impede traffic. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle.

\*47 (Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane) is used when the case materials identify this occupant was making an improper turn from a turn lane. To distinguish from 28 (Improper Lane Usage), police officer must indicate the occupant's intention to turn to use this attribute. This may only be used on the Person Form for the occupant that is PERSON TYPE 03 (Occupant of a Motor Vehicle Not In-Transport) and in SEATING POSITION 11 (Front Seat, Left Side) in a working motor vehicle.

\*51 (Operator Inexperience) is used when the case materials identify this occupant lacks experience operating the vehicle they were in at the time of the crash. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or state of residence. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11</u> (Front Seat, Left Side) in a working motor vehicle.

**Examples include:** 

- A new/young recently licensed driver
- A driver inexperienced in the operation of a large truck or bus (based on the judgment of the police officer)
- A person driving a rental car where they are unfamiliar with the vehicle
- The driver parks the vehicle where parking is illegal because they are inexperienced.

**\*52 (Unfamiliar with Roadway)** is used when the case materials identify this occupant is unfamiliar with the area/location where they were when the crash occurred. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or state of residence. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

# Examples include:

- A driver from out-of-state is unfamiliar with area.
- A driver operating on a new stretch of road or section of road altered because of construction and/or detour.
- The driver parks the vehicle where parking is illegal because they are unfamiliar with the location.

**56 (Non-Driver Flees Scene)** is used when the case materials identify that this non-driver left the scene of a Hitand-Run crash.

**Examples include:** 

- A passenger of motor vehicle in-transport fled scene on foot.
- Occupant of an involved parked vehicle leaves by driving their vehicle from the scene.
- An involved motor vehicle in-transport is driven away by a passenger in that vehicle.

**\*57 (Improper Tire Pressure)** is used when the case materials identify that improper tire pressure was present in one or more tires of this vehicle. Improper tire pressure is not a defect, but rather the irresponsibility of the person. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

**\*59 (Overcorrecting)** is used when the case materials identify this occupant "overcorrected" based on the judgment of the police officer. This must be stated by the officer in the narrative or *Police Crash Report* field to be coded. Overcorrecting and Oversteering are technically different but this attribute may be selected for a reported combination of the two (e.g. overcorrecting/ oversteering) *on the Police Crash Report*. This may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

# **Vision Obscured By:**

The following set of attributes identifies visual obstructions noted in the case materials. These attributes may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

- \*60 (Rain, Snow, Fog, Smoke, Sand, Dust)
- \*61 (Reflected Glare, Bright Sunlight or Headlights)
- \*62 (Curve, Hill or Other Design Features [including traffic signs, embankment])
- \*63 (Building, Billboard or Other Structures)
- \*64 (Trees, Crops or Vegetation)
- \*65 (Motor Vehicle [including load])

**Examples include:** 

- A car stopped on the roadway.
- A tractor-trailer in-transport on the road.
- A school bus stopped for the purpose of loading and/or unloading children.

\*66 (Parked Vehicle)

- \*67 (Splash or Spray of a Passing Vehicle)
- \*68 (Inadequate Lighting System)

\*69 (Obstructing Angles on the Vehicle) is used when the case materials identify obstructing angles on this person's vehicle. This attribute should not to be confused with visual obstructions from other vehicles. (See <u>65</u> (Motor Vehicle [including load]) and 66 (Parked Vehicle).

**\*70 (Mirrors)** is used when the case materials identify that vision was obscured by any mirrors attached to or within a motor vehicle (e.g., rear view mirror, side mirror, etc.).

**\*72 (Other Visual Obstruction)** is used when the case materials identify that vision was obscured something other than previously listed. For example, a trailer that has been left parked on the side of the road by a truck or vehicle.

# Skidding, Swerving, Sliding Due To:

This set of attributes is applicable to the occupant that attempted to avoid one of the following or whose ability to control the vehicle was affected by one of the following. These attributes may only be used on the Person Form for the occupant that is PERSON TYPE <u>03 (Occupant of a Motor Vehicle Not In-Transport)</u> and in SEATING POSITION <u>11 (Front Seat, Left Side)</u> in a working motor vehicle.

**\*73 (Severe Crosswind)** is used when the case materials identify this occupant's ability to control the vehicle was affected by severe crosswinds.

**\*74 (Wind from Passing Truck)** is used when the case materials identify this occupant's ability to control the vehicle was affected by winds produced by a passing truck.

\*75 (Slippery or Loose Surface) is used when the case materials identify this occupant's ability to control the vehicle was affected by the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice, or snow (see <u>83 (Ice,</u> <u>Snow, Slush, Water, Sand, Dirt, Oil or Wet Leaves on Road)</u>).

# Examples include:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.

**\*76 (Tire Blowout or Flat)** is used when the case materials identify this occupant's ability to control the vehicle was affected by a tire blowout or flat.

**\*77 (Debris or Objects in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of debris in the road. Examples would include: nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

**\*78 (Ruts, Holes, Bumps in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of a road surface anomalies such as ruts, holes, dips or bumps.

**\*80 (Vehicle in Road)** is used when the case materials identify this driver attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that remain at the scene.

**\*81 (Phantom Vehicle)** is used when the case materials identify this driver attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

**\*82 (Pedestrian, Pedal Cyclist, or Other Non-Motorist)** is used when the case materials identify this driver attempted to avoid or lost control as a result of a pedestrian, a pedal cyclist (bicyclist) or other type of non-motorist.

**\*83 (Ice, Snow, Slush, Water, Sand, Dirt, Oil or Wet Leaves on Road)** is used when the case materials identify this occupant's ability to control the vehicle was affected by a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see <u>75 (Slippery or Loose Surface)</u>.

# **Other Factors:**

**86 (Emergency Services Personnel)** is used when the case materials identify that this person was a fire fighter, wrecker service worker, or Emergency Medical Service (EMS) personnel. This includes personnel located in the cab and in the treatment compartment of an ambulance.

**Note:** for persons identifiable as EMS personnel located in the ambulance treatment compartment, also use RELATED FACTORS - PERSON (MV OCCUPANT) attribute <u>92 (Person in Ambulance Treatment</u> <u>Compartment)</u>.

**87 (Police or Law Enforcement Officer)** is used when the case materials identify that this person was a police or law enforcement officer working at the time of the crash. The officer may be affiliated at the Federal, State, or local law enforcement level. This would also include: military and park police, border patrol, and all other sworn law enforcement officers.

**\*88 (Seat Back Not in Normal Upright Position, Seat Back Reclined)** is used when the case materials identify that this occupant's seat back was not in a normal, safe driving/seating position prior to the crash.

**91 (Portable Electronic Devices)** is used when the case materials identify that this occupant had an electronic device (Cell phone, MP3 Player, PDA, etc.) in the vehicle that was somehow related to the crash occurrence.

**92 (Person in Ambulance Treatment Compartment)** is used when the case materials identify that this occupant was located in the ambulance treatment compartment. For example: patients, EMS personnel, and other person accompanying patient.

**Note:** for persons identifiable as EMS personnel also use RELATED FACTORS - PERSON (MV OCCUPANT) attribute <u>86 (Emergency Services Personnel).</u>

**99 (Unknown)** is used when the circumstances surrounding the crash are unknown and reported as "unknown" by the investigating officer. In these circumstances, nine-fill all fields. If **99 (Unknown)** is used for any field, ALL fields must be **99 (Unknown)**. DO NOT leave any remaining fields blank.

#### \*FARS ONLY ATTRIBUTES

Check	IF	THEN
(1W0P)	any RELATED FACTORS-PERSON LEVEL equals 99,	all factors must equal 99.
(2W0P)	any RELATED FACTORS-PERSON LEVEL equals blanks,	all factors must equal blanks.
(3W0P)	any RELATED FACTORS-PERSON LEVEL equals 00,	all subsequent factors must equal 00.
(4W0P)	A RELATED FACTORS-PERSON LEVEL (MV Occupant) between 05 and 92 can be used only once per person form.	
(580F)	FIRST HARMFUL EVENT equals 14, and RELATED FACTORS- PERSON (MV OCCUPANT) LEVEL does not equal 32, 89 for at least one occupant in the not in-transport motor vehicle involved in the first harmful event,	RELATION TO TRAFFICWAY should not equal 01.
(5M0F)	PERSON TYPE equals 01,	all RELATED FACTORS-PERSON LEVEL (MV Occupant) must equal 00.
(5M0G)	SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09,	RELATED FACTORS-PERSON (MV OCCUPANT) LEVEL should equal 86 or 92.
(5M0H)	PERSON TYPE equals 1,	RELATED FACTORS – PERSON (MV OCCUPANT) LEVEL must equal 0.
(5NOF)	PERSON TYPE equals 02,	RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 21, 26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51-53, 57-70, 72-78, 80-83, 91.
(7M0F)	PERSON TYPE equals 03,	RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 21, 26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51, 52, 57-70, 72-78, 80-83, 91.

Check	IF	THEN
(A65F)	FIRST HARMFUL EVENT equals 14, and	CRASH TYPE should equal 15, 92 or 98 for the
	RELATED FACTORS - PERSON (MV	in-transport vehicle involved in the First Harmful
	OCCUPANT) LEVEL equals 32 or 89 for an	Event.
	occupant of the parked vehicle involved in	
	the first harmful event,	
(A66F)	FIRST HARMFUL EVENT equals 14, and CRASH	RELATED FACTORS - PERSON (MV OCCUPANT)
	TYPE equals 01-10 or 14,	LEVEL must not equal 32 or 89 for any occupant
		of the parked vehicle involved in the First
		Harmful Event.
(CLOP)	PERSON TYPE equals 09,	RELATED FACTORS-PERSON LEVEL (MV
		Occupant) must not equal 21, 26, 28, 29, 33, 37,
		40-42, 44, 45, 47, 51, 52, 56-70, 72-78, 80-83,
		91.

# Consistency Check (FARS Only):

Check	IF	THEN
(5W0P)	RELATED FACTORS-PERSON LEVEL equals 18,	SEX must equal 2, and AGE must be greater than 012.

# Person Level (Not A Motor Vehicle Occupant) Data Elements

NM1 – State Number – FARS Only

NM2 – Consecutive Number – FARS Only

NM3/P4 – Person Number

NM4 – Vehicle Number of Motor Vehicle Striking Non-Motorist

NM5/P5 – Age

<u>NM6/P6 – Sex</u>

<u>NM7 – Person Type</u>

NM8/P8 – Injury Severity

<u>NM9 – Pedestrian/Bike Typing</u>

NM10 – Non-Motorist Location at Time of Crash

NM11 – Non-Motorist Action/Circumstances

<u>NM12 – Non-Motorist Contributing Circumstances</u>

NM13 – Non-Motorist Safety Equipment

NM14/D23 – Condition (Impairment) at Time of Crash

NM15/P16 – Police Reported Alcohol Involvement

NM16/P17 – Method of Alcohol Determination by Police – FARS Only

NM17/P18 – Alcohol Test

NM18/P19 – Police Reported Drug Involvement

NM19/P20 – Method of Drug Determination by Police – FARS Only

NM20/P21 – Drug Test

NM21/P22 – Transported to First Medical Facility By

NM22/P23 – Died at Scene/En Route – FARS Only

NM23/P24 – Death Date – FARS Only

NM24/P25 – Death Time – FARS Only

NM25 – Related Factors – Person (Not a Motor Vehicle Occupant) Level

## NM3/P4 - Person Number

### FORMAT: 3 numeric SAS NAME: Person.PER\_NO ELEMENT VALUES:

Codes	Attributes
001-999	Assigned Number

**Definition:** This element identifies a number for persons that are not in a motor vehicle in consecutive order.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P4. Please see <u>P4 Person Number</u> for remarks.

Check	Language	
(CSI6)	For each VEHICLE NUMBER, PERSON NUMBERS must be consecutive, beginning with 001 and	
	with no gaps.	
(CSI7)	PERSON NUMBERS for persons not in motor vehicles must be consecutive, beginning with 001	
	and with no gaps.	

# NM4 – Vehicle Number of Motor Vehicle Striking Non-Motorist

#### FORMAT: 3 numeric SAS NAME: Person.STR\_VEH ELEMENT VALUES:

Codes	Attributes
001-998	Assigned Vehicle Number
999	<u>Unknown</u>

**Definition:** This data element captures the in-transport vehicle that made contact with this non-motorist.

**Remarks:** This only applies to those non-motorists who are not occupants of a motor vehicle. If a non-motorist is contacted by a parked or working motor vehicle that was propelled by an in-transport vehicle, record the vehicle number of the in-transport vehicle.

In cases where more than one vehicle makes contact with a non-occupant, code the number of the vehicle that caused the most significant injury. If uncertain, code the number of the vehicle that made contact first.

**999 (Unknown)** is used when the investigating officer indicates that it is unknown which vehicle struck the non-motorist.

Check	IF	THEN
(050P)	PERSON TYPE equals 04-08, 19, and NUMBER	VEHICLE NUMBER OF MOTOR VEHICLE
	OF VEHICLE FORMS SUBMITTED equals 001,	STRIKING NON-MOTORIST must equal 001.
(060P)	VEHICLE NUMBER OF MOTOR VEHICLE	the VEHICLE NUMBER OF MOTOR VEHICLE
	STRIKING NON-MOTORIST is not equal to 000,	STRIKING NON-MOTORIST must equal some
	999,	VEHICLE NUMBER in the case, and the UNIT
		TYPE must equal 1.
(A612)	PERSON TYPE equals 04, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	10, 49, or 74 for that vehicle number in the
	MOTORIST equals,	CRASH EVENTS table.
(A613)	PERSON TYPE equals 05, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	08 for that vehicle number in the CRASH
	MOTORIST equals,	EVENTS table.
(A614)	PERSON TYPE equals 06, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	09 for that vehicle number in the CRASH
	MOTORIST equals,	EVENTS table.
(A615)	PERSON TYPE equals 07, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	09 for that vehicle number in the CRASH
	MOTORIST equals,	EVENTS table.
(A616)	PERSON TYPE equals 08, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	15 for that vehicle number in the CRASH
	MOTORIST equals,	EVENTS table.
(A617)	PERSON TYPE equals 10, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING NON-	08 for that vehicle number in the CRASH
	MOTORIST equals,	EVENTS table.

Check	IF	THEN
(A618)	PERSON TYPE equals 19, and <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST equals,	at least one SEQUENCE OF EVENTS must equal 99 for that vehicle number in the CRASH EVENTS table.
(A619)	the total count of <i>persons with</i> PERSON TYPE equal to 05 <i>that have the same VEHICLE</i> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST is,	the number of events equal to 08 <i>for that vehicle</i> in the CRASH EVENTS table should equal
(A61A)	the total count of PERSON TYPES is equal to 08 for the vehicle in <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is	the number of events equal to 15 in the CRASH EVENTS table should equal for that vehicle.
(A61B)	the total count of PERSON TYPES is equal to 10 for the vehicle in <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is	the number of events equal to 08 in the CRASH EVENTS table should equal for that vehicle.
(A61G)	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
(A61H)	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON- MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
(A61J)	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 08, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the FIRST HARMFUL EVENT,	CRASH TYPE should not equal 13 for this vehicle.
(A61K)	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(PB30)	PEDESTRIAN/BIKE TYPING -PEDESTRIAN CRASH TYPE equals 220,	at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.

Check	IF	THEN
(PB31)	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 147, 157 or 357,	at least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB32)	PEDESTRIAN/BIKE TYPING -PEDESTRIAN CRASH TYPE equals 742,	at least one DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB40)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 610,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, or 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB41)	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 215,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08 or 09 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB42)	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 111, 211 or 212,	at least one PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB43)	If PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 112, 151, 213, 214, 217 or 218,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10, <i>16</i> , or 17 for the vehicle number identified in this person's <i>VEHICLE</i> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB45)	PEDESTRIAN/BIKE TYPING -PEDESTRIAN CRASH TYPE equals 781 or 782,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11 or 17 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB46)	PEDESTRIAN/BIKE TYPING -BICYCLIST CRASH TYPE equals 221-225,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB49)	PERSON TYPE equals 05 or 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - PEDESTRIAN CRASH TYPE should equal 211-214 or 219.

Check	IF	THEN
(PB50)	PERSON TYPE equals 05 or 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795 or 799.
(PB52)	PERSON TYPE equals 06 or 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - BICYCLIST CRASH TYPE should equal 610.
(PB56)	PEDESTRIAN/BIKE TYPING - PEDESTRIAN CRASH TYPE equals 791, 792, 794, 795,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PBAO)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.
(PBA1)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217 or 218, and VEHICLE NUMBER - VEHICLE LEVEL equals <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.
(PBA5)	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15, 16, or 17 for the vehicle number that struck this non-motorist.
(PBA6)	PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 for the vehicle number that struck this non-motorist.
(PBA7)	PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 for the vehicle number that struck this non-motorist.

## FORMAT: 3 numeric SAS NAME: Person.Age ELEMENT VALUES:

Codes	Attributes
	Blank
000	Less than One Year
001-120	Actual Age*
998	Not Reported
999	Unknown

**Definition:** This element identifies the person's age, in years, with respect to the person's last birthday.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P5. Please see <u>P5 Age</u> for remarks.

Check	IF	THEN
(5W0P)	RELATED FACTORS-PERSON LEVEL equals 18,	SEX must equal 2, and AGE must be greater than 012.
(7P0F)	PERSON TYPE equals 01,	AGE must not be less than 002.
(9L0F)	PERSON TYPE equals 01, and RELATED FACTORS-DRIVER LEVEL equals 12,	SEX must equal 2, and AGE must be greater than 012.
(D060)	NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 1-8, and PERSON TYPE equals 01,	AGE should not be less than 015.
(D620)	NON-CDL LICENSE TYPE equals 7,	AGE (for the driver) should equal 014-016.
(D630)	NON-CDL LICENSE TYPE equals 2,	AGE (for the driver) should equal 015-017.
(D640)	AGE equals 014-017, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 2, 7.
(D650)	AGE equals 018-120, and PERSON TYPE equals 01,	NON-CDL LICENSE TYPE should equal 1.
(P010)	PERSON TYPE equals 01	AGE should not be less than 012.
(P020)	PERSON TYPE equals 02, 03, 09, and PROTECTION SYSTEM USE equals 04, 10-12,	AGE should be less than 010, or equal to 999.
(P1A0)	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.
(U120)	UNLIKELY: AGE should not be greater than 094, unless equal to 998, 999.	
(U360)	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.	

## FORMAT: 1 numeric SAS NAME: Person.Sex ELEMENT VALUES:

Codes	Attributes
1	Male
2	Female
8	Not Reported
9	Unknown

**Definition:** This element identifies the sex of the person involved in the crash.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P6. Please see <u>P6 Sex</u> for remarks.

Check	IF	THEN
(5W0P)	RELATED FACTORS-PERSON LEVEL equals 18,	SEX must equal 2, and AGE must be greater than
		012.
(9L0F)	PERSON TYPE equals 01, and RELATED	SEX must equal 2, and AGE must be greater than
	FACTORS-DRIVER LEVEL equals 12,	012.
(U340)	UNLIKELY: HIT-AND-RUN equals 0 or 9, and	
	SEX equals 9.	

# NM7 - Person Type

## FORMAT: 2 numeric SAS NAME: Person.PER\_TYP ELEMENT VALUES:

Codes	Attributes
04	Occupant of a Non-Motor Vehicle Transport Device
05	Pedestrian
06	Bicyclist
07	Other Cyclist
08	Person on Personal Conveyances
10	Persons In/On Buildings
19	Unknown Type of Non-Motorist

**Definition:** This element describes the role of this person involved in the crash.

#### **Remarks:**

**04 (Occupant of a Non-Motor Vehicle Transport Device)** refers to persons riding in an animal-drawn conveyance, on an animal, or injured occupants of railway trains, etc.

**05 (Pedestrian)** is used for all pedestrians except for those in/on personal conveyances (See <u>08 (Persons on</u> <u>Personal Conveyances)</u> below) and in buildings (See <u>10 (Persons In/On Buildings)</u> below). A *person* pushing a vehicle *or being carried by a pedestrian* should be coded **Pedestrian**.

**06 (Bicyclist)** is used for a two-wheel, non-motorized cycle. *This includes* all persons (operator and passengers) on a bicycle *and a person being pulled by a bicycle (e.g., in a wagon or bike trailer)*.

07 (Other Cyclist) is used for unicycles and tricycles.

**08** (Person on Personal Conveyances): This attribute should be used for pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

#### Inclusions:

2.

- 1. Rideable toys
  - a. Roller Skates, In-Line skates
  - b. Skateboards
  - c. Skates
  - d. Baby carriage
  - e. Scooters
  - f. Toy Wagons
  - Motorized rideable toys
    - a. Motorized skateboard
    - b. Motorized toy car
- 3. Devices for personal mobility assistance
  - a. Segway-style devices
  - b. Motorized and non-motorized <u>wheelchairs</u>

c. Handicapped scooters

#### **Exclusions:**

- 1. Golf cart
- 2. Low Speed Vehicles (LSVs)
- 3. Go-carts
- 4. Minibike
- 5. "Pocket" motorcycles
- 6. Motor scooters
- 7. Moped

Wheelchair: use the term, "wheelchair" as follows:

"Wheelchair - A mobility aid, usable indoors, and designed for and used by individuals with mobility impairments, whether operated manually or powered." Therefore, all wheelchair users, motorized or not, are **08 (Persons on Personal Conveyances)**.

## **RATIONALE:**

Some states have passed legislation to classify operators of motorized wheelchairs as "pedestrians" and others as "motor vehicles." Also, there seems to be an increase in the variety of forms these devices take (if not in the actual number in use). Some resemble 3-wheeled scooters; others small four-wheel carts; still others look like the typical human-powered wheelchair. They are in use by individuals who are unable to walk, who have limited walking ability, or who need to avoid walking for reasons of health or stamina. Since these devices simply supply a form of assisted "walking" for such persons, their legitimate users may be seen as "other persons on personal conveyances" just as other non-motorists moving along a sidewalk, walking with or against traffic on the edge of a road, crossing the roadway, or turning into a driveway.

**10 (Persons In/On Buildings)** is used for a person inside of or on a building who is struck by a motor vehicle. *directly or by way of an object set in motion (e.g., crash debris as a vehicle penetrates a wall).* **10 (Persons In/On Buildings)** takes precedence over attributes "05-08."

**19 (Unknown Type of Non-Motorist)** is used only when it cannot be determined which attribute is applicable for persons not in motor vehicles.

Check	IF	THEN
(050P)	PERSON TYPE equals 04-08, 19, and NUMBER	VEHICLE NUMBER OF MOTOR VEHICLE
	OF VEHICLE FORMS SUBMITTED equals 001,	STRIKING NON-MOTORIST must equal 001.
(1M1F)	RELATED FACTORS-PERSON LEVEL equals 13,	PERSON TYPE should equal 08.
(1N0F)	PERSON TYPE equals 06,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 09, 13, 69, 70, 86, 90.
(1N1F)	PERSON TYPE equals 10,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 09, 21, 37, 40-42, 51,
		52, 56, 57, 60-70, 72-78, 80-83, 90, 91.
(1P1F)	PERSON TYPE equals 04, 05, 08, 10, or 19	NON-MOTORIST LOCATION AT TIME OF CRASH
		should not equal 16 for this person.
(1P2F)	PERSON TYPE equals 10,	NON-MOTORIST LOCATION AT TIME OF CRASH
		must equal 25.

Check	IF	THEN
(1P3F)	PERSON TYPE equals 10,	NON-MOTORIST ACTION/CIRCUMSTANCES
		must not equal 01-12, 16, and NON-MOTORIST
		CONTRIBUTING CIRCUMSTANCES must not
		equal 01-20.
(1P4F)	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES
( )		must not equal 04, 12.
(1P5F)	PERSON TYPE equals 06-08, 19,	NON-MOTORIST ACTION/CIRCUMSTANCES
(1.51)		must not equal 04.
(1P7F)	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES
(1171)		should not equal 10, 11.
(1P8F)	PERSON TYPE equals 06, 07,	NON-MOTORIST ACTION/CIRCUMSTANCES
(1101)		should not equal 10-12.
(1005)		
(1P9F)	PERSON TYPE equals 08,	NON-MOTORIST ACTION/CIRCUMSTANCES
((		should not equal 11.
(1P0G)	PERSON TYPE equals 05,	NON-MOTORIST CONTRIBUTING
		CIRCUMSTANCES must not equal 07, 08, 10, 13-
		18, 20.
(1P1G)	PERSON TYPE equals 19,	NON-MOTORIST ACTION/CIRCUMSTANCES
		should not equal 11, 12.
(1P3G)	PERSON TYPE equals 04, 06, 07,	NON-MOTORIST CONTRIBUTING
		CIRCUMSTANCES should not equal 04.
(1P4G)	PERSON TYPE equals 04, 06-08, 19,	NON-MOTORIST CONTRIBUTING
		CIRCUMSTANCES should not equal 05.
(1P5G)	PERSON TYPE equals 08,	NON-MOTORIST CONTRIBUTING
		CIRCUMSTANCES should not equal 20.
(1P6G)	PERSON TYPE equals 04, 06-08, 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
. ,		must not equal 03.
(1P7G)	PERSON TYPE equals 05-07, 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
< - <i>i</i>		should not equal 04.
(1P8G)	PERSON TYPE equals 10,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
(1.00)		should not equal 01-10, 96.
(1PJ1)	NON-MOTORIST LOCATION AT TIME OF	the PERSON TYPE for this person should equal
(1, 51)	CRASH equals 16,	06 or 07.
(3P0F)	PERSON TYPE equals 03-08, 10, 19,	INJURY SEVERITY should not equal 6.
(4X3A)	NON-MOTORIST CONTRIBUTING	PERSON TYPE must equal 05.
. ,	CIRCUMSTANCES equals 11,	
(550F)	FIRST HARMFUL EVENT equals 08,	at least one person must have PERSON TYPE
		equal 05, 10.
(560F)	FIRST HARMFUL EVENT equals 09,	at least one person must have PERSON TYPE
(0001)	······································	equal to 06, 07.
(590F)	FIRST HARMFUL EVENT equals 15,	at least one Person Level form must have a
(3301)		PERSON TYPE of 08.
(5705)		
(5Z0F)	SEQUENCE OF EVENTS equals 08,	at least one person must have PERSON TYPE
(6705)		equal to 05, 10.
(6Z0F)	SEQUENCE OF EVENTS equals 09,	at least one person must have PERSON TYPE
		equal to 06, 07.

Check	IF	THEN
(880F)	RELATED FACTORS-CRASH LEVEL equals 16,	there must be a Person Level (Not a MV
		Occupant) form with PERSON TYPE equal to 04-
		08, 19.
(890F)	RELATED FACTORS-CRASH LEVEL equals 15,	there must be a Person Level (Not a MV
		Occupant) form with PERSON TYPE equal to 04-
		08, 10, 19.
(8M0F)	PERSON TYPE equals 04,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 13, 86, 90.
(8Q0F)	PERSON TYPE equals 08,	RELATED FACTORS-PERSON LEVEL must not
		equal 09, 86, 90.
(8T0F)	NON-MOTORIST SAFETY EQUIPMENT	PERSON TYPE should equal 06-08.
	Subfield 1 Non-Motorist Helmet Use equals 2	
(8Z0F)	any SEQUENCE OF EVENTS equals 15,	at least one Person Level (Not a MV Occupant)
		form must have a PERSON TYPE code of 08.
(9M0F)	PERSON TYPE equals 05,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 13, 21, 26, 40, 42, 51,
		52, 57, 68-70, 73-83.
(9P0F)	PERSON TYPE equals 04-08, 10, 19,	EXTRICATION must not equal 1, 9.
(A612)	PERSON TYPE equals 04, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	10, 49, or 74 for that vehicle number in the
	NON-MOTORIST equals,	CRASH EVENTS table.
(A613)	PERSON TYPE equals 05, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	08 for that vehicle number in the CRASH
	NON-MOTORIST equals,	EVENTS table.
(A614)	PERSON TYPE equals 06, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	09 for that vehicle number in the CRASH
	NON-MOTORIST equals,	EVENTS table.
(A615)	PERSON TYPE equals 07, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	09 for that vehicle number in the CRASH
	NON-MOTORIST equals,	EVENTS table.
(A616)	PERSON TYPE equals 08, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	15 for that vehicle number in the CRASH
	NON-MOTORIST equals,	EVENTS table.
(A617)	PERSON TYPE equals 10, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	08 for that vehicle number in the CRASH
	NON-MOTORIST equals,	EVENTS table.
(A618)	PERSON TYPE equals 19, and VEHICLE	at least one SEQUENCE OF EVENTS must equal
	NUMBER OF MOTOR VEHICLE STRIKING	99 for that vehicle number in the CRASH
	NON-MOTORIST equals,	EVENTS table.
(A619)	the total count of <i>persons with</i> PERSON TYPE	the number of events equal to 08 <i>for that</i>
	equal to 05 that have the same VEHICLE	vehicle in the CRASH EVENTS table should equal
	NUMBER OF MOTOR VEHICLE STRIKING	·
	NON-MOTORIST is,	

Check	IF	THEN
(A61A)	the total count of PERSON TYPES is equal to	the number of events equal to 15 in the CRASH
	08 for the vehicle in VEHICLE NUMBER OF	EVENTS table should equal for that
	MOTOR VEHICLE STRIKING NON-MOTORIST is	vehicle.
(A61B)	the total count of PERSON TYPES is equal to	the number of events equal to 08 in the CRASH
	10 for the vehicle in VEHICLE NUMBER OF	EVENTS table should equal for that
	MOTOR VEHICLE STRIKING NON-MOTORIST is	vehicle.
(A61G)	the FIRST HARMFUL EVENT equals 08, and	CRASH TYPE should not equal 13 for this vehicle.
	PERSON TYPE equals 05, and NON-MOTORIST	
	LOCATION AT THE TIME OF CRASH equals 21,	
	22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF	
	MOTOR VEHICLE STRIKING NON-MOTORIST is	
	involved in the first harmful event,	
(A61H)	the FIRST HARMFUL EVENT equals 09, and	CRASH TYPE should not equal 13 for this vehicle.
	PERSON TYPE equals 06, 07, and NON-	
	MOTORIST LOCATION AT THE TIME OF	
	CRASH equals 21, 22, 24, 25, 28, and the	
	VEHICLE NUMBER OF MOTOR VEHICLE	
	STRIKING NON-MOTORIST is involved in the	
	first harmful event,	
(A61J)	the FIRST HARMFUL EVENT equals 15, and	CRASH TYPE should not equal 13 for this vehicle.
	PERSON TYPE equals 08, and NON-MOTORIST	
	LOCATION AT THE TIME OF CRASH equals 21,	
	22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF	
	MOTOR VEHICLE STRIKING NON-MOTORIST is	
	involved in the first harmful event,	
(A61K)	the FIRST HARMFUL EVENT equals 49, and	CRASH TYPE should not equal 13 for this vehicle.
	PERSON TYPE equals 04, and NON-MOTORIST	
	LOCATION AT THE TIME OF CRASH equals 21,	
	22, 24, 25, 28, and the VEHICLE NUMBER OF	
	MOTOR VEHICLE STRIKING NON-MOTORIST is	
	involved in the first harmful event,	
(BFOF)	PERSON TYPE equals 04-08, 10, 19,	EJECTION must equal 8.
(BZ51)	CRITICAL PRECRASH EVENT equals 80 and	at least one PERSON TYPE should equal 5.
	PRE-IMPACT LOCATION does not equal 4,	
(CKOP)	PERSON TYPE equals 07,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 09, 13, 69, 70, 86, 87,
		90.
(CM0P)	PERSON TYPE equals 19,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 13, 69, 70, 90.
(FPOF)	PERSON TYPE is blank, case status is flawed.	
(FP9F)	PERSON TYPE equals 05, 06, 07, 08 and the	
	PEDESTRIAN/BIKE - CRASH TYPE equals blank,	
	case status is flawed.	

Check	IF	THEN
(P071)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS should not equal 9,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE should not equal 99, and
		ALCOHOL TEST RESULT should not equal 999.
(P073)	PERSON TYPE equals 02, 04-08, 10, and	DRUG TEST STATUS should not equal 9 and any
	INJURY SEVERITY does not equal 4,	DRUG TEST TYPE should not equal 9, and any
		DRUG TEST RESULTS should not equal 999.
(P074)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS must not equal 8,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE must not equal 95, and
		ALCOHOL TEST RESULT must not equal 995.
(P075)	PERSON TYPE equals 02, 04-08, 10 or 19, and	DRUG TEST STATUS must not equal 8, any DRUG
	INJURY SEVERITY does not equal 4,	TEST TYPE must not equal 6, and any DRUG
		TEST RESULTS must not equal 095.
(PB22)	SCHOOL BUS RELATED equals 1, and PERSON	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	TYPE equals 05 or 08,	PEDESTRIAN should equal 342.
(PB23)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	SCHOOL BUS RELATED should equal 1.
	PEDESTRIAN equals 342, and PERSON TYPE	
	equals 05 or 08,	
(PB24)	PERSON TYPE equals 05 or 08, and NON-	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	MOTORIST LOCATION AT TIME OF CRASH	PEDESTRIAN should equal 230, 320, 410, 420,
	equals 14, 16, 20, 21, 22, 24 or 25,	430, 440, 459, 510, 520, 590, 830 or 890.
(PB25)	PERSON TYPE equals 05 or 08, and NON-	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	MOTORIST CONTRIBUTING CIRCUMSTANCES	PEDESTRIAN should equal 690, 710, 730, 741,
	equals 01-03 or 09,	742, 760, 770, 781, 782, 791, 792, 794, 795 or
		799.
(PB26)	NON-MOTORIST CONTRIBUTING	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	CIRCUMSTANCES equals 02, and PERSON	BICYCLIST should equal 142, 144, 147, 153, 155,
	TYPE equals 06 or 07,	156, 157, 159, 311, 312, 313, 318, 319 or 357.
(PB27)	NON-MOTORIST ACTION/CIRCUMSTANCES	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	equals 05, and PERSON TYPE equals 05 or 08,	PEDESTRIAN should equal 410 or 420.
(PB28)	NON-MOTORIST ACTION/CIRCUMSTANCES	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	equals 06, and PERSON TYPE equals 05 or 08,	PEDESTRIAN should equal 430 or 440.
(PB29)	NON-MOTORIST ACTION/CIRCUMSTANCES	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	equals 04, and PERSON TYPE equals 05 or 08,	PEDESTRIAN should equal 410, 420, 430, 440 or
		459.
(PB36)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PERSON TYPE must equal 08.
	PEDESTRIAN equals 250,	
(PB49)	PERSON TYPE equals 05 or 08, and PRE-	at least one PEDESTRIAN/BIKE TYPING - CRASH
	EVENT MOVEMENT (PRIOR TO RECOGNITION	TYPE - PEDESTRIAN should equal 211-214 or
	OF CRITICAL EVENT) equals 13 for the vehicle	219.
	number identified in this person's VEHICLE	
	NUMBER OF MOTOR VEHICLE STRIKING	
	NON-MOTORIST,	

Check	IF	THEN
(PB50)	PERSON TYPE equals 05 or 08, and PRE-	at least one PEDESTRIAN/BIKE TYPING - CRASH
	EVENT MOVEMENT (PRIOR TO RECOGNITION	TYPE - PEDESTRIAN should equal 461, 465, 469,
	OF CRITICAL EVENT) equals 10-12 or 16 for	510, 781, 782, 791, 792, 794, 795 or 799.
	the vehicle number identified in this person's	
	VEHICLE NUMBER OF MOTOR VEHICLE	
	STRIKING NON-MOTORIST.	
(PB52)	PERSON TYPE equals 06 or 07, and PRE-	at least one PEDESTRIAN/BIKE TYPING - CRASH
	EVENT MOVEMENT (PRIOR TO RECOGNITION	TYPE - BICYCLIST should equal 610.
	OF CRITICAL EVENT) equals 13 for the vehicle	
	number identified in this person's VEHICLE	
	NUMBER OF MOTOR VEHICLE STRIKING	
	NON-MOTORIST,	
(PB59)	NON-MOTORIST ACTION/CIRCUMSTANCES	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	equals 16, and PERSON TYPE equals 05 or 08,	PEDESTRIAN should equal 459.
(PB60)	PERSON TYPE equals 05 or 08, and DRIVER	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	PRESENCE equals 0 for the motor vehicle	PEDESTRIAN should equal 220.
	which strikes the non-motorist,	

# NM8/P8 - Injury Severity

### FORMAT: 1 numeric SAS NAME: Person.Inj\_Sev ELEMENT VALUES:

Codes	Attributes
0	No Apparent Injury (O)
1	Possible Injury (C)
2	Suspected Minor Injury (B)
3	Suspected Serious Injury (A)
4	Fatal Injury (K)
5	Injured, Severity Unknown
6	Died Prior to Crash*
9	Unknown/Not Reported

**Definition:** This element describes the severity of the injury to this person in the crash.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P8. Please see <u>P8 Injury Severity</u> for remarks.

Check	IF	THEN
(1ROP)	SEATING POSITION equals 51, and BODY TYPE	INJURY SEVERITY must not equal 0, 9.
	equals 50-52, 55, 58, 59,	
(1R1P)	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
(1U1F)	INJURY SEVERITY equals 4,	DEATH DATE must not equal 888888888.
(1U2F)	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
(2U1F)	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 888888888.
(2U2F)	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
(2U3F)	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		should not equal 0.
(3P0F)	PERSON TYPE equals 03-08, 10, 19,	INJURY SEVERITY should not equal 6.
(4U0F)	Each original submission must have at least	
	one Person Level form with INJURY SEVERITY	
	coded 4.	
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person
		must be within 720 hours of the CRASH DATE
		and CRASH TIME.
(7E0P)	INJURY SEVERITY equals 4,	DEATH CERTIFICATE NUMBER must NOT equal
		0000-00-000000.
(7E1P)	INJURY SEVERITY equals 4,	RACE must not equal 00.
(7E2P)	INJURY SEVERITY equals 4,	HISPANIC ORIGIN must not equal 00.
(7E3P)	INJURY SEVERITY does not equal 4,	RACE AND HISPANIC ORIGIN must equal 00.
(7F0P)	DEATH CERTIFICATE NUMBER is not blank or	INJURY SEVERITY must equal 4.
· ·	0000-00-000000,	
(7F1P)	RACE equals 00,	INJURY SEVERITY must not equal 4.

Check	IF	THEN
(7F2P)	HISPANIC ORIGIN equals 00,	INJURY SEVERITY must not equal 4.
(7F3P)	RACE is not equal to 00, and HISPANIC	INJURY SEVERITY must equal 4.
	ORIGIN is not equal to 00,	
(7R0P)	FATAL INJURY AT WORK equals 0, 1, 9,	INJURY SEVERITY must equal 4.
(7W0P)	FATAL INJURY AT WORK equals 8	INJURY SEVERITY must not equal 4.
(FP8F)	INJURY SEVERITY is blank, case status is flawed.	
(P071)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS should not equal 9,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE should not equal 99, and
		ALCOHOL TEST RESULT should not equal 999.
(P072)	PERSON TYPE equals 02, 03, and INJURY	POLICE REPORTED ALCOHOL INVOLVEMENT
	SEVERITY equals 0, and ALCOHOL TEST	should equal 0, 8.
	RESULT equals 996,	
(P073)	PERSON TYPE equals 02, 04-08, 10, and	DRUG TEST STATUS should not equal 9 and any
	INJURY SEVERITY does not equal 4,	DRUG TEST TYPE should not equal 9, and any
		DRUG TEST RESULTS should not equal 999.
(P1A0)	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.
(P090)	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
(0120)		must equal 0.
(P130)	BODY TYPE equals 60-67, 71, 72, 78, 79, and PERSON TYPE equals 01, 03, and INJURY	FATAL INJURY AT WORK should equal 1.
	SEVERITY equals 4,	
(P300)	POLICE REPORTED ALCOHOL INVOLVEMENT	ALCOHOL TEST STATUS should not equal <b>0</b> .
(PSUU)	equals 1, and INJURY SEVERITY equals 4,	ALCOHOL TEST STATUS SHOULD HOT EQUAL <b>U</b> .
(P53P)	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.
(U160)	UNLIKELY: INJURY SEVERITY equals 6.	
	· · · · · · · · · · · · · · · · · · ·	
(U350)	UNLIKELY: INJURY SEVERITY equals 1-6, and	
	SEATING POSITION equals 98.	

## Consistency Check (FARS Only):

Check	Language
(4U0F)	Each original submission must have at least one Person Level form with INJURY SEVERITY coded
	4.

# NM9 - Pedestrian/Bike Typing

FORMAT: Elements Completed in MDE SAS NAME: Various

**Definition:** This element describes *the precrash actions* leading to crashes between motor vehicles and pedestrians or bicyclists.

**Remarks:** Pedestrian and Bicycle Crash Type describes the precrash actions of the involved parties to better define the sequence of events and precipitating actions leading to crashes between motor vehicles and pedestrians or bicyclists.

During the 1970s the National Highway Traffic Safety Administration developed methodologies for typing pedestrian and bicycle crashes. In the 1990s the methodologies were applied to more than 8,000 pedestrian and bicycle crashes in six States. The results provided a representative summary of the distribution of crash types experienced by pedestrians and bicyclists and, over time, this method has evolved and was refined. Pedestrian/Bike typing is offered as a tool to help overcome hindrances to the development of effective countermeasures to prevent bicyclist and pedestrian crashes

In FARS and CRSS, Pedestrian and Bicycle Crash Typing is accomplished through a software application *referred* to as the Ped/Bike Wizard. By clicking on choices in the wizard, the analyst/coder enters data into the file without typing each specific data element's attribute (numeric code).

The elements, attributes, and remarks are not presented here in the main Coding and Validation manual, but rather in the detailed companion FARS/CRSS Pedestrian Bicyclist Manual.

The Pedestrian/Bike Typing application is presented for the following person types:

- <u>Pedestrian</u>,
- Persons on Personal Conveyances,
- Bicyclist,
- Other Cyclist.

Check	IF	THEN
(1PK2)	NON-MOTORIST LOCATION AT TIME OF	SIDEWALK PRESENT must equal 1.
	CRASH equals 21,	
(1PK3)	NON-MOTORIST LOCATION AT TIME OF	MARKED CROSSWALK PRESENT must equal 1.
	CRASH equals 01 or 10,	
(FP9F)	PERSON TYPE equals 05, 06, 07, 08 and the	
	PEDESTRIAN/ CRASH TYPE equals blank,	
	case status is flawed.	
(PB00)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one SEQUENCE OF EVENTS for the
	PEDESTRIAN equals 110-910,	striking vehicle must equal 08 or 15.
(PB02)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one SEQUENCE OF EVENTS for the
	BICYCLIST equals 111-980,	striking vehicle must equal 09.
(PB04)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO JUNCTION (b) must not equal 02.
	PEDESTRIAN for a person involved in the	Note: this edit is restricted to vehicles which
	first harmful event equals 211, 212, 461,	are involved in only one event with
	465, 680, 830, 890, 900 or 910,	pedestrian(s).

Check	IF	THEN
(PB05)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO TRAFFICWAY must equal 01 or
	PEDESTRIAN for a person involved in the	11. Note: this edit is restricted to vehicles
	first harmful event equals 311, 312 or 313,	which are involved in only one event with
		pedestrian(s).
(PB06)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	PEDESTRIAN equals 730,	vehicle must equal 01-03.
(PB07)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO JUNCTION (b) must equal 04 or
	BICYCLE for a person involved in the first	08. Note: this edit is restricted to vehicles
	harmful event equals 311, 312, 313, 321,	which are involved in only one event with
	322 or 323,	bicyclist(s).
(PB08)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO JUNCTION (b) must equal 02 or
	BICYCLIST for a person involved in the first	03. Note: this edit is restricted to vehicles
	harmful event equals 141-144, 147, 151-	which are involved in only one event with
	157 or 159,	bicyclist(s).
(PB09)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	BICYCLIST equals 141, 143, 151-158, 217 or	vehicle must not equal 00.
	218,	
(PB10)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	BICYCLIST equals 151, 156, 157, 217 or 218,	vehicle must equal 01-04.
(PB11)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	TRAFFIC CONTROL DEVICE for the striking
	BICYCLIST equals 143 or 154,	vehicle must equal 01-04,08, 20, 21, 28 or 29.
(PB12)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	RELATION TO TRAFFICWAY must not equal 01
	PEDESTRIAN for a person involved in the	or 11. Note: this edit is restricted to vehicles
	first harmful event equals 510, 520 or 590,	which are involved in only one event with
		pedestrian(s).
(PB15)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST
	PEDESTRIAN equals 910,	ACTION/CIRCUMSTANCES must equal 03.
(PB16)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST CONTRIBUTING
	BICYCLIST equals 142, 144, 147, 153, 155,	CIRCUMSTANCES must equal 02.
	156, 157, 159, 311, 312, 313, 318, 319 or	
	357,	
(PB17)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	PEDESTRIAN for a person involved in the	RECOGNITION OF CRITICAL EVENT) must equal
	first harmful event equals 211-214 or 219,	08, 09, 13, or 98. Note: this edit is restricted to
		vehicles which are involved in only one event
		with pedestrian(s).
(PB18)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST CONTRIBUTING
	PEDESTRIAN equals 742,	CIRCUMSTANCES must equal 01.
(PB19)	NON-MOTORIST ACTION/CIRCUMSTANCES	PEDESTRIAN/BIKE TYPING – CRASH TYPE -
	equals 08,	PEDESTRIAN must not equal 510, 520, 590,
		830 or 890.
(PB20)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST ACTION/
. ,	PEDESTRIAN equals 510, 520 or 590,	CIRCUMSTANCES must equal 02.
(PB21)	PEDESTRIAN equals 510, 520 or 590, PEDESTRIAN/BIKE TYPING - CRASH TYPE -	CIRCUMSTANCES must equal 02. TRAFFIC CONTROL DEVICE for the striking

Check	IF	THEN
(PB22)	SCHOOL BUS RELATED equals 1, and	PEDESTRIAN/BIKE TYPING – CRASH TYPE -
	PERSON TYPE equals 05 or 08,	PEDESTRIAN should equal 342.
(PB23)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 342, and PERSON TYPE equals 05 or 08,	SCHOOL BUS RELATED should equal 1.
(PB24)	PERSON TYPE equals 05 or 08, and NON- MOTORIST LOCATION AT TIME OF CRASH equals 14, 16, 20, 21, 22, 24 or 25,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 230, 320, 410, 420, 430, 440, 459, 510, 520, 590, 830 or 890.
(PB25)	PERSON TYPE equals 05 or 08, and NON- MOTORIST LOCATION AT TIME OF CRASH equals 01-03 or 09,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795 or 799.
(PB26)	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 02, and PERSON TYPE equals 06 or 07,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - BICYCLIST should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319 or 357.
(PB27)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 410 or 420.
(PB28)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 430 or 440.
(PB29)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 410, 420, 430, 440 or 459.
(PB30)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220,	at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB31)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 147, 157 or 357,	at least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST.
(PB32)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742,	at least one DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST.
(PB33)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 156,	DRIVER'S VISION OBSCURED BY for the striking vehicle must not equal 06.
(PB34)	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01, and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02,	PEDESTRIAN/ BIKE TYPING – CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360, 680, 830, 890, 900, or 910.

Check	IF	THEN
(PB35)	NUMBER OF FORMS SUBMITTED FOR	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION
	PERSONS NOT IN MOTOR VEHICLES equals	- PEDESTRIAN must equal 1.
	01, and FIRST HARMFUL EVENT equals 08,	
	and RELATION TO JUNCTION (b) equals 02,	
(PB36)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PERSON TYPE must equal 08.
	PEDESTRIAN equals 250,	
(PB37)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST ACTION/
	PEDESTRIAN equals 311, 312 or 313,	CIRCUMSTANCES must equal 08 or 10.
(PB38)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST
	PEDESTRIAN equals 410 or 420,	ACTION/CIRCUMSTANCES must equal 05.
(PB39)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST
	PEDESTRIAN equals 430 or 440,	ACTION/CIRCUMSTANCES must equal 06.
(PB40)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one PRE-EVENT MOVEMENT (PRIOR
	BICYCLE equals 610,	TO RECOGNITION OF CRITICAL EVENT) must
		equal 08, 09 or 13 for the vehicle number
		identified in this person's <b>VEHICLE</b> NUMBER
		OF MOTOR VEHICLE STRIKING NON-
		MOTORIST.
(PB41)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	BICYCLIST equals 215,	RECOGNITION OF CRITICAL EVENT) must equal
		08 or 09 for the vehicle number identified in
		this person's <b>VEHICLE</b> NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.
(PB42)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one PRE-EVENT MOVEMENT (PRIOR
	BICYCLIST equals 111, 211 or 212,	TO RECOGNITION OF CRITICAL EVENT) must
		equal 11, <i>16</i> , or 17 for the vehicle number
		identified in this person's <b>VEHICLE</b> NUMBER
		OF MOTOR VEHICLE STRIKING NON- MOTORIST.
(PB43)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
(PB43)	BICYCLIST equals 112, 151, 213, 214, 217 or	RECOGNITION OF CRITICAL EVENT) must equal
	218,	10, <b>16</b> , or 17 for the vehicle number identified
	210,	in this person's <b>VEHICLE</b> NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.
(PB44)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	EMERGENCY MOTOR VEHICLE USE should
(1044)	PEDESTRIAN equals 240,	equal 2-6 at least one.
(PB45)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
(1043)	PEDESTRIAN equals 781 or 782,	RECOGNITION OF CRITICAL EVENT) must equal
		11 or 17 for the vehicle number identified in
		this person's <b>VEHICLE</b> NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.
(PB46)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
(. =)	BICYCLIST equals 221-225,	RECOGNITION OF CRITICAL EVENT) should
		equal 01 for the vehicle number identified in
		this person's <b>VEHICLE</b> NUMBER OF MOTOR
		VEHICLE STRIKING NON-MOTORIST.

Check	IF	THEN
(PB49)	PERSON TYPE equals 05 or 08, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.
(PB50)	PERSON TYPE equals 05 or 08, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469, 510, 781, 782, 791, 792, 794, 795 or 799.
(PB52)	PERSON TYPE equals 06 or 07, and PRE- EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 610.
(PB56)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 791, 792, 794, 795,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB59)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 16, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 459.
(PB60)	PERSON TYPE equals 05 or 08, and DRIVER PRESENCE equals 0 for the motor vehicle which strikes the non-motorist,	PEDESTRIAN/BIKE TYPING – CRASH TYPE - PEDESTRIAN should equal 220.
(PB61)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220,	DRIVER PRESENCE should equal 0 for the motor vehicle striking the non-motorist.
(PB62)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES PRIOR TO CRASH must equal 12.
(PB63)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230,	at least one RELATED FACTORS - CRASH LEVEL should equal 19 or 23.
(PB66)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION – PEDESTRIAN equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, or 22.
(PB67)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION – PEDESTRIAN equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-25, 28, 98, 99.
(PB68)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION – PEDESTRIAN equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-24, 28, 98, 99.

Check	IF	THEN
(PB69)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION – PEDESTRIAN equals 4,	must equal 24, 25, 98, 99.
(PB70)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION – PEDESTRIAN equals 9,	must equal 16, 22, 24, 98 or 99.
(PB71)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 1,	must equal 01, 02, 03, 09, 16 or 22.
(PB72)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 2,	must equal 10, 11, 13, 14, 16, 20, 21, 22, 23,
		24, 25, 28, 98, 99.
(PB73)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 3,	must equal 10, 11, 13, 14, 16, 20, 21, 22, 23,
		24, 28, 98, 99.
(PB74)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 4,	must equal 24, 25, 98, 99.
(PB75)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 9,	must equal 16, 22, 24, 98 or 99.
(PB76)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 01,	must equal 03.
(PB77)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 02,	must equal 01, 02 or 10.
(PB78)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 03,	must equal 11, 13.
(PB79)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 04,	must equal 14, 16, 20, 98 or 99.
(PB80)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 05,	must equal 21, 23, 24, 98 or 99.
(PB81)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 06,	must equal 20, 22, 28, 98 or 99.
(PB82)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
()	POSITION equals 07 or 08,	must equal 25.
(PB83)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 09,	must equal 09, 20, 22, 28, 98 or 99.
(PB84)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 1,	must equal 03, 09, 11 or 13.
(PB85)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
(	POSITION equals 2,	must equal 14, 16 or 20.
(PB86)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
()	POSITION equals 3,	must equal 01, 02, 10, 21, 23, 98 or 99.
(PB87)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
(0000)	POSITION equals 4,	must equal 24.
(PB88)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
(2222)	POSITION equals 5 or 6,	must equal 25.
(PB89)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 8,	must equal 20, 22, 28, 98 or 99.
(PB90)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 9,	must equal 22, 98 or 99.

Check	IF	THEN
(PB91)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN
	LOCATION – PEDESTRIAN equals 1,	POSITION must equal 01, 02 or 09.
(PB92)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN
	LOCATION – PEDESTRIAN equals 2,	POSITION must equal 03, 04, 05, 06, 07, 08 or
		09.
(PB93)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN
	LOCATION – PEDESTRIAN equals 3,	POSITION must equal 02, 03, 04, 05, 06 or 09.
(PB94)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN
	LOCATION – PEDESTRIAN equals 4,	POSITION must equal 07, 08 or 09.
(PB95)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN
	LOCATION – PEDESTRIAN equals 9,	POSITION must equal 02, 05 or 09.
(PB96)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - BICYCLIST
	LOCATION - BICYCLE equals 1,	POSITION must equal 1, 2, 3, 8 or 9.
(PB97)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - BICYCLIST
	LOCATION - BICYCLE equals 3,	POSITION must equal 1, 2, 3, 4, 8 or 9.
(PB98)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - BICYCLIST
	LOCATION - BICYCLE equals 4,	POSITION must equal 4, 5, 6 or 9.
(PB99)	PEDESTRIAN/ BIKE TYPING - CRASH	PEDESTRIAN/ BIKE TYPING - BICYCLIST
	LOCATION-BICYCLE equals 9,	POSITION must equal 9.
(PBAO)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	BICYCLE equals 111, 211, 212, and VEHICLE	RECOGNITION OF CRITICAL EVENT) should
	NUMBER - VEHICLE LEVEL equals VEHICLE	equal 11.
	NUMBER OF MOTOR VEHICLE STRIKING	
	NON-MOTORIST,	
(PBA1)	PEDESTRIAN/ BIKE TYPING - CRASH TYPE -	PRE-EVENT MOVEMENT (PRIOR TO
	BICYCLE equals 112, 151, 213, 214, 217 or	RECOGNITION OF CRITICAL EVENT) should
	218, and VEHICLE NUMBER – VEHICLE	equal 10.
	LEVEL equals VEHICLE NUMBER OF MOTOR	
	VEHICLE STRIKING NON-MOTORIST,	
(PBA2)	PEDESTRIAN SCENARIO equals 1a, 1b, 1c,	<b>PEDESTRIAN POSITION must equal 2.</b>
	1d, 3a, 3b, 3c, 3d, 5a, 5b, 5c, 5d, 7a, 7b, 7c,	
	7d, 9a, 9b, 9c, 9d, or 11a, 11b, 11c, 11d,	
(PBA3)	CRASH LOCATION equals 1 (At Intersection)	<b>PEDESTRIAN POSITION must equal 1, 9.</b>
	and PEDESTRIAN SCENARIO equals 2a, 2b,	
	2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b,	
	8c, 8d, 10a, 10b, 10c, 10d, or 12a, 12b, 12c,	
	12d,	
(PBA4)	<b>CRASH LOCATION equals 2 (Intersection-</b>	PEDESTRIAN POSITION must equal 3-9.
	Related) and PEDESTRIAN SCENARIO	
	equals 2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b,	
	6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or	
	12a, 12b, 12c, 12d,	

Check	IF	THEN
(PBA5)	PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15, 16, or 17 for the vehicle number that struck this non-motorist.
(PBA6)	PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c, 8d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10 for the vehicle number that struck this non-motorist.
(PBA7)	PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d, 12a, 12b, 12c, 12d,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 for the vehicle number that struck this non-motorist.

# NM10 - Non-Motorist Location at Time of Crash

FORMAT: 2 numeric SAS NAME: Person.LOCATION ELEMENT VALUES:

Codes	Attributes
01	At Intersection-In Marked Crosswalk
02	At Intersection-Unmarked / Unknown if Marked Crosswalk
03	At Intersection-Not In Crosswalk
09	At Intersection-Unknown Location
10	Not At Intersection-In Marked Crosswalk
11	Not At Intersection-On Roadway, Not in Marked Crosswalk
13	Not At Intersection-On Roadway, Crosswalk Availability Unknown
14	Parking Lane/Zone
16	Bicycle Lane
20	Shoulder/Roadside
21	<u>Sidewalk</u>
22	Median/Crossing Island
23	Driveway Access
24	Shared-Use Path
25	Non-Trafficway Area
28	Other
98	Not Reported
99	Unknown Location

**Definition:** This element identifies the location of the non-motorist with respect to the roadway at the time of the crash.

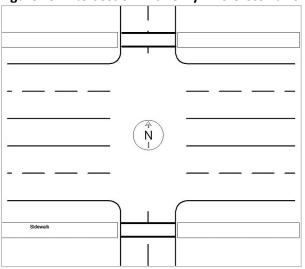
**Remarks:** "At intersection" means: The person is **on a roadway** (travel lane) either (1) in the intersection, (2) in an area between a crosswalk and the perimeter of the intersection, or (3) in a crosswalk (whether marked or unmarked) adjacent to an intersection. If there are no crosswalks, "at intersection" means only the intersection, which is the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways.

Crosswalk is (1) that part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway, and in the absence of a sidewalk on one side of the highway, that part of the highway included within the extension of the lateral line of the existing sidewalk to the side of the highway without the sidewalk, with such extension forming a right angle to the centerline of the highway; or (2) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway placed in accordance with the provisions in the <u>Manual of Uniform</u> <u>Traffic Control Devices</u>.

Intersection is an area that (1) contains a crossing or connection of two or more roadways not classified as driveway access (2) is embraced within the prolongation of the lateral curb lines, or, if none, the lateral boundary lines of the roadways.

**01 (At Intersection-In Marked Crosswalk)** is used when a person is in that portion of a roadway at an intersection that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway. This attribute includes shared-use path crossings. This does not include crosswalks located in midblocks.

**02 (At Intersection-In Unmarked/Unknown if Marked Crosswalk)** is used when the person is "at intersection" within the prolongations of the sidewalk edges but there are no lines or other markings on the surface of the roadway (unmarked crosswalk). There must be a sidewalk or improved path present on one side of the leg of the trafficway that this person is crossing for there to be an unmarked crosswalk. If there are no sidewalks, there are no crosswalks. If it is unknown if the crosswalk is marked or unmarked, default to unmarked.





In a four-way intersection with sidewalks running along the East/West trafficway and no sidewalks on the North/South trafficway, the intersection area would only have two crosswalks. The two that allow crossing of the North/South trafficway. (See Figure 25 above)

**03 (At Intersection-Not in Crosswalk)** refers to a person in a travel lane that is not using an available crosswalk or there is not a crosswalk at this location.

**09 (At Intersection-Unknown Location)** is used when a person is known to be at an intersection, but it cannot be determined whether the person was in a crosswalk area (marked or unmarked) or the intersection.

**10 (Not at Intersection-In Marked Crosswalk)** is used when a person is in the portion of the roadway, not at an intersection, that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway. (i.e., the case identifies a mid-block crosswalk exists and the person is using it.) This attribute includes shared-use path crossings.

**11 (Not at Intersection-On Roadway, Not in Marked Crosswalk)** is used when a person is in the portion of the roadway, not at an intersection, and either:

- 1. the case identifies a mid-block crosswalk exists and the person is not using it (e.g., the person is jaywalking when a mid-block crosswalk is available), or
- 2. there is not a crosswalk at this location, or
- 3. the person is crossing at a location where a mid-block crosswalk would not be expected to exist (e.g., a rural roadway or interstate).

**13 (Not at Intersection - On Roadway, Crosswalk Availability Unknown)** is used when it cannot be determined if a crosswalk was available. (e.g., there is some information (possibly conflicting) that leads you to believe that there may be a mid-block crosswalk at this location, but there is not sufficient information about the location to be able to make a determination.)

**14 (Parking Lane/Zone)** refers to a person in an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of roadway parking (for example, legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see <u>11 (Not at Intersection-On Roadway, Not in Marked Crosswalk)</u>).

**16 (Bicycle Lane)** is used when a person is adjacent to travel lanes in a bikeway which has been designated for preferential or exclusive use by pedalcyclists through striping, signage, or pavement markings. This attribute includes pedalcyclists in a marked bicycle lane in an intersection (i.e., do not use 03 (At Intersection-Not in Crosswalk)). For persons other than pedalcyclists in a marked bicycle lane in an intersection an intersection, use <u>03 (At Intersection-Not in Crosswalk)</u>. If you do not know if there is a marked bike lane through the intersection, then default to **03 (At Intersection-Not in Crosswalk)**.

**20 (Shoulder/Roadside)** - Shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped motor vehicles, and lateral support of the roadway structure. Roadside is the outermost part of the trafficway from the property line or other boundary in to the edge of the first road. For persons on a sidewalk on the roadside select **21 (Sidewalk)**.

**21 (Sidewalk)** is any improved surface primarily constructed for use by pedestrians. Do not select this attribute for sidewalks within a <u>23 (Driveway Access)</u>, **22 (Median/Crossing Island)**, <u>25 (Non-Trafficway Area)</u>.

22 (Median/Crossing Island) is used when a person is in a median or crossing island. Median is an area of trafficway between parallel roads separating travel in opposite directions. A median should be four or more feet wide. Crossing Island is a cement or grassy area in the middle of a trafficway. This attribute excludes crosswalk areas that pass through a median, crossing or traffic island (i.e., select <u>01 (At Intersection-In Marked</u> <u>Crosswalk</u>), <u>02 (At Intersection-In Unmarked/Unknown if Marked Crosswalk</u>), or <u>10 (Not at Intersection-In Marked</u> <u>Marked Crosswalk</u>).)

**23 (Driveway Access)** is a portion of the trafficway at the end of a driveway providing access to property adjacent to a trafficway. This includes the driveway crossing which is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access.

**24 (Shared-Use Path)** is used when a person on a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or an independent right-of-way. Shared-Use Paths will also be used by pedestrians, skaters, wheelchairs, joggers, and other non-motorized users. Shared-use path **crossings** are coded under <u>**01 (At Intersection-In Marked Crosswalk)</u>** or <u>**10 (Not At Intersection-In Marked Crosswalk)**}.</u></u>

**25 (Non-Trafficway Area)** is not physically located on any land way open to the public as a matter of right or custom for moving persons or property from one place to another. For example: a person in a parking lot, a yard, a person in a closed portion of a work zone, or in a house.

**28 (Other)** is used when a person is at a location stated in the case materials that is not reflected in the listed attributes for this data element. These would be persons within the trafficway (i.e., not element value **25 (Non-Trafficway Area)**). Examples include central islands of rotary intersections, gores, separators, or directional/channelizing islands.

If a *Police Crash Report* data element is coded with the attribute "Other" but the officer does not specify what this refers to:

- 1. Code **28 (Other)** if the *Police Crash Report* attribute choices can be matched to or include all the attributes in FARS/CRSS.
- 2. Code **98 (Not Reported)** if the *Police Crash Report* choices cannot be matched to or include all the attributes in FARS/CRSS.

## 98 (Not Reported)

If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks is NOT considered "**Not Reported**".

Code **98 (Not Reported)** in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown Location)** is used when the case materials state that the location of the non-motorist was unknown at the time of the crash.

Check	IF	THEN
(1P1F)	PERSON TYPE equals 04, 05, 08, 10, or 19	NON-MOTORIST LOCATION AT TIME OF CRASH should not equal 16 for this person.
(1P2F)	PERSON TYPE equals 10,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
(1P9G)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 20,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 15.
(1POH)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 07-10, 15, 16, 20.
(1P1H)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 22,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 02, 04, 07, 08, 11, 15, 20.
(1P2H)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 12, 15.
(1P3H)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01, 03, 04, 10, 11.
(1P4H)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01-04, 10-12, 15-17, 20.

Check	IF	THEN
(1P5H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 28, 98, 99,	CIRCUMSTANCES should not equal 01, 03, 04,
		10-12, 15, 16, 20.
(1P6H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
(=: •: .)	CRASH equals 16,	CIRCUMSTANCES should not equal 04, 16.
(1P7H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
(11711)	CRASH equals 21,	CIRCUMSTANCES should not equal 01, 05, 11,
	CRASH equals 21,	
(1 0011)		
(1P8H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
(10011)	CRASH equals 23,	CIRCUMSTANCES should not equal 02.
(1P9H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 24,	CIRCUMSTANCES should not equal 02, 05, 12,
		15, 16.
(1PHO)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 25,	CIRCUMSTANCES should not equal 07-09.
(1PJ1)	NON-MOTORIST LOCATION AT TIME OF	the PERSON TYPE for this person should equal
	CRASH equals 16,	06 or 07.
(1PK2)	NON-MOTORIST LOCATION AT TIME OF	SIDEWALK PRESENT must equal 1.
	CRASH equals 21,	
(1PK3)	NON-MOTORIST LOCATION AT TIME OF	MARKED CROSSWALK PRESENT must equal 1.
(1110)	CRASH equals 01 or 10,	· ·
(440F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
(,	RELATION TO TRAFFICWAY equals 01,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 01-03,
		09-11, 13, 16, 23, 98 or 99.
(450F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
(4501)	RELATION TO TRAFFICWAY equals 07,	MV Occupant) form with NON-MOTORIST
	RELATION TO TRAFFICWAT Equals 07,	LOCATION AT TIME OF CRASH equal to 14.
	FIRST HARAFILL EVENT actuals 09, 00, 15, and	· · · · · · · · · · · · · · · · · · ·
(460F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
	RELATION TO TRAFFICWAY equals 02,	MV Occupant) form with NON-MOTORIST
/ <b></b>		LOCATION AT TIME OF CRASH equal to 02, 20.
(470F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
	RELATION TO TRAFFICWAY equals 03, 08, 10,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 20, 22,
		<b>28,</b> 98, 99.
(480F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
	RELATION TO TRAFFICWAY equals 04, 06,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 09, 16,
		20, 21, 24, 25, 28, 98, 99.
(490F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
. ,	RELATION TO TRAFFICWAY equals 05,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 24, 25.
(530F)	FIRST HARMFUL EVENT equals 08, 09, 15, and	there must be at least one Person Level (Not a
(3301)	RELATION TO TRAFFICWAY equals 99,	MV Occupant) form with NON-MOTORIST
		LOCATION AT TIME OF CRASH equal to 09, 98,
		• • • •
		99.

Check	IF	THEN
(531F)	FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11,	there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
(A61G)	the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61H)	the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON- MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON- MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61J)	the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 08, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(A61K)	the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful event,	CRASH TYPE should not equal 13 for this vehicle.
(PB24)	PERSON TYPE equals 05 or 08, and NON- MOTORIST LOCATION AT TIME OF CRASH equals 14, 16, 20, 21, 22, 24 or 25,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 230, 320, 410, 420, 430, 440, 459, 510, 520, 590, 830 or 890.
(PB25)	PERSON TYPE equals 05 or 08, and NON- MOTORIST LOCATION AT TIME OF CRASH equals 01-03 or 09,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795 or 799.
(PB66)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, or 22.
(PB67)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-25, 28, 98, 99.
(PB68)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-24, 28, 98, 99.
(PB69)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
(PB70)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98 or 99.

Check	IF	THEN
(PB71)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 1,	must equal 01, 02, 03, 09, 16 or 22.
(PB72)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 2,	must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24,
		25, 28, 98, 99.
(PB73)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 3,	must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24,
		28, 98, 99.
(PB74)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 4,	must equal 24, 25, 98, 99.
(PB75)	PEDESTRIAN/ BIKE TYPING - CRASH	NON-MOTORIST LOCATION AT TIME OF CRASH
	LOCATION - BICYCLE equals 9,	must equal 16, 22, 24, 98 or 99.
(PB76)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 1,	must equal 03.
(PB77)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 2,	must equal 01, 02 or 10.
(PB78)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 3,	must equal 11, 13.
(PB79)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 4,	must equal 14, 16, 20, 98 or 99.
(PB80)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 5,	must equal 21, 23, 24, 98 or 99.
(PB81)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 6,	must equal 20, 22, 28, 98 or 99.
(PB82)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 7 or 8,	must equal 25
(PB83)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 9,	must equal 09, 20, 22, 28, 98 or 99.
(PB84)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 1,	must equal 03, 09, 11 or 13.
(PB85)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 2,	must equal 14, 16 or 20.
(PB86)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 3,	must equal 01, 02, 10, 21, 23, 98 or 99.
(PB87)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 4,	must equal 24.
(PB88)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 5 or 6,	must equal 25.
(PB89)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 8,	must equal 20, 22, 28, 98 or 99.
(PB90)	PEDESTRIAN/ BIKE TYPING - BICYCLIST	NON-MOTORIST LOCATION AT TIME OF CRASH
	POSITION equals 9,	must equal 22, 98 or 99.
(U150)	UNLIKELY: NON-MOTORIST LOCATION AT	
	TIME OF CRASH equals 16, 25.	

# NM11 - Non-Motorist Action/Circumstances

**FORMAT:** 2 numeric. Select all that apply. **SAS NAME:** nmprior.MPR\_ACT **ELEMENT VALUES:** 

Codes	Attributes
01	Going to or from School (K-12)
02	Waiting to Cross Roadway
03	Crossing Roadway
04	Jogging/Running
05	Movement Along Roadway with Traffic (In or Adjacent to Travel Lane)
06	Movement Along Roadway Against Traffic (In or Adjacent to Travel Lane)
16	Movement Along Roadway - Direction Unknown
08	In Roadway - Other (Working, Playing, etc.)
09	Adjacent to Roadway (e.g., Shoulder, Median)
10	Working in Trafficway (Incident Response)
11	Entering/Exiting Parked or Stopped Vehicle
12	Disabled Vehicle Related (Working on, Pushing, Leaving/Approaching)
14	Other (Specify:)
98	Not Reported
99	<u>Unknown</u>

**Definition:** This element describes the action(s) of the non-motorist at the time of their involvement in the crash.

**Remarks:** As a select all that apply element, attributes can be used in combination.

**01 (Going to or from School [K-12])** includes person age 5-18 or an adult supervising persons age 5 - 18 going to or from a school for any reason. Examples are going to a school dance, sports practice, or extracurricular activities.

**02 (Waiting to Cross Roadway)** is used when the non-motorist is near the curb or the roadway edge waiting to cross a roadway anywhere along the roadway. If the pedestrian **began to cross the roadway**, stopped, and then was struck select **03 (Crossing the Roadway)**. For person's adjacent to the roadway where their **intent to cross is not identified**, use <u>09 (Adjacent to Roadway)</u>.

**03 (Crossing Roadway)** is used when the non-motorist was moving across or in the travel lanes with the goal of crossing the roadway.

**04 (Jogging/Running)** is used when the pedestrian was running or jogging.

**05 (Movement Along Roadway with Traffic [In or Adjacent to Travel Lane])** is used when the non-motorist was moving in the same direction as the flow of traffic, either in the travel lane or adjacent to it (e.g. jogging or walking on shoulder or roadside). This also includes situations where the person's action/intent was traveling along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on cell phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median or driveway access, etc.

**06 (Movement Along Roadway Against Traffic [In or Adjacent to Travel Lane])** is used when the non-motorist was moving in the opposite direction of the flow of traffic (facing oncoming vehicles), either in the travel lane or adjacent to it. (e.g. jogging or walking on shoulder or roadside.) This also includes situations where the person's action/intent was traveling along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on cell phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median, or driveway access, etc.

**16 (Movement Along Roadway - Direction Unknown)** is used when the non-motorist was moving in or adjacent to a travel lane but their direction with respect to the flow of traffic is unknown. (e.g. jogging or walking on shoulder or roadside.) This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median, or driveway access, etc.

**08 (In Roadway - Other [Working, Playing, etc.])** is used when the non-motorist was in the roadway but not crossing it. Examples include conducting maintenance, playing in the roadway, operating a snow blower or lawn care equipment, or lying in the roadway. For cases involving a non-motorist working within a closed portion of a work zone area, use attribute <u>14 (Other)</u>.

**09 (Adjacent to Roadway [e.g., Shoulder, Median])** is used when the non-motorist was not moving and not in the roadway but in an area immediately adjacent to the roadway, such as a median, shoulder or sidewalk.

**10 (Working in Trafficway [Incident Response])** is used when the non-motorist was in the roadway as part of an official response to an incident, such as a firefighter moving between an emergency vehicle and a crash involved vehicle.

**11 (Entering/Exiting Parked/Stopped Vehicle)** is used when a pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. This does not include crashes involving pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.

**12 (Disabled Vehicle Related [Working on, Pushing, Leaving/Approaching])** is used when the pedestrian was outside of a disabled vehicle for any of a number of reasons, including working on it, pushing it, leaving it, or approaching it.

**14 (Other [Specify:])** is used when the actions or circumstances stated in the case materials do not reflect the listed attributes for this data element. This includes non-motorists working within a closed portion of a work zone area.

**Note:** for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

**98 (Not Reported)** If a state's crash report manual instructs to leave blank data blocks that are not applicable, then a blank in those data blocks are NOT considered "**Not Reported**".

Code 98 (Not Reported) in these two situations:

- 1. No field or coding block exists on the state's crash report to provide the information to code this element AND no other information is available to code the element (e.g., narrative, diagram, case materials)
- 2. A field or coding block exists on the state's crash report that would provide the information needed to code this element, but it has been left blank, *OR a code has been selected on the state's crash*

*report that does not map to any FARS/CRSS attribute,* AND no other information is available to code the element (e.g., narrative, diagram, case materials).

**99 (Unknown)** is used when the case materials state that the action or circumstances of the non-motorist prior to the crash was unknown.

Check	IF	THEN
(1P3F)	PERSON TYPE equals 10,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01-20.
(1P4F)	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04, 12.
(1P5F)	PERSON TYPE equals 06-08, 19,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 04.
(1P7F)	PERSON TYPE equals 04,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10, 11.
(1P8F)	PERSON TYPE equals 06, 07,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 10-12.
(1P9F)	PERSON TYPE equals 08,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 11.
(1P1G)	PERSON TYPE equals 19,	NON-MOTORIST ACTION/CIRCUMSTANCES should not equal 11, 12.
(4X2G)	any NON-MOTORIST ACTION/	the NON-MOTORIST ACTION/CIRCUMSTANCES
	CIRCUMSTANCES equals 08,	must not also equal 03 for this person.
(4X5F)	NON-MOTORIST ACTION/CIRCUMSTANCES is	NON-MOTORIST ACTION/CIRCUMSTANCES
	selected 04,	attributes 05, 06 or 16 should also be selected.
(4X7F)	any NON-MOTORIST ACTION/	only that one code and no other must be coded
	CIRCUMSTANCES equals 98 or 99,	for this person.
(PB15)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST ACTION/
	PEDESTRIAN equals 910,	CIRCUMSTANCES must equal 03.
(PB19)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 08,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 510, 520, 590, 830 or 890.
(PB20)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 510, 520 or 590,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 02.
(PB27)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410 or 420.
(PB28)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 430 or 440.
(PB29)	NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410, 420, 430, 440 or 459.
(PB37)	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 311, 312 or 313,	at least one NON-MOTORIST ACTION/ CIRCUMSTANCES must equal 08 or 10.

Check	IF	THEN
(PB38)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST ACTION/
	PEDESTRIAN equals 410 or 420,	CIRCUMSTANCES must equal 05.
(PB39)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST ACTION/
	PEDESTRIAN equals 430 or 440,	CIRCUMSTANCES must equal 06.
(PB58)	NON-MOTORIST ACTION/CIRCUMSTANCES	
	must not equal 05, 06 or 16 in combination.	
(PB59)	NON-MOTORIST ACTION/ CIRCUMSTANCES	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	equals 16, and PERSON TYPE equals 05 or 08,	PEDESTRIAN should equal 459.
(PB62)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST ACTION/
	PEDESTRIAN equals 230,	CIRCUMSTANCES must equal 12.
(PB64)	any NON-MOTORIST ACTION/	the NON-MOTORIST ACTION/ CIRCUMSTANCES
	CIRCUMSTANCES equals 03 or 09,	must not also equal 05, 06 or 16 for this person.

FORMAT: 2 numeric. Select all that apply. SAS NAME: nmcrash.MTM\_CRSH ELEMENT VALUES:

Codes	Attributes
00	None Noted
01	Dart-Out
11	Dash
02	Failure to Yield Right-Of-Way
03	Failure to Obey Traffic Signs, Signals or Officer
04	In Roadway Improperly (Standing, Lying, Working, Playing, etc.)
05	Entering/Exiting Parked or Stopped Vehicle
06	Inattentive (Talking, Eating, etc.)
07	Improper Turn/Merge
08	Improper Passing
09	Wrong-Way Riding or Walking
10	Riding on Wrong Side of Road
12	Improper Crossing of Roadway or Intersection (Jaywalking)
13	Failing to Have Lights on When Required
14	Operating Without Required Equipment
15	Improper or Erratic Lane Changing
16	Failure to Keep in Proper Lane or Running Off Road
17	Making Improper Entry to or Exit from Trafficway
18	Operating in Other Erratic, Reckless, Careless or Negligent Manner
19	Not Visible (Dark Clothing, No Lighting, etc.)
20	Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle
21	Other (Specify:)
99	<u>Unknown</u>

**Definition:** This element describes the action(s) and/or circumstances of the non-motorist that law enforcement indicated may have contributed to the crash.

**Remarks:** As a select all that apply element, attributes can be used in combination.

**00 (None Noted)** is used when no contributing circumstances or improper actions are noted by the officer for this non-motorist. "Not Reported" is coded here. If this attribute is used no other attribute may be selected.

**01 (Dart-Out)** is used when a person entered the roadway and was involved in a collision with a vehicle where the driver's view of the person was blocked until an instant before impact. A dart-out can only occur if there is some documented visual obstruction (e.g., parked vehicle, building, or vegetation).

**11 (Dash)** is used when a person ran into the roadway and was involved in a collision with a vehicle. There is no mention in the case materials that the driver's view of the person was obstructed. The case materials should state that the person **ran**.

#### Examples of proper use include:

- A person's activity prior to the crash is jogging or running, but just prior to the impact the nonmotorist darted into the roadway.
- Children seen playing in a front yard, who suddenly run into the road to retrieve an object associated with their play (e.g. a ball).

**02 (Failure to Yield Right-of-Way)** is used when a person fails to yield the right-of-way as indicated in the case materials. A citation need not be issued, only that a failure to yield by the person was represented on the *Police Crash Report* through the crash description, diagram, and or coded boxes.

#### **Examples include:**

- Failure to yield when exiting a driveway.
- Mid-block crossings not at a crosswalk.
- Not clearing an intersection before the light turns green for crossing traffic.
- Failure to yield at an intersection not controlled by a stop sign or flashing red lights.
- A bicyclist which stopped at the stop sign, but did not realize it was a two way stop rather than a 4way stop control and proceeded into the intersection without yielding to traffic on the through trafficway.

Failure to obey a traffic control device is coded as 03 (Failure to Obey Traffic Signs, Signals or Officer).

**03 (Failure to Obey Traffic Signs, Signals or Officer)** is used when a person fails to obey a traffic control device as indicated in the case materials. Examples include: person does not obey traffic signs, traffic control devices (including pedestrian signals), traffic officers, or safety zones; or passes around railroad gates.

**04 (In Roadway Improperly [Standing, Lying, Working, Playing, etc.])** is used when *a* person was indicated to have been in the roadway improperly other than making an improper crossing as in code <u>12 (Improper Crossing of Roadway or Intersection [Jaywalking])</u>.

Examples include:

- Playing in the road before the vehicle arrived. The person must not have just run into the roadway after a ball, which would be coded <u>01 (Dart-Out)</u> or <u>11 (Dash)</u>.
- Working in the road other than because of the requirement of his/her job, (e.g., someone walking backwards into the roadway with a snow blower or lawn care equipment).
- In the street voluntarily, such as a civilian directing traffic at the scene of a crash.
- Attempting to hail a cab, flag down assistance, or flag down a transit bus between designated stops.
- Sitting, getting up, asleep/unconscious, kneeling, etc.

**05 (Entering/Exiting Parked or Stopped Vehicle)** is used when a pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. This does not include crashes involving pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.

**06** (Inattentive [Talking, Eating, etc.]) is used when the case materials specifically state a person is inattentive, lost in thought or distracted. Examples include using any electronic devices (cell phone, video game, e-reader), using earbuds on a music player while jogging, chatting with a neighbor, caring for a baby in a stroller, admiring a garden, etc.

**07 (Improper Turn/Merge)** is used when the case materials indicate the bicyclist/operator made an improper turn or merge. Examples of an improper turn include too wide right or left turns, making a right turn from the left lane, a left turn from the right lane or unsafe U-turns. An example of an improper merge is when the bicycle lane ends and the bicyclist merges into the path of a vehicle without leaving sufficient space.

**08 (Improper Passing)** is used when the case materials indicate the bicyclist/operator made an improper passing maneuver. The bicyclist/operator may be passing a motor vehicle or another bicyclist. Actions include passing on the right, and where prohibited by signs, pavement markings, or a stopped school bus, (i.e., mainly violations as designated by traffic controls). Improper passing which is based on faulty judgment errors such as insufficient distance, or inadequate visibility are captured by 20 (Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle).

**09 (Wrong-Way Riding or Walking)** is used when a person was identified in the case materials to have been traveling the wrong way.

**10 (Riding on Wrong Side of Road)** is used when a bicyclist was identified in the case materials to have been traveling on the wrong side of the road.

**12 (Improper Crossing of Roadway or Intersection [Jaywalking])** is used when a person is engaged in crossing a road but is not doing so properly. This includes mid-block crossings outside a crosswalk and crossing at an intersection by cutting on a diagonal through it. The officer's representation of either circumstance on the diagram or in the narrative substantiates the use of this attribute. The person may be engaged in other activities such as the continuation of jogging/running or a "sudden or impulsive" dart, run, etc. This attribute should not be used in conjunction with <u>04 (In Roadway Improperly [Standing, Lying, Working, Playing, etc.])</u>.

**13 (Failing to Have Lights on When Required)** is used when the case materials indicate the operator of a bicycle, animal-drawn conveyance or personal conveyance failed to have lights on when required. This also includes not having lights available to turn on, and may be used with **14 (Operating Without Required Equipment)**.

**14 (Operating Without Required Equipment)** is used when the case materials indicate that the bicycle, animaldrawn conveyance or person conveyance, was being operated without the proper equipment such as headlights, taillights, etc. Helmet use is captured under <u>NM13 Non-Motorist Safety Equipment</u>.

**15 (Improper or Erratic Lane Changing)** is used when a bicyclist, operator of horse-drawn vehicle, roller blader, or skateboard rider was weaving in and out of traffic. This includes maneuvering between vehicles and in-and-out of a bike lane.

**16 (Failure to Keep in Proper Lane or Running Off Road)** is used when a bicyclist/operator fails to stay in the proper lane or runs off the road. For example, a bicyclist fails to keep in bicycle lane or operator of horse-drawn vehicle goes straight in a turn lane. This includes running into a median or drifting into a parking lane.

**17 (Making Improper Entry to or Exit from Trafficway)** is used when a person is engaged in entering or exiting the trafficway but is not doing so properly, or in a manner that would be anticipated by others. This includes entering or exiting the trafficway midblock between driveway accesses, improper use of ramps and turn-bays to enter or exit, and or cutting on a diagonal across a lawn or parking lot to enter a trafficway. This may be used in conjunction with <u>02 (Failure to Yield Right-of-Way)</u>, <u>03 (Failure to Obey Traffic Signs, Signals or Officer)</u>, <u>07</u> (<u>Improper Turn/Merge</u>), and/or <u>09 (Wrong-Way Riding or Walking</u>) if they apply. This code does not apply to <u>Person Types</u> <u>05 (Pedestrian)</u> or <u>10 (Persons In/On Buildings)</u>.

**18 (Operating in Other Erratic, Reckless, Careless or Negligent Manner)** is used when explicitly stated in the case materials. Examples include bicyclists doing wheelies, attempting to grab on to a vehicle for motion ("skitching"), or skateboard racing.

**19 (Not Visible [Dark Clothing, No Lighting, etc.])** is used when the non-motorist was not visible to the motorist because of blocked views, insufficient lighting, or other reasons such as clothing which blends in with the surroundings at any time of the day (camouflage) or dark clothing in the rain at night. The officer must indicate that the non-motorist was not visible.

**20 (Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle)** is used when an improper passing maneuver is indicated in the case materials for the non-motorist. This indicates passing violations based on faulty judgment. This may be used in conjunction with <u>08 (Improper Passing)</u> if both apply.

**21 (Other, Specify:)** is used when the case materials state that an action(s)/circumstances(s) by the nonmotorist may have contributed to the crash, but are not listed in these attributes. Examples include being pushed into the roadway, falling from a bicycle, traveling on a prohibited roadway.

\*Note: for attributes with a "Specify:" designation, a fill-in text box will open in MDE. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

**99 (Unknown)** is used when the officer indicated unknown in the case material's contributing circumstances field or the narrative and no other information is available. If this attribute is used no other attribute may be selected.

Check	IF	THEN
(OPB1)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST CONTRIBUTING
	PEDESTRIAN equals 741,	CIRCUMSTANCES must equal 11.
(1N4F)	NON-MOTORIST SAFETY EQUIPMENT	NON-MOTORIST CONTRIBUTING
	Subfield 5- Non-Motorist Use of Lighting equals 2,	CIRCUMSTANCES should not equal 13.
(1P3F)	PERSON TYPE equals 10,	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01-20.
(1P0G)	PERSON TYPE equals 05,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 07, 08, 10, 13- 18, 20.
(1P3G)	PERSON TYPE equals 04, 06, 07,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 04.
(1P4G)	PERSON TYPE equals 04, 06-08, 19,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 05.
(1P5G)	PERSON TYPE equals 08,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 20.
(1P9G)	NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 20,	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 15.

Check	IF	THEN
(1P0H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 21,	CIRCUMSTANCES must not equal 02-04, 07-10,
		15, 16, 20.
(1P1H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 22,	CIRCUMSTANCES must not equal 01, 02, 04, 07,
		08, 11, 15, 20.
(1P2H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 23,	CIRCUMSTANCES must not equal 12, 15.
(1P3H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 24,	CIRCUMSTANCES must not equal 01, 03, 04, 10,
		11.
(1P4H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 25,	CIRCUMSTANCES must not equal 01-04, 10-12,
		15-17, 20.
(1P5H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 28, 98, 99,	CIRCUMSTANCES should not equal 01, 03, 04,
		10-12, 15, 16, 20.
(1P6H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
(10711)	CRASH equals 16, NON-MOTORIST LOCATION AT THE TIME OF	CIRCUMSTANCES should not equal 04, 16.
(1P7H)		NON-MOTORIST CONTRIBUTING
	CRASH equals 21,	CIRCUMSTANCES should not equal 01, 05, 11, 12, 17.
(1P8H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
(11011)	CRASH equals 23,	CIRCUMSTANCES should not equal 02.
(1P9H)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
(=: •: )	CRASH equals 24,	CIRCUMSTANCES should not equal 02, 05, 12,
		15, 16.
(1PHO)	NON-MOTORIST LOCATION AT THE TIME OF	NON-MOTORIST CONTRIBUTING
	CRASH equals 25,	CIRCUMSTANCES should not equal 07-09.
(4X2A)	NON-MOTORIST CONTRIBUTING	NON-MOTORIST SAFETY EQUIPMENT Subfield
	CIRCUMSTANCES equals 19	4-Non-Motorist Use of Reflective
		Clothing/Carried Item should not equal 2.
(4X2B)	NON-MOTORIST CONTRIBUTING	NON-MOTORIST SAFETY EQUIPMENT Subfield
	CIRCUMSTANCES equals 19	5- Non-Motorist Use of Lighting should not
		equal 2.
(4X3A)	NON-MOTORIST CONTRIBUTING	PERSON TYPE must equal 05.
	CIRCUMSTANCES equals 11,	
(4X8F)	any NON-MOTORIST CONTRIBUTING	only that one code and no other must be coded
	CIRCUMSTANCES equals 00 or 99,	for this person.
(4X8G)	NON-MOTORIST CONTRIBUTING	
	CIRCUMSTANCES must not equal 01 and 11	
185 - 51	for the same person.	
(PB16)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST CONTRIBUTING
	BICYCLIST equals 142, 144, 147, 153, 155,	CIRCUMSTANCES must equal 02.
	156, 157, 159, 311, 312, 313, 318, 319 or 357,	

PEDESTRIAN/BIKE TYPING - CRASH TYPE -

PEDESTRIAN equals 742,

(PBB1)

Check	IF	THEN
(PB18)	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	at least one NON-MOTORIST CONTRIBUTING
	PEDESTRIAN equals 742,	CIRCUMSTANCES must equal 01.
(PB26)	NON-MOTORIST CONTRIBUTING	PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	CIRCUMSTANCES equals 02, and PERSON	BICYCLIST should equal 142, 144, 147, 153, 155,
	TYPE equals 06 or 07,	156, 157, 159, 311, 312, 313, 318, 319 or 357.
	PEDESTRIAN/BIKE TYPING - CRASH TYPE -	NON-MOTORIST CONTRIBUTING
(PBA9)	PEDESTRIAN equals 741,	CIRCUMSTANCES must not equal 01.

NON-MOTORIST CONTRIBUTING

CIRCUMSTANCES must not equal 11.

### NM13 - Non-Motorist Safety Equipment

#### FORMAT: 6 Sets, 1 numeric.

SAS NAMES: Person.NMHELMET Person.NMPROPAD Person.NMOTHPRO Person.NMREFCLO Person.NMLIGHT Person.NMOTHPRE

#### ELEMENT VALUES:

#### **PROTECTIVE Non-Motorist Safety Equipment**

#### Subfield 1 - Non-Motorist Helmet Use

Codes	Attributes
1	No
2	Yes
8	Not Reported
9	<u>Unknown</u>

#### Subfield 2-Non-Motorist Use of Protective Pads

Codes	Attributes
1	No
2	<u>Yes</u>
8	Not Reported
9	<u>Unknown</u>

#### Subfield 3- Non-Motorist Use of Other Protective Safety Equipment

Codes	Attributes
1	<u>No</u>
2	<u>Yes</u>
8	Not Reported
9	<u>Unknown</u>

#### **PREVENTIVE Non-Motorist Safety Equipment**

#### Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item

Codes	Attributes
1	<u>No</u>
2	<u>Yes</u>
8	Not Reported
9	<u>Unknown</u>

#### Subfield 5-Non-Motorist Use of Lighting

Codes	Attributes
1	No
2	Yes
8	Not Reported
9	<u>Unknown</u>

Codes	Attributes
1	No
2	<u>Yes</u>
8	Not Reported
9	<u>Unknown</u>

#### Subfield 6-Non-Motorist Use of Other Preventive Safety Equipment

Definition: This element identifies the safety equipment that was used and not used by this non-motorist as reflected in the case materials.

Remarks: The applicable attribute may be determined using various items in the case materials such as a crash report field, the officer narrative, a fatal crash supplement, etc. Each subfield is recorded separately using the same attribute choices (<u>No</u>, <u>Yes</u>, <u>Not Reported</u>, and <u>Unknown</u>).

#### **PROTECTIVE Non-Motorist Safety Equipment**

Subfield 1- Non-Motorist Helmet Use is used to identify if the case materials indicate the non-motorist was wearing a safety helmet. The non-motorist does not have to be riding a bicycle at the time of the crash to code this subfield as <u>2 (Yes)</u>.

<u>2 (Yes)</u> includes all helmets (e.g., bicycle helmet, motorcycle helmet, racing helmets, etc.). If the non-motorist was wearing a motorcycle helmet, see <u>Related Factors - Person (Not a Motor Vehicle Occupant) Level</u> attribute <u>93 (Non-Motorist Wearing Motorcycle Helmet)</u>. For example, a pedestrian that previously was riding a motorcycle gets struck while still wearing their helmet.

Subfield 2- Non-Motorist Use of Protective Pads is used to identify if the case materials indicate the nonmotorist was wearing padded, shaped attachments to protect specific areas of the body (elbows, knees, shins, etc.) from injury.

Subfield 3- Non-Motorist Use of Other Protective Safety Equipment is used to identify if the case materials indicate the non-motorist was using protective safety equipment other than a helmet or pads (e.g., eye wear/face shields, gloves, wrist guards, etc.). If other safety equipment is noted in the case materials and it cannot be determined if it is preventive or protective, use code <u>8 (Not Reported)</u>.

#### PREVENTIVE Non-Motorist Safety Equipment

Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item is used to identify if the case materials indicate the non-motorist was wearing or carrying some type of reflective item (e.g., jacket, backpack, vest, etc.). The emphasis is on the reflective property of the clothing or carried item and does not include devices which give off light under their own power (e.g., flashlights). For lighting, use <u>Subfield 5- Non-Motorist Use of Lighting</u>. The reflective item can be reflective tape affixed to regular clothing, special reflective clothing, a reflective device that is worn or a reflective device that is carried. It can be made by the non-motorist and does not have to be specially designed as a safety device.

Do not code bicycle reflectors or clothing that is non-reflective but considered to be safety equipment (hi-glo orange clothing) here, use <u>Subfield 6- Non-Motorist Use of Other Preventive Safety Equipment</u> instead. Subfield 4 is used only for clothing or equipment that is both reflective and worn or carried.

Subfield 5- Non-Motorist Use of Lighting is used to identify if the case materials indicate the non-motorist was using a light on his/her person or on a pedalcycle or personal conveyance for safety purposes, to include flashlights.

Subfield 6- Non-Motorist Use of Other Preventive Safety Equipment is used to identify if the case materials indicate the non-motorist was using preventive safety equipment other than a reflective clothing/carried item or light (e.g., bicycle reflectors and flags, reflectors and triangles on a buggy, hi-glo orange clothing, rollerblade stoppers, etc.). If other safety equipment is noted in the case materials and it cannot be determined if it is preventive or protective, use code <u>8 (Not Reported)</u>.

#### The following attributes apply to all 6 subfields:

1 (No) is used when the case materials identify this non-motorist did not use this type of safety equipment.

2 (Yes) is used when the case materials identify this non-motorist used this type of safety equipment.

8 (Not Reported) is used when the case materials do not provide sufficient information to identify if this nonmotorist did 2(Yes) or did not 1 (No) use this type of safety equipment.

9 (Unknown) is used when the case materials identify it is unknown if this non-motorist used this type of safety equipment.

Check	IF	THEN
(1N4F)	NON-MOTORIST SAFETY EQUIPMENT	NON-MOTORIST CONTRIBUTING
	Subfield 5- Non-Motorist Use of Lighting equals 2,	CIRCUMSTANCES should not equal 13.
(4X2A)	NON-MOTORIST CONTRIBUTING	NON-MOTORIST SAFETY EQUIPMENT Subfield
	CIRCUMSTANCES equals 19	4-Non-Motorist Use of Reflective
		Clothing/Carried Item should not equal 2.
(4X2B)	NON-MOTORIST CONTRIBUTING	NON-MOTORIST SAFETY EQUIPMENT Subfield
	CIRCUMSTANCES equals 19	5- Non-Motorist Use of Lighting should not
		equal 2.
(4W2P)	RELATED FACTORS – PERSON (NOT A MV	NON-MOTORIST SAFETY EQUIPMENT Subfield 1
	OCCUPANT) LEVEL equals 93,	Non-Motorist Helmet Use must equal 2.
(8T0F)	NON-MOTORIST SAFETY EQUIPMENT	PERSON TYPE should equal 06-08.
	Subfield 1 Non-Motorist Helmet Use equals 2	

### NM14/D23 - Condition (Impairment) at Time of Crash

FORMAT: 2 numeric. Select all that apply. SAS NAME: Nmimpair.NMIMPAIR ELEMENT VALUES:

Codes	Attributes
00	None/Apparently Normal
01	III, Blackout
02	Asleep or Fatigued
03	Walking with a Cane or Crutches, etc.
04	Paraplegic or <i>in a</i> Wheelchair
05	Impaired Due to Previous Injury
06	<u>Deaf</u>
07	Blind
08	Emotional (Depressed, Angry, Disturbed, etc.)
09	Under the Influence of Alcohol, Drugs or Medication
10	Physical Impairment – No Details
96	Other Physical Impairment
98	Not Reported
99	Unknown If Impaired

**Definition:** This element attempts to identify any physical impairment to this non-motorist which may have contributed to the cause of the crash.

Remarks: Select all that apply.

This element's values and remarks are identical to the Driver Level element D23. Please see **D23 Condition** (Impairment) at Time of Crash for remarks.

Check	IF	THEN
(1P6G)	PERSON TYPE equals 04, 06-08, 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
		must not equal 03.
(1P7G)	PERSON TYPE equals 05-07, 19,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
		should not equal 04.
(1P8G)	PERSON TYPE equals 10,	CONDITION (IMPAIRMENT) AT TIME OF CRASH
		should not equal 01-10, 96.
(4X3F)	any CONDITION (IMPAIRMENT) AT TIME OF	only that one code and no other must be coded
	CRASH (NM14) equals 00 or 98 or 99,	for this person.
(4X6F)	any CONDITION (IMPAIRMENT) AT TIME OF	POLICE REPORTED ALCOHOL INVOLVEMENT
	CRASH (NM14) equals 09,	(NM15) or POLICE REPORTED DRUG
		INVOLVEMENT (NM18) must equal 1 for this
		person.
(U590)	UNLIKELY: any CONDITION (IMPAIRMENT) AT	
	TIME OF CRASH (NM14) equals 05 or 07.	

### NM15/P16 - Police Reported Alcohol Involvement

#### FORMAT: 1 numeric SAS NAME: Person.DRINKING ELEMENT VALUES:

Codes	Attributes
0	No (Alcohol Not Involved)
1	Yes (Alcohol Involved)
8	Not Reported
9	Unknown (Police Reported)

**Definition:** This data element reflects only the **judgment of law enforcement** as to whether alcohol was involved or not for this person.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P16. Please see <u>P16 Police Reported Alcohol Involvement</u> for remarks.

Check	IF	THEN
(4X6F)	any CONDITION (IMPAIRMENT) AT TIME OF	POLICE REPORTED ALCOHOL INVOLVEMENT
	CRASH (NM14) equals 09,	(NM15) or POLICE REPORTED DRUG
		INVOLVEMENT (NM18) must equal 1 for this
		person.
(D090)	VIOLATIONS CHARGED equals 11-19, and	POLICE REPORTED ALCOHOL INVOLVEMENT
	PERSON TYPE equals 01, 03,	should equal 1, or POLICE REPORTED DRUG
		INVOLVEMENT should equal 1.
(P072)	PERSON TYPE equals 02, 03, and INJURY	POLICE REPORTED ALCOHOL INVOLVEMENT
	SEVERITY equals 0, and ALCOHOL TEST	should equal 0, 8.
	RESULT equals 996,	
(P110)	METHOD OF ALCOHOL DETERMINATION BY	POLICE REPORTED ALCOHOL INVOLVEMENT
	POLICE equals 1-5, 8,	should equal 0, 1.
(P200)	POLICE REPORTED ALCOHOL INVOLVEMENT	METHOD OF ALCOHOL DETERMINATION BY
	equals 8, 9,	POLICE should equal 9.
(P300)	POLICE REPORTED ALCOHOL INVOLVEMENT	ALCOHOL TEST STATUS should not equal <b>0</b> .
	equals 1, and INJURY SEVERITY equals 4,	

### NM16/P17 - Method of Alcohol Determination by Police -FARS Only

FORMAT: 1 numeric SAS NAME: Person.ALC\_DET ELEMENT VALUES:

Codes	Attributes
1	Evidential Test (breath, blood, urine)
2	Preliminary Breath Test (PBT)
3	Behavioral
4	Passive Alcohol Sensor (PAS)
5	Observed
8	Other (e.g., Saliva test)
9	Not Reported

**Definition:** This element describes the method by which the police made the determination as to whether alcohol was involved or not for this person.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P17. Please see <u>P17 Method of Alcohol Determination by Police</u> for remarks.

Check	IF	THEN
(P110)	METHOD OF ALCOHOL DETERMINATION BY	POLICE REPORTED ALCOHOL INVOLVEMENT
	POLICE equals 1-5, 8,	should equal 0, 1.
(P200)	POLICE REPORTED ALCOHOL INVOLVEMENT	METHOD OF ALCOHOL DETERMINATION BY
	equals 8, 9,	POLICE should equal 9.
(U681)	UNLIKELY: METHOD OF ALCOHOL	
	DETERMINATION BY POLICE equals 8.	

### NM17/P18 - Alcohol Test

**FORMAT:** 3 sets, 1 set, 1 numeric, 1 set, 2 numeric, 1 set, 3 numeric **SAS NAME:** Person.ALC\_STATUS, Person.ATST\_TYP, Person.ALC\_RES **ELEMENT VALUES:** 

#### Subfield 1 – Test Status

CRSS Codes	FARS Codes	Attributes
0	0	Test Not Given
2	2	Test Given
8	8	Not Reported
9	9	Unknown if Tested

#### Subfield 2 – Test Type

CRSS Codes	FARS Codes	Attributes
00	00	Test Not Given
01	01	Blood
02	02	Breath Test (AC)
10	10	Preliminary Breath Test (PBT)
03	03	<u>Urine</u>
XX	04	Vitreous
XX	05	Blood Plasma/Serum
XX	06	Blood Clot
XX	07	Liver
08	08	Other Test Type
98	98	Unknown Test Type
95	95	Not Reported
99	99	Unknown if Tested

#### Subfield 3 – Test Result

CRSS Codes	FARS Codes	Attributes	
00-939	00-939	Actual Value	
940	940	.94 or Greater	
996	996	Test Not Given	
997	997	AC Test Performed, Results Unknown	
998	998	Positive Reading with No Actual Value	
995	995	Not Reported	
999	999	Unknown if Tested	

Definition for Alcohol Test Status: This element identifies if an alcohol (ethanol) test was given to this person.

**Definition for Alcohol Test Type:** This element identifies the type of the alcohol (ethanol) test that was used for this person.

Definition for Alcohol Test Result: This element identifies the alcohol (ethanol) test result for this person.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P18. Please see <u>P18 Alcohol Test</u> for remarks.

Check	IF	THEN
(5T7P)	ALCOHOL TEST STATUS equals <b>0</b> ,	ALCOHOL TEST TYPE must equal 00, and
		ALCOHOL TEST RESULT must equal 996.
(5T8P)	ALCOHOL TEST STATUS equals 9,	ALCOHOL TEST TYPE must equal 99, and
		ALCOHOL TEST RESULT must equal 999.
(5T9P)	ALCOHOL TEST STATUS equals 2,	ALCOHOL TEST TYPE must equal 01-10, 95, 98,
		and ALCOHOL TEST RESULT must equal 000-940,
		997, 998.
(5TCP)	ALCOHOL TEST STATUS equals 8,	ALCOHOL TEST TYPE must equal 95, and
		ALCOHOL TEST RESULT must equal 995.
(P071)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST STATUS should not equal 9,
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST TYPE should not equal 99, and
		ALCOHOL TEST RESULT should not equal 999.
(P072)	PERSON TYPE equals 02, 03, and INJURY	POLICE-REPORTED ALCOHOL INVOLVEMENT
	SEVERITY equals 0, and ALCOHOL TEST	should equal 0, 8.
	RESULT equals 996,	
(P074)	PERSON TYPE equals 02, 04-08, 10, and	ALCOHOL TEST TYPE must equal 00, and
	INJURY SEVERITY does not equal 4,	ALCOHOL TEST RESULT must not equal 995.
(P080)	ALCOHOL TEST RESULTS should not equal	
	340-940.	
(P300)	POLICE REPORTED ALCOHOL INVOLVEMENT	ALCOHOL TEST STATUS should not equal <b>0</b> .
	equals 1, and INJURY SEVERITY equals 4,	
(U689)	UNLIKELY: ALCOHOL TEST Subfield 3-Test	
	Result equals 001-009.	
(U691)	UNLIKELY: ALCOHOL TEST Subfield 3-Test	
	Result equals 010-019.	
(U692)	UNLIKELY: ALCOHOL TEST Subfield 3-Test	
	Result equals 020-029.	
(U693)	UNLIKELY: ALCOHOL TEST Subfield 3-Test	
	Result equals 030-039.	

### NM18/P19 - Police Reported Drug Involvement

#### FORMAT: 1 numeric SAS NAME: Person.DRUGS ELEMENT VALUES:

Codes	Attributes	
0	No (Drugs Not Involved)	
1	Yes (Drugs Involved)	
8	Not Reported	
9	Unknown (Police Reported)	

**Definition:** This data element reflects only the **judgment of law enforcement** as to whether drugs were involved or not for this person.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P19. Please see **P19 Police Reported Drug Involvement** for remarks.

Check	IF	THEN
(4X6F)	any CONDITION (IMPAIRMENT) AT TIME OF	POLICE REPORTED ALCOHOL INVOLVEMENT
	CRASH (NM14) equals 09,	(NM15), or POLICE REPORTED DRUG
		INVOLVEMENT (NM18) must equal 1 for this
		person.
(BQ0P)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT must
	POLICE equals 8,	equal 0, 1, 8, 9.
(BROP)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT must
	POLICE equals 1-7,	equal 0, 1, 8.
(D090)	VIOLATIONS CHARGED equals 11-19, and	POLICE REPORTED ALCOHOL INVOLVEMENT
	PERSON TYPE equals 01, 03,	should equal 1, or POLICE REPORTED DRUG
		INVOLVEMENT should equal 1.
(P140)	POLICE REPORTED DRUG INVOLVEMENT	METHOD OF DRUG DETERMINATION BY POLICE
	equals 8, 9,	should equal 8.
(P150)	POLICE REPORTED DRUG INVOLVEMENT	DRUG TEST STATUS should not equal 0.
	equals 1,	
(P160)	POLICE REPORTED DRUG INVOLVEMENT	not all DRUG TEST RESULTS should equal 001.
	equals 1, and METHOD OF DRUG	
	DETERMINATION BY POLICE equals 2,	
(P170)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT should
	POLICE equals 1-7,	equal 0, 1.

### NM19/P20 - Method of Drug Determination by Police -FARS Only

FORMAT: 1 numeric SAS NAME: Person.DRUG\_DET ELEMENT VALUES

Codes	Attributes	
1	Evidential Test (Blood, Urine)	
2	Drug Recognition Expert (or Evaluator) (DRE) determination	
3	Behavioral	
7	<u>Other</u>	
8	Not Reported	

**Definition:** This element identifies the method by which the police made the determination as to whether drugs were involved or not for this person.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P20. Please see <u>P20 Method of Drug Determination by Police</u> for remarks.

Check	IF	THEN
(BQ0P)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT must
	POLICE equals 8,	equal 0, 1, 8, 9.
(BROP)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT must
	POLICE equals 1-7,	equal 0, 1, 8.
(P140)	POLICE REPORTED DRUG INVOLVEMENT	METHOD OF DRUG DETERMINATION BY POLICE
	equals 8, 9,	should equal 8.
(P160)	POLICE REPORTED DRUG INVOLVEMENT	not all DRUG TEST RESULTS should equal 001.
	equals 1, and METHOD OF DRUG	
	DETERMINATION BY POLICE equals 2,	
(P170)	METHOD OF DRUG DETERMINATION BY	POLICE REPORTED DRUG INVOLVEMENT should
	POLICE equals 1-7,	equal 0, 1.

### NM20/P21 - Drug Test

FORMAT: 3 sets: 2 sets, 1 numeric; 1 set, 3 sets, 3 numeric

SAS NAME: Person.DSTATUS, Person.DRUGTST1, Person.DRUGTST2, Person.DRUGTST3, Person.DRUGRES1, Person.DRUGRES2, Person.DRUGRES3

#### **ELEMENT VALUES:**

#### Subfield 1 – Test Status

CRSS Codes	FARS Codes	Attributes
0	0	Test Not Given
2	2	Test Given
8	8	Not Reported
9	9	Unknown if Tested

#### Subfield 2 – Test Type

CRSS Codes	FARS Codes	Attributes
0	0	Test Not Given
1	1	Blood
2	2	<u>Urine</u>
3	3	Both: Blood and Urine Tests
7	7	Unknown Test Type
8	8	Other Test Type
6	6	Not Reported
9	9	Unknown if Tested

#### Subfield 3 – Test Result

CRSS Codes	FARS Codes	Attributes
000	000	Test Not Given
001	001	Tested, No Drugs Found/Negative
XXX	100-295	Narcotic*
XXX	300-395	Depressant*
XXX	400-495	Stimulant*
XXX	500-595	Hallucinogen*
XXX	600-695	Cannabinoid*
XXX	700-795	Phencyclidine (PCP)*
XXX	800-895	Anabolic Steroid*
XXX	900-995	Inhalant*
XXX	996	Other Drug
997	997	Tested for Drugs, Results Unknown
998	998	Tested for Drugs, Drugs Found, Type Unknown/Positive
095	095	Not Reported
999	999	Unknown If Tested

#### \* See Specific Drug Listings

\*\* Test Result does not include Aspirin, Nicotine or Ethanol. Alcohols reported other than ethanol would be classified under <u>996 (Other Drug)</u>. In addition, exclude drugs explicitly indicated to have been administered after the crash. See Remarks below.

**Definition for Drug Test Status:** This element identifies if a chemical test for the presence of drugs was given to this person.

**Definition for Drug Test Type:** This element identifies the type of chemical test for the presence of drugs that was used for this person.

**Definition for Drug Test Result:** This element identifies the result of a chemical test for the presence of drugs for this person.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P21. Please see <u>P21 Drug Test</u> for remarks.

See <u>Alphabetical Drug Index</u> and <u>Drugs by Category</u> under element P21. Also reference "<u>Examples for</u> <u>Interpreting Drug Tests</u>" under element P21.

Check	IF	THEN
(7M1F)	PERSON TYPE equals 03, and SEATING	DRUG TEST STATUS must not equal 8, any DRUG
	POSITION is not equal to 11 or 13, and	TEST TYPE must not equal 6, and any DRUG TEST
	INJURY SEVERITY does not equal 4,	RESULTS must not equal 095.
(BT1P)	DRUG TEST STATUS equals <b>0</b> ,	all DRUG TEST TYPE must equal 0, and all DRUG
		TEST RESULT must equal 000 for this person.
(BT2P)	DRUG TEST STATUS equals 8,	DRUG TEST TYPE 1 must equal 6, and DRUG
		TEST RESULT 1 must equal 095 and remaining
		DRUG TEST TYPES and DRUG TEST RESULTS
		must be 0 filled.
(BT3P)	DRUG TEST STATUS equals 2,	at least one DRUG TEST TYPE must equal 1-8,
		and one corresponding DRUG TEST RESULT must
		equal 001, 095, 100-295, 300-395, 400-495, 500-
		595, 600-695, 700-795, 800-895, 900-995, 996-
		998.
(BT6P)	DRUG TEST STATUS equals 9,	DRUG TEST TYPE 1 must equal 9, and DRUG
		TEST RESULT 1 must equal 999 and remaining
		DRUG TEST TYPES and DRUG TEST RESULTS
		must be 0 filled.
(BT7P)	DRUG TEST STATUS equals 2, and DRUG TEST	DRUG TEST RESULT two and three must not
	RESULT one equals 001, 095, 100-295, 300-	equal 999.
	395, 400-495, 500-595, 600-695, 700-795,	
	800-895, 900-995, 996, 997, 998,	
(BT8P)	More than one of the same DRUG TEST	
	RESULT values must not be coded for the	
	same person except for 000, 996.	
(BT9P)	DRUG TEST RESULT 1 equals 000, 001, 997,	DRUG TEST RESULT 2 and DRUG TEST RESULT 3
	998, 095, or 999,	must equal 000.
(P073)	PERSON TYPE equals 02, 04-08, 10, and	DRUG TEST STATUS should not equal 9, and any
	INJURY SEVERITY does not equal 4,	DRUG TEST TYPE should not equal 9, and any
		DRUG TEST RESULTS should not equal 999.

Check	IF	THEN
(P075)	PERSON TYPE equals 02, 04-08, 10 or 19, and	DRUG TEST STATUS must not equal 8, any DRUG
	INJURY SEVERITY does not equal 4,	TEST TYPE must not equal 6, and any DRUG TEST
		RESULTS must not equal 095.
(P150)	POLICE REPORTED DRUG INVOLVEMENT	DRUG TEST STATUS should not equal 0.
	equals 1,	
(P160)	POLICE REPORTED DRUG INVOLVEMENT	not all DRUG TEST RESULTS should equal 001.
	equals 1, and METHOD OF DRUG	
	DETERMINATION BY POLICE equals 2,	

### NM21/P22 - Transported to First Medical Facility By

FORMAT: 1 numeric SAS NAME: Person.Hospital ELEMENT VALUES:

Codes	Attributes
0	Not Transported
1	EMS Air
5	EMS Ground
3	EMS Unknown Mode
2	Law Enforcement
4	Transported Unknown Source
6	<u>Other</u>
8	Not Reported
9	Unknown

**Definition:** This element identifies the method of transportation this person was provided to receive treatment at the first hospital or medical facility.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P22. Please see <u>P22 Transported to First Medical Facility By</u> for remarks.

Check	IF	THEN
(2U3F)	INJURY SEVERITY equals 3,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		should not equal 0.
(A551)	EMS TIME AT HOSPITAL equals 8888, 9997,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	9998,	should not equal 1, 3, 5 for any PERSON.
(P090)	INJURY SEVERITY equals 0,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.
(P091)	TRANSPORTED TO FIRST MEDICAL FACILITY	EMS TIME AT HOSPITAL should not equal 8888,
	BY equals 1, 3, 5,	9997, 9998.
(P093)	all persons TRANSPORTED TO FIRST MEDICAL	NOTIFICATION TIME EMS, ARRIVAL TIME EMS,
	FACILITY BY equals 2, 4,	EMS TIME AT HOSPITAL must equal 8888.
(P095)	TRANSPORTED TO FIRST MEDICAL FACILITY	EMS TIME AT HOSPITAL must not equal 0000-
	BY equals 0 for every person in the case,	2399, 9999.
(P50P)	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.
(P51P)	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 1-6.

#### **Consistency Checks:**

#### **Consistency Checks (FARS Only):**

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME AND DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.

Check	IF	THEN
(P52P)	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 8 or 9.
(P55P)	TRANSPORTED TO FIRST MEDICAL FACILITY	DIED AT SCENE/EN ROUTE must equal 0, 9.
	BY equals 9,	

### NM22/P23 - Died at Scene/En Route - FARS Only

#### FORMAT: 1 numeric SAS NAME: Person.DOA ELEMENT VALUES:

Codes	Attributes
0	Not Applicable
7	Died at Scene
8	Died En Route
9	Unknown

**Definition:** This element identifies if this person died at the scene of the crash or en route to a hospital or treatment facility.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P23. Please see <u>P23 Died at Scene/En Route</u> for remarks.

#### **Consistency Checks:**

Check	IF	THEN
(1R1P)	If DIED AT SCENE/EN ROUTE equals 7, 8,	INJURY SEVERITY must equal 4.
(P50P)	DIED AT SCENE/EN ROUTE equals 7,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 0.
(P510)	EMS TIME AT HOSPITAL equals 8888, 9997,	DIED AT SCENE/EN ROUTE should not equal 8
	9998,	for any PERSON.
(P51P)	DIED AT SCENE/EN ROUTE equals 8,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 1-6.
(P530)	EMS TIME AT HOSPITAL equals 9996,	DIED AT SCENE/EN ROUTE must equal 8 for at
		least one person.
(P53P)	INJURY SEVERITY equals 0-3, 5, 6,	DIED AT SCENE/EN ROUTE must equal 0.
(P54P)	DIED AT SCENE/EN ROUTE equals 8,	EMS TIME AT HOSPITAL should not equal 8888,
		9997, 9998.
(P56P)	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the
		CRASH TIME.

#### **Consistency Checks (FARS Only):**

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME AND DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.
(P52P)	DIED AT SCENE/EN ROUTE equals 9,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
		must equal 8 or 9.
(P55P)	TRANSPORTED TO FIRST MEDICAL FACILITY	DIED AT SCENE/EN ROUTE must equal 0, 9.
	BY equals 9,	

### NM23/P24 - Death Date - FARS Only

#### **FORMAT:** 2 sets of 2 numeric, 1 set of 4 numeric **SAS NAME:** Person.DEATH\_DA; Person.DEATH\_MO; Person.DEATH\_YR **ELEMENT VALUES:**

#### Month:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-12	Month of the Year
99	Unknown

#### Day:

Codes	Attributes
88	Not Applicable (Non-fatal)
01-31	Day of the Month
99	Unknown

#### Year:

Codes	Attributes
8888	Not Applicable (Non-fatal)
	Actual Year of Death
9999	Unknown

**Definition:** This element records the month, day, and year of this person's death.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P24. Please see <u>P24 Death Date</u> for remarks.

Check	IF	THEN
(1U1F)	INJURY SEVERITY equals 4,	DEATH DATE must not equal 888888888.
(1VOP)	DEATH MONTH or DAY equals 88, or DEATH YEAR equals 8888,	all must equal 8s.
(2U1F)	INJURY SEVERITY is not equal to 4,	DEATH DATE must equal 888888888.
(2V0P)	DEATH DAY is 01-31, and DEATH MONTH is 01-12,	DEATH DAY must be a valid day for DEATH MONTH.
(3U0P)	DEATH DATE equals CRASH DATE, and CRASH TIME is not equal to 9999,	DEATH TIME must not be less than CRASH TIME.
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
(4V2F)	CRASH MONTH equals 12, and DEATH MONTH equals 01,	DEATH YEAR must equal CRASH YEAR plus 1.
(4V3F)	CRASH MONTH equals 12,	DEATH MONTH must equal 01, 12, 88, 99.
(4V4F)	CRASH MONTH equals 02-11, and DEATH MONTH is not equal to 88 or 99,	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1.

Check	IF	THEN
(4V5F)	CRASH MONTH equals 01, and DEATH	DEATH MONTH must equal CRASH MONTH or
	MONTH is not equal to 88 or 99,	CRASH MONTH plus 1 or CRASH MONTH plus 2.
(4V6P)	DEATH MONTH is not equal to blanks,	DEATH DAY and DEATH YEAR must not equal
		blanks.
(4V7P)	DEATH DAY is not equal to blanks,	DEATH MONTH and DEATH YEAR must not equal
		blanks.
(4V8P)	DEATH YEAR is not equal to blanks,	DEATH MONTH and DEATH DAY must not equal
		blanks.
(6V0P)	DEATH DATE must not be less than CRASH	
	DATE.	
(7V0F)	DEATH YEAR equals 9999,	CRASH MONTH must not be 01-11.
(8V0P)	DEATH YEAR equals 9999,	DEATH MONTH and DEATH DAY must equal 99.
(9V0P)	DEATH MONTH equals 99,	DEATH DAY must equal 99.
(P56P)	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the
		CRASH TIME.

#### Consistency Check (FARS Only):

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME and DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.

### NM24/P25 - Death Time - FARS Only

#### **FORMAT:** 4 numeric **SAS NAME:** Person.DEATH\_HR; Person.DEATH\_MN; Person.DEATH\_TM **ELEMENT VALUES:**

Codes	Attributes
8888	Not Applicable (Non-fatal)
0000-2359	Valid Military Time
0099-2399	Known Hour but Unknown Minutes
9999	Unknown

**Definition:** This element identifies the hour and minute of this person's death utilizing the 24-hour clock format.

**Remarks:** This element's values and remarks are identical to the Person Level (MV Occupant) Level element P25. Please see **P25 Death Time** for remarks.

#### **Consistency Checks:**

Check	IF	THEN
(1U2F)	INJURY SEVERITY equals 4,	DEATH TIME must not equal 8888.
(2U2F)	INJURY SEVERITY is not equal to 4,	DEATH TIME must equal 8888.
(3U0P)	DEATH DATE equals CRASH DATE, and CRASH TIME is not equal to 9999,	DEATH TIME must not be less than CRASH TIME.
(4V1F)	INJURY SEVERITY equals 4,	DEATH DATE and DEATH TIME for this person must be within 720 hours of the CRASH DATE and CRASH TIME.
(P56P)	DIED AT SCENE/EN ROUTE equals 7,	DEATH TIME should be within 30 minutes of the CRASH TIME.

#### Consistency Check (FARS Only):

Check	IF	THEN
(P520)	CRASH DATE and DEATH DATE are the same,	TRANSPORTED TO FIRST MEDICAL FACILITY BY
	and CRASH TIME AND DEATH TIME are the	should equal 0, and DIED AT SCENE/EN ROUTE
	same,	should equal 7.

### NM25 - Related Factors – Person (Not A Motor Vehicle Occupant) Level

#### FORMAT: 2 numeric occurring 3 times SAS NAME: Person.P\_SF1, Person.P\_SF2, Person.P\_SF3 ELEMENT VALUES:

Codes	Attributes
00	None
*08	Mentally Challenged
09	Construction/Maintenance/Utility Worker
10	Alcohol and/or Drug Test Refused
13	Motorized Wheelchair Rider
*18	Mother of Dead Fetus/ Mother of Infant Born Post Crash
*21	Overloading or Improper Loading of Vehicle with Passengers or Cargo
*26	Following Improperly
*37	Traveling on Prohibited Trafficways
*40	Passing Through or Around Barrier
*41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them
*42	Failure to Signal Intentions
*51	Operator Inexperience
*52	Unfamiliar with Roadway
56	Non-Driver Flees Scene
*57	Improper Tire Pressure

#### Vision Obscured By:

Codes	Attributes
*60	Rain, Snow, Fog, Smoke, Sand, Dust
*61	Reflected Glare, Bright Sunlight, Headlights
*62	Curve, Hill, or Other Design Features (including traffic signs, embankment)
*63	Building, Billboard, Other Structures
*64	Trees, Crops, Vegetation
*65	Motor Vehicle (including load)
*66	Parked Vehicle
*67	Splash or Spray of Passing Vehicle
*68	Inadequate Lighting System
*69	Obstructing Angles on Vehicle
*70	<u>Mirrors</u>
*72	Other Visual Obstruction

#### Skidding, Swerving, Sliding Due To:

Codes	Attributes
*73	Severe Crosswind
*74	Wind from Passing Truck
*75	Slippery or Loose Surface
*76	Tire Blowout or Flat

Codes	Attributes
*77	Debris or Objects in Road
*78	Ruts, Holes, Bumps in Road
*80	Vehicle in Road
*81	Phantom Vehicle
*82	Pedestrian, Pedal Cyclists, or Other Non-Motorist
*83	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road

#### **Other Non-Motorist Factors:**

Codes	Attributes
86	Emergency Services Personnel
87	Police or Law Enforcement Officer
90	Non-Motorist Pushing a Vehicle
91	Portable Electronic Devices
93	Non-Motorist Wearing Motorcycle Helmet
99	<u>Unknown</u>

#### **\*FARS ONLY ATTRIBUTES**

**Definition:** This element identifies factors related to persons not in a motor vehicle expressed by the investigating officer.

**Remarks:** Code information provided by the investigating officer associated with this person from the narrative, contributing factors/circumstances field, or citations/violations section of the case materials.

This is a nominal list only and does NOT imply a hierarchy. However, if more than three factors apply to this nonmotorist, capture those which cannot be collected elsewhere in the data.

#### The following lists those related factors that may be used for each person type (NM7):

Person Type	Valid Related Factors
04 (Occupant of a Non-Motor Vehicle	00, 08, 09, <b>10,</b> 18, 21, 26, 37, 40-42, 51, 52, 56, 57, 60-70, 72-78,
Transport Device)	80-83, 87, 91, 93, 99
05 (Pedestrian)	00, 08, 09, <b>10,</b> 18, 37, 41, 56, 60-67, 72, 86-87, 90, 91, 93, 99
06 (Bicyclist)	00, 08, <b>10,</b> 18, 21, 26, 37, 40-42, 51, 52, 56, 57, 60-68, 72-78, 80-
	83, 87, 91, 93, 99
07 (Other Cyclist)	00, 08, <b>10,</b> 18, 21, 26, 37, 40-42, 51, 52, 56, 57, 60-68, 72-78, 80-
	83, 91, 93, 99
08 (Person on Personal Conveyances)	00, 08, <b>10,</b> 13, 18, 21, 26, 37, 40-42, 51, 52, 56, 57, 60-70, 72-78,
	80-83, 87, 91, 93, 99
10 (Persons In/On Buildings)	00, 08, <b>10,</b> 13, 18, 26, 86, 87, 93, 99
09 (Unknown Type of Non-Motorist)	00, 08, 09, <b>10,</b> 18, 21, 26, 37, 40-42, 51, 52, 56, 57, 60-68, 72-78,
	80-83, 86, 87, 91, 93, 99

**00 (None)** is used when no applicable related factors are noted in the crash report. Zero-fill all fields. Also, use **00 (None)** to complete the remaining fields when you will be recording less than three non-motorist related factors. DO NOT leave any remaining fields blank.

**\*08 (Mentally Challenged)** is used when the case materials identify that the non-motorist has a documented mental illness or intellectual disorder noted by the officer.

**09** (Construction/Maintenance/Utility Worker) is used when the case materials identify that this was a nonmotorist working with the highway department, a contractor, or a utility company at the time of the crash.

10 (Alcohol and/or Drug Test Refused) is used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to administer a test post-refusal. Because of this, it is possible to code 10 (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

**13 (Motorized Wheelchair Rider)** is used when the case materials identify the non-motorist is in a motorized wheelchair (personal conveyance).

\*18 (Mother of Dead Fetus/Mother of Infant Born Post Crash) is used when the case materials identify that this non-motorist is the mother of a fetus that died in or as a result of this crash or it is identified that this non-motorist gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate individual and, thus, is not counted as a separate person in the crash.

**\*21 (Overloading or Improper Loading of Vehicle with Passengers or Cargo)** is used when the case materials describe more than one non-motorist is occupying one seating position at the time of the crash. For example, overloading a bicycle with a passenger riding on the handlebars.

**\*26 (Following Improperly)** is used when the case materials identify that this non-motorist was following a bicyclist, motor vehicle, non-motor vehicle transport device, or person on a personal conveyance too closely as to create a dangerous situation.

#### Examples include:

- A non-motorist (bicyclist, skateboard rider, roller blader, etc.) that attempts to grab on to a motor vehicle that is in-transport.
- A bicyclist is following a vehicle so closely that as it passes or takes an avoidance maneuver around one vehicle going in the same direction as the bicyclist, the bicyclist strikes the rear of the vehicle it was attempting to pass or the rear of another vehicle in the adjacent lane also going the same direction.

**\*37 (Traveling on Prohibited Trafficways)** is used when the case materials identify that this non-motorist was traveling on an open trafficway that prohibited travel for their mode of transportation. This applies to all forms of pedestrian travel (skateboard riders, roller bladers, etc.), as well as horseback riders, carriages, bicyclists, etc.

**\*40 (Passing Through or Around Barrier)** is used when the case materials identify this non-motorist was traveling through or around a "demarcated" area to be in a prohibited area (street closed for a parade, construction, sidewalk closed, etc.).

\*41 (Failure to Observe Warnings or Instructions on Vehicles Displaying Them) is used when the case materials identify this non-motorist failed to heed warnings or follow instructions displayed on other vehicles. Examples include:

#### Examples include:

- A non-motorist failed to follow construction instructions (e.g., arrows directing traffic mounted on a vehicle) or instructions on emergency vehicles (ambulances, fire trucks, police cars).
- A non-motorist failed to observe right-turn warning on a truck or buses.
- A bicyclist failed to heed hazard lights on a disabled vehicle.
- A child failed to walk around the school bus arm that was extended into the travel lane that permitted the bus driver to see the child in the roadway.

**\*42 (Failure to Signal Intentions)** is used when the case materials identify this non-motorist failed to signal their intentions as required. This attribute includes a failure to signal by either lamp turn signal or hand.

**\*51 (Operator Inexperience)** is used when the case materials identify this non-motorist's (horseback rider, skate boarder, bicyclist without training wheels, etc.) lack of experience contributed to their involvement. Should be expressed by officer and not presumed based on age.

**\*52 (Unfamiliar with Roadway)** is used when the case materials identify this non-motorist's (horseback rider, skate boarder, bicyclist without training wheels, etc.) lack of familiarity with the area/location where the crash occurred contributed to their involvement. Should be expressed by officer and not presumed based on age.

**56 (Non-Driver Flees Scene)** is used when the case materials identify this non-motorist left the scene of a Hitand-Run crash.

Examples Include:

- A bicyclist clipped by a vehicle that runs off the road and overturns, leaves the scene on their bike.
- A pedestrian is pushing an occupied wheelchair, which is struck by a motor vehicle. The pedestrian panics and flees the scene.

**\*57 (Improper Tire Pressure)** is used when the case materials identify that improper tire pressure was present on one or more tires of a bicycle, non-motor vehicle transport device or personal conveyance in use by this non-motorist. It signifies that improper tire pressure is not a defect, but rather the irresponsibility of this person.

#### **Vision Obscured By:**

The following set of attributes identifies visual obstructions noted in the case materials applicable to this nonmotorist.

\*60 (Rain, Snow, Fog, Smoke, Sand, Dust)

\*61 (Reflected Glare, Bright Sunlight or Headlights)

- \*62 (Curve, Hill or Other Design Features [including traffic signs, embankment])
- \*63 (Building, Billboard or Other Structures)
- \*64 (Trees, Crops or Vegetation)

#### \*65 (Motor Vehicle [including load])

Examples include:

- A car stopped on the roadway.
- A tractor-trailer in-transport on the road.
- A school bus stopped for the purpose of loading and/or unloading children.
- \*66 (Parked Vehicle)
- \*67 (Splash or Spray of a Passing Vehicle)
- \*68 (Inadequate Lighting System)

\*69 (Obstructing Angles on the Vehicle) is used when the case materials identify obstructing angles on this person's vehicle. This attribute should not to be confused with visual obstructions from other vehicles. (See 65 (Motor Vehicle [including load]) and 66 (Parked Vehicle).

**\*70 (Mirrors)** is used when the case materials identify that this non-motorist's vision was obscured by any type of mirror.

**\*72 (Other Visual Obstruction)** is used when the case materials identify that this non-motorist's vision was obscured by something other than previously listed. For example, a trailer that has been left parked on the side of the road by a truck or vehicle.

#### Skidding, Swerving, Sliding Due To:

This set of attributes is applicable to the non-motorist that attempted to avoid one of the following or whose control loss was related to one of the following.

**\*73 (Severe Crosswind)** is used when the case materials identify this non-motorist's control loss was related to severe crosswinds.

**\*74 (Wind from Passing Truck)** is used when the case materials identify this non-motorist's control loss was related to winds produced by a passing truck.

\*75 (Slippery or Loose Surface) is used when the case materials identify this non-motorist's control loss was related to the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice or snow (see <u>83 (Ice, Snow, Slush,</u> <u>Water, Sand, Dirt, Oil or Wet Leaves on Road</u>).

Examples include:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.

**\*76 (Tire Blowout or Flat)** is used when the case materials identify this non-motorist's control loss was related to a tire blowout or flat.

**\*77 (Debris or Objects in Road)** is used when the case materials identify this non-motorist attempted to avoid or lost control as a result of debris in the road. Examples would include: nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

**\*78 (Ruts, Holes, Bumps in Road)** is used when the case materials identify this non-motorist attempted to avoid or lost control as a result of a road surface anomalies such as ruts, holes, dips or bumps.

**\*80 (Vehicle in Road)** is used when the case materials identify this non-motorist attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that remain at the scene.

**\*81 (Phantom Vehicle)** is used when the case materials identify this non-motorist attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

**\*82 (Pedestrian, Pedal Cyclist, or Other Non-Motorist)** is used when the case materials identify this nonmotorist attempted to avoid or lost control as a result of a pedestrian, a pedal cyclist (bicyclist) or other type of non-motorist.

**\*83 (Ice, Snow, Slush, Water, Sand, Dirt, Oil or Wet Leaves on Road)** is used when the case materials identify this non-motorist's control loss was related to a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see <u>75 (Slippery or Loose Surface)</u>.

#### **Other Non-Motorist Factors:**

**86 (Emergency Services Personnel)** is used when the case materials identify that this non-motorist was a fire fighter, wrecker service worker or Emergency Medical Service (EMS) personnel.

**87 (Police or Law Enforcement Officer)** is used when the case materials identify that this non-motorist was a police or law enforcement officer **working** at the time of the crash. The officer may be affiliated at the Federal, State or local law enforcement level. This would also include: military and park police, border patrol officers and all other sworn law enforcement officers.

**90 (Non-Motorist Pushing a Vehicle)** is used when the case materials identify the non-motorist was pushing a vehicle.

**91 (Portable Electronic Devices)** is used when the case materials identify that this non-motorist was using an electronic device (Cell phone, MP3 Player, PDA, etc.) that was somehow related to the crash occurrence.

**93 (Non-Motorist Wearing Motorcycle Helmet)** is used when the materials identify that this non-motorist was wearing a motorcycle helmet. This can apply to a pedestrian, bicyclist, or other non-motorist. For example, a pedestrian that previously was riding a motorcycle gets struck while still wearing their helmet.

**99 (Unknown)** is used when the circumstances surrounding the crash are unknown and reported as "unknown" by the investigating officer. In these circumstances, nine-fill all fields. If **99 (Unknown)** is used for any field, ALL fields must be **99 (Unknown)**. DO NOT leave any remaining fields blank.

Check	IF	THEN
(1M1F)	RELATED FACTORS-PERSON LEVEL equals 13,	PERSON TYPE should equal 08.
(1N0F)	PERSON TYPE equals 06,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 09, 13, 69, 70, 86, 90.
(1N1F)	PERSON TYPE equals 10,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 09, 21, 37, 40-42, 51,
		52, 56, 57, 60-70, 72-78, 80-83, 90, 91.
(1W0P)	any RELATED FACTORS-PERSON LEVEL equals 99,	all factors must equal 99.
(2W0P)	any RELATED FACTORS-PERSON LEVEL equals blanks,	all factors must equal blanks.
(3W0P)	any RELATED FACTORS-PERSON LEVEL equals 00,	all subsequent factors must equal 00.
(4W1P)	A RELATED FACTORS-PERSON LEVEL (Not a	
	MV Occupant) between 08 and 91 can be	
	used only once per person form.	
(4W2P)	RELATED FACTORS – PERSON (NOT A MV	NON-MOTORIST SAFETY EQUIPMENT Subfield 1
	OCCUPANT) LEVEL equals 93,	Non-Motorist Helmet Use must equal 2.
(8M0F)	PERSON TYPE equals 04,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 13, 86, 90.
(8Q0F)	PERSON TYPE equals 08,	RELATED FACTORS-PERSON LEVEL must not
		equal 09, 86, 90.

Check	IF	THEN
(9M0F)	PERSON TYPE equals 05,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 13, 21, 26, 40, 42, 51,
		52, 57, 68-70, 73-83.
(CKOP)	PERSON TYPE equals 07,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 09, 13, 69, 70, 86, 87,
		90.
(CM0P)	PERSON TYPE equals 19,	RELATED FACTORS-PERSON LEVEL (Not a MV
		Occupant) must not equal 13, 69, 70, 90.

#### Consistency Check (FARS Only):

Check	IF	THEN
(5W0P)	RELATED FACTORS-PERSON LEVEL equals 18,	SEX must equal 2, and AGE must be greater than
		012.

# **Supplemental Data Elements – FARS Only**

Person Level Elements – Including Coding Instructions.

- <u>SP1 Death Certificate Number</u>
- SP2 Fatal Injury at Work
- SP3 Race/Hispanic Origin

### SP1 - Death Certificate Number - FARS Only

FORMAT: Element Completed in MDE SAS NAME: Person.CERT\_NO ELEMENT VALUES:

Codes	Attributes
Os	Not Applicable (not a fatality)
	Any Numeric Characters
9s	Unknown

**Definition:** This element identifies the four digit GSA code for the city where the death occurred, the two-digit state number, and the six-digit sequence number from the death certificate as assigned by the State Vital Statistics or Vital Records Department.

**Remarks:** Code the sequence number from the death certificate as assigned by your State Vital Statistics Department. The sequence number is six digits in length and is part of the State File Number.

The format for coding the numbers is as follows:

- First four digits \_ \_ \_ City (where death occurred)
- Next two digits \_ \_ State (where death occurred)
- Last six digits \_\_\_\_\_ Sequence Number (as assigned by State Vital Statistics Department)

If this person is not a fatality, zero-fill this element.

Use GSA codes for the City and State where the death occurred according to the death certificate. These are the same GSA codes used for the <u>City variables in the Crash Level Form</u>:

- 0000 Not a fatality or death not within city limits and no location code is available
- 0001-9996 GSA Geographical Location Codes
- 9997 Other (Death within city limits, but no GSA code available for this city)
- 9999 Unknown (City where death occurred cannot be found on death certificate).

The State codes are the same as those used for variables C1, V1, D1, PC1, P1, and NM1 State Number.

If the fatal crash occurred in your State, but the death occurred in a hospital of another State, please attempt to obtain the death certificate from that State and code the City and State where the death occurred.

If a person dies at the crash scene, code the appropriate city code or location code for the crash location. Code "0000" if the location is not within a city, and no geographical location code is available.

If the location is not within a city, but a geographical location code is available, use the location code.

If a person is transported by EMS and dies en route or at the hospital, use the city code for the hospital's location.

Code the exact sequence number as indicated on the death certificate. If the sequence number is less than sixdigits long (e.g., the sequence number is "12345" (five digits)) right-justify your coded number and zero-fill the first (and/or second digit) (e.g., <u>012345</u>). Note that if you receive a copy of the death certificate from the Medical Examiner or Coroner, it may not contain the sequence number. The sequence number needed is the one assigned by your State Vital Statistics or Vital Records Department, which is subsequently sent to the National Center for Health Statistics. In those instances, leave the sequence number blank until you are able to obtain it in a follow-up effort with your Vital Statistics Department.

If the sequence number contains a letter in it (e.g., **N**12345), simply ignore the letter and code the numbers only (right-justified), (e.g., **D**12345).

If the death certificate number cannot be obtained, 9-fill this element.

If the death certificate number can be obtained, but is not yet received, leave this element blank until the number is available.

Check	IF	THEN
(7E0P)	INJURY SEVERITY equals 4,	DEATH CERTIFICATE NUMBER must NOT equal
		0000-00-000000.
(7F0P)	DEATH CERTIFICATE NUMBER is not blank or	INJURY SEVERITY must equal 4.
	0000-00-000000,	

### SP2 - Fatal Injury At Work - FARS Only

#### FORMAT: 1 numeric SAS NAME: Person.WORK\_INJ ELEMENT VALUES:

Codes	Attributes
0	No
1	Yes
8	Not Applicable (not a fatality)
9	<u>Unknown</u>

**Definition:** This element indicates if the death certificate identified this person as being "at work" at the time of the crash.

# Remarks: THE DEATH CERTIFICATE INDICATES WHETHER THE VICTIM WAS ON-THE-JOB AT THE TIME OF FATAL INJURY.

**0 (No)** is used if the injury **was not** at work.

1 (Yes) is used if the injury was on the job.

8 (Not Applicable (not a fatality)) is used if the victim was not a fatality.

**9 (Unknown)** is used if the death certificate does not indicate whether the injury was at work or if you do not have access to death certificate information.

# FATAL INJURY AT WORK SHOULD ONLY BE DETERMINED FROM THE DEATH CERTIFICATE, NOT FROM ANY OTHER SOURCE. HOWEVER, IT IS NOT NECESSARY TO HAVE A COPY OF THE DEATH CERTIFICATE.

Check	IF	THEN
(7R0P)	FATAL INJURY AT WORK equals 0, 1, 9,	INJURY SEVERITY must equal 4.
(7W0P)	FATAL INJURY AT WORK equals 8,	INJURY SEVERITY must not equal 4.
(P1A0)	AGE is less than 012, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 0.
(P130)	BODY TYPE equals 60-67, 71, 72, 78, 79, and PERSON TYPE equals 01, 03, and INJURY SEVERITY equals 4,	FATAL INJURY AT WORK should equal 1.

### SP3 - Race/Hispanic Origin - FARS Only

FORMAT: 2 numeric SAS NAME: Person.RACE, Person.HISPANIC ELEMENT VALUES:

#### **Detail Race:**

Codes	Attributes
00	Not a Fatality (not applicable)
01	White
02	Black
03	American Indian (includes <i>Alaska Native</i> )
04	Chinese
05	Japanese
06	Hawaiian (includes part-Hawaiian)
07	Filipino
18	Asian Indian
19	Other Indian (includes South and Central America, any others, except American or Asian Indians)
28	Korean
38	Samoan
48	Vietnamese
58	Guamanian
68	Other Asian or Pacific Islander
78	Asian or Pacific Islander, No Specific (individual) Race
97	Multiple Races (Individual races not specified; e.g. "mixed")
98	All Other Races
99	Unknown

#### **Hispanic Origin:**

Codes	Attributes
00	Not a Fatality (not applicable)
01	Mexican
02	Puerto Rican
03	Cuban
04	Central or South American
05	European Spanish
06	Hispanic, Origin not Specified or Other Origin
07	Non-Hispanic
99	<u>Unknown</u>

**Definition:** This element indicates the race and Hispanic origin of this person from the death certificate.

Remarks: Race and Hispanic Origin should be obtained from the death certificate only.

Both RACE and HISPANIC ORIGIN are coded for fatal victims only (<u>INJURY SEVERITY</u> on this person must be <u>Fatal</u> <u>Injury</u>). If INJURY SEVERITY is coded other than **Fatal Injury** on the Person Level, the MDE System will automatically enter "00s" in both the RACE and HISPANIC ORIGIN fields.

In general, the actual race will be written literally (e.g., white, black, Chinese, etc.) on the death certificate. Hispanic Origin comes directly from a check box. Within that box, if Hispanic Origin is "yes" a specific location (e.g., Cuba, Puerto Rico, Mexico, etc.) is indicated.

For translating the entries on the death certificate, refer to the table, "<u>Detail Race and Hispanic Origin for FARS</u>." This table is based on the guidelines provided by the Center for Disease Control (CDC). The only exception is Hawaiian. Any race with Hawaiian is coded Hawaiian (See <u>06 Hawaiian</u> below).

#### **Detail Race**

**01 (White)** should be coded for persons listed as White, Mexican, Puerto Rican, Cuban, and Caucasian for race.

**06 (Hawaiian [includes part Hawaiian])** should be coded for any person listed as Hawaiian, even if another race is listed as well.

19 (Other Indian) includes South and Central America and any other Indians, except American or Asian Indians.

68 (Other Asian or Pacific Islander) is used when an "Other Asian" or "Pacific Island" race is specified, and it is other than 04 (Chinese), 05 (Japanese), 06 (Hawaiian), 07 (Filipino), 18 (Asian Indian), 28 (Korean), 38 (Samoan), 48 (Vietnamese), or 58 (Guamanian).

**78 (Asian or Pacific Islander, No Specific [individual] Race)** is used when the death certificate or report lists "Asian" for race.

**97 (Multiple Races)** is used when the death certificate indicates more than one race **without** specifying the individual races (e.g., "mixed," "multiple races," "multi-racial," etc.)

**98 (All Other Races)** is used if an individual race listed on the death certificate or report is not found on the translation table.

If more than one race is listed on the death certificate or report, code the race entry listed **first**. An example is "American Indian/White," which should be coded **03 (American Indian)**. Again, <u>**06 (Hawaiian)**</u> is the exception. (See <u>**06 (Hawaiian)**</u> above.)

#### **Hispanic Origin**

**06 (Hispanic Origin Not Specified, or Other Origin)** This includes when you know they are Hispanic, but the specific origin is not specified (e.g., Hispanic, Latino, Latin American, South American).

**99 (Unknown)** This person could be Hispanic, or not. You don't have enough information to determine whether or not they are Hispanic. (e.g., all you know is that Race is "White," "Black," "European," or "Indian," and no other information is provided.)

If you receive a listing from the Vital Statistics Department, be sure you request a translation table for the code structure. For FARS, we tried to match the coding structure to the National Center for Health Statistics (NCHS) coding structure for these elements; however, it was necessary to modify NCHS's structure slightly in order to be consistent with other FARS codes. Reference: National Center for Health Statistics. Documentation for the Mortality Public Use Data Set, 1999.

#### Consistency Checks:

Check	IF	THEN
(7E1P)	INJURY SEVERITY equals 4,	RACE must not equal 00.
(7E2P)	INJURY SEVERITY equals 4,	HISPANIC ORIGIN must not equal 00.
(7E3P)	INJURY SEVERITY does not equal 4,	RACE AND HISPANIC ORIGIN must equal 00.
(7F1P)	RACE equals 00,	INJURY SEVERITY must not equal 4.
(7F2P)	HISPANIC ORIGIN equals 00,	INJURY SEVERITY must not equal 4.
(7F3P)	RACE is not equal to 00, and HISPANIC	INJURY SEVERITY must equal 4.
	ORIGIN is not equal to 00,	

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
	Acadian				15	99	07
Afghanistan	Afghan	Afghanistan	Middle East	1	21	01	07
African	African			2	24	02	07
African/American				2		02	07
Afro/American	Afro-American			2	24	02	07
Alaskan Indian				3		03	07
	Alaskan Native				07	03	07
	Albanian	Albania	Europe		19	01	07
Aleut	Aleut			3	07	03	07
Algerian	Algerian	Algeria	North Africa	1	23	01	07
Amerasian				9		98	99
American	American			1	06	99	99
American Indian	American Indian			3	07	03	07
	American Negro				24	02	07
	American White				06	01	99
Amish	Amish			1	99	01	07
		Andorra				01	99
Anglo-Saxon	Anglo Saxon			1	08	01	07
	Anglo American				08	99	07
	Angolan	Angola	Africa		24	02	07
Antiguans and		Antigua &				02	07
Barbudans		Barbuda					
	Arab				22	01	07
Arabian				1		01	07
Argentinian	Argentina (Argentino)	Argentina	South America	1	04	01	04
	Arian				99	99	99
Armenian	Armenian	Armenia	Europe	1	22	01	07
Aryan				1		01	99
Asian	Asian			9	22	78	07
Asian Indian	Asian Indian			9	21	18	07
Asiatic				9		78	07
Assyrian	Assyrian			1	22	01	07
Athapaskan				3		03	07
Australian	Australian	Australia	Australasia & Pacific	1	20	01	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Austrian	Austrian	Austria	Europe	1	16	01	07
		Azerbiajan	Europe			01	07
Azores	Azorean	Azores	Europe	1	19	01	07
Bahamian	Bahamian	Bahamas		6	99	98	07
	Bahrain	Bahrain	Middle East		22	01	07
	Baleanc Islands				05	01	05
Bangladeshi	Bangladesh	Bangladesh	Asia	9	21	68	07
		Barbados				02	07
Basque	Basque			1	05	01	05
Bavarian	Bavarian			1	16	01	07
	Belgian	Belgium	Europe		16	01	07
Belizian	Belizian	Belize	Central America	6	04	98	04
	Belorussian, Byelorussian	Belarus	Europe		18	01	07
Bengali	Bengali			6	21	98	07
	Benin	Benin	Africa		24	99	07
	Bermudan	Bermuda			15	99	07
	Bhutanese	Bhutan	Asia		21	68	07
Bilatian	Bilatian		Africa	2	24	02	07
Black	Black			2	24	02	07
Blanc				1		01	99
Bohemian	Bohemian			1	18	01	07
Bolivian	Bolivia (Boliviano)	Bolivia	South America	1	04	01	04
	Boricua (Borinquano)				05	99	05
		Bosnia- Herzegovna	Europe			01	07
	Botswana	Botswana	Africa		24	99	07
Brava (Bravo)				1		01	99
Brazilian	Brazilian	Brazil	South America	1	15	01	04
	British				08	99	07
British Honduran		(See Belize)		0		98	04
Brown				2		02	99
		Brunei	Asia			68	07
	Bulgarian	Bulgaria	Europe		18	01	07
		Burkina Faso	Africa			99	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Burmese	Burmese	Burma (Also Myanmar)	Asia	9	20	68	07
	Burundi	Burundi	Africa		24	99	07
Cajun	Cajun			1	15	01	07
	California				05	99	05
Cambodian	Cambodian	Cambodia	Asia	9	20	68	07
	Cameroon	Cameroon	Africa		24	99	07
Canadian	Canadian	Canada	North America	1	15	01	07
Canadian Indian				3		03	07
Canadian Mexican				3		03	01
	Canary Islands				05	99	05
	Cantonese				20	78	07
Cape Verde	Cape Verdean	Cape Verde	Africa	2	24	02	07
Carib				6		98	99
	Castillan				05	01	05
	Catalonia				05	01	05
Caucasian	Caucasian			1	99	01	07
		Cayman Islands				99	99
	Celtic				08	01	07
	Central African Republic	Central African Republic	Africa		24	02	07
	Central European				99	99	99
	Centroamericano				04	99	04
Ceylonese	Ceylonese			9	21	68	07
	Chad	Chad	Africa		24	99	07
Chamorro	Chamorro			9	20	68	07
Chicano	Chicano			1	01	01	01
Chicano/Mex/American				1		01	01
	Chile (Chilano)	Chile	South American		04	01	04
Chinese	Chinese	China	Asia	4	20	04	07
Chinese/White				4		04	99
Colombian	Colombia (Colombiano)	Colombia	South America	1	04	01	04
Colored				2		02	99
		Comoros	Africa			99	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
	Congolese	Congo (Republic of)	Africa		24	99	07
Costa Rican	Costa Rica (Constarricense)	Costa Rica	Central America	1	04	01	04
Creole	Creole			1	16	01	99
	Croatian	Croatia	Europe		19	01	07
Crucian				1		01	99
Cuban	Cuban	Cuba		1	03	01	03
	Cypriot	Cyprus	Europe		22	01	07
Czechoslovakian	Czechoslovakian	Czech Republic	Europe	1	18	01	07
	Dahomey		Africa		24	02	07
Danish	Danish	Denmark	Europe	1	12	01	07
		Djibouti	Africa			99	07
		Dominica				99	99
Dominican	Dominican Republic	Dominican Republic		2	04	02	04
	Dutch	Netherlands	Europe		16	01	07
Dutch East Indian				9		68	99
East Indian	East Indian			9	20	68	07
	Eastern European				18	99	07
Ebian				1		01	99
Ecuadorian	Ecuador (Ecuatoriano)	Ecuador	South America	1	04	01	04
Egyptian	Egyptian	Egypt	North Africa	1	23	01	07
	El Salvador	El Salvador	Central America		04	98	04
English	English			1	08	01	07
		England	Europe			99	99
English-French			Europe	1		01	07
English-Irish			Europe	1		01	07
	Equatorial Guinea	Equatorial Guinea	Africa		24	99	07
Eritrean		Eritrea	Africa	2		02	07
Eskimo, Eskimoan	Eskimo, Eskimoan			3	07	03	07
	Espana, (Espanol)				05	01	05
	Estonian	Estonia	Europe		18	01	07
Ethiopia(n)	Ethiopian	Ethiopia	Africa	2	24	02	07
Eurasian	Eurasian			9	22	78	99
European	European			1	99	01	99

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
	Falkland Islands	Falkland Islands	South America		04	01	07
	Fernando PO				05	99	05
Fijan	Fijan	Fiji	Australasia & Pacific	9	20	68	07
Filipino	Filipino	Philippines	Asia	8	20	07	07
Finnish	Finnish	Finland	Europe	1	17	01	07
	Flemish		Europe		16	01	07
	Franco American				11	99	07
French	French	France	Europe	1	11	01	07
French Canadian	French Canadian			1	15	01	07
		French Guiana				99	99
French Indian (American)	French Indian			3	07	03	07
French Indian (India)				9		18	07
		French Polynesia				68	07
	Gabonese	Gabon	Africa		24	99	07
	Galapagos Islands				04	01	04
	Gambian	Gambia	Africa		24	99	07
	Georgian	Georgia	Europe		18	01	07
German	German	Germany	Europe	1	10	01	07
Ghanaian	Ghanaian	Ghana	Africa	2	24	02	07
Gilbertese				9		68	07
	Great Russian				18	01	07
Greek	Greek	Greece	Europe	1	19	01	07
	Greenland	Greenland			15	99	07
		Grenada				02	07
		Guadeloupe				99	99
Guamanian	Guamanian	Guam		9	20	58	07
Guatemalan	Guatemala (Guatemalteco)	Guatemala	Central America	6	04	98	04
	Guinean	Guinea	Africa		24	99	07
		Guinea- Bissau	Africa			99	07
Guyanese	Guyanaq	Guyana	South America	0	15	99	07
Gypsy	Gypsy			1	22	01	07
Haitian	Haitian	Haiti		2	15	02	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Hamitic				2		02	07
Hawaiian	Hawaiian			7	20	06	07
Hawaiian/Part Hawaiian				7		06	07
Hebrew	Hebrew			1	22	01	07
Hindu	Hindu			9	21	78	07
Hispanic	Hispanio			1	05	01	06
Hmong	Hmong			9	20	68	07
Honduran	Honduras (Hondureno)	Honduras	Central America	6	04	98	04
	Hong Kong	Hong Kong	Asia		20	78	07
Hungarian	Hungarian	Hungary	Europe	1	18	01	07
	Iberian (Ibero)				05	01	05
Icelandic	Icelandic	Iceland	Europe	1	17	01	07
India				9		18	07
Indian (From India)	Indian (From India)	India	Asia	9	21	18	07
Indian (American)				3		03	07
Indian (Argentina)				6		98	04
Indian (AM, AK, CN, MX)				3		03	99
Indo-Aryan				9		78	07
Indonesian	Indonesian	Indonesia	Asia	9	20	68	07
Iran(ian)	Iranian	Iran	Middle East	1	22	01	07
Iraqi	Iraqi	Iraq	Middle East	1	22	01	07
Irish	Irish	Ireland	Europe	1	09	01	07
Islamic				1		01	07
Israelite	Israeli	Israel	Middle East	1	22	01	07
Italian	Italian	Italy	Europe	1	14	01	07
	Ivory Coast	Ivory Coast/ Cote D'Ivoire	Africa		24	02	07
Jackson (Jack) White				6		98	99
Jamaican	Jamaican	Jamaica		2	15	02	07
Japanese	Japanese	Japan	Asia	5	20	05	07
Java	Javanese			9	20	68	07
Jew	Jewish			1	99	01	99
Jordanian	Jordanian	Jordan	Middle East	1	22	01	07
	Kashmirian				21	99	07
		Kazakhstan	Asia			68	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Kenyan	Kenyan	Kenya	Africa	2	24	02	07
		Kiribati				99	99
Korean	Korean	Korea-North	Asia	9	20	28	07
Korean	Korean	Korea-South	Asia	9	20	28	07
Kuwaitian	Kuwaiti	Kuwait	Middle East	1	22	01	07
		Kyrgyzstan	Asia			68	07
Ladina				1		01	99
	La Raza				05	01	01
Laotian	Laotian	Laos	Asia	9	20	68	07
Latin American	American			1	05	01	06
	Latino				05	01	06
Latvian	Latvian	Latvia	Europe	1	18	01	07
Lebonese	Lebonese	Lebanon	Middle East	1	22	01	07
	Lesotho	Lesotho	Africa		24	99	07
Liberian	Liberian	Liberia	Africa	2	24	02	07
Libyan	Libyan	Libya	North Africa	1	23	01	07
		Liechtenstein	Europe			01	07
Lithuanian	Lithuanian	Lithuania	Europe	1	18	01	07
		Luxembourg	Europe			01	07
		Macau				04	07
		Macedonia	Europe			01	07
	Madagascan	Madagascar	Africa		24	99	07
	Majorca				05	99	05
Malawian	Malawi	Malawi	Africa	2	24	02	07
Malayan	Malaysian	Malaysia	Asia	9	20	68	07
		Maldives	Asia			99	07
	Mali	Mali	Africa		24	99	07
	Mallorca (Mallorquin)				05	99	05
Maltese	Maltese	Malta	Europe	1	19	01	07
Maori	Maori			9	20	68	07
Marshallese		Marshall Islands	Australasia & Pacific	9		68	07
Marshenese				1		01	99
		Martinique				02	07
Mauritian	Mauritanian	Mauritania	Africa	1	24	01	07
	Mauritius	Mauritius	Africa		24	99	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Mediterranean				1		01	99
Melanesian	Melanesian			9	20	68	07
Mestizo				6		03	04
Mestizo-Inca				6		03	04
Mexican	Mexican (Mexicano)	Mexico	North America	1	01	01	01
Mexican Indian				3		03	01
	Mexican American				01	99	01
Micronesian	Micronesian			9	20	68	07
Mixed	Mixed			6	99	98	99
Mohammed Ali				6		98	07
Mohammedan (Moslem)				1		01	07
		Moldova	Europe			01	07
		Monaco	Europe			01	07
Mongolian	Mongolian	Mongolia	Asia		20	68	07
		Montenegro				01	07
Moor(ish)				6		98	07
Morroccan	Morroccan	Morocco	North Africa	1	23	01	07
	Moslem				99	99	99
Mugandan				2		02	99
Mullato				2		02	99
Muslim	Muslim			1	99	01	99
		Mozambique	Africa			02	07
		Myanmar (also Burma)	Asia			68	07
		Namibia	Africa			02	07
Nassau				2		02	99
	Native American				07	03	07
		Nauru	Australasia & Pacific			78	07
Negro	Negro			2	24	02	07
Negro/Indian				2		02	07
Nepalese	Nepali	Nepal	Asia	9	21	68	07
		Netherlands	Europe			01	07
		Netherlands Antilles				99	99
		New Caledonia	Australasia & Pacific			78	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
	New Zelander	New Zealand	Australasia & Pacific		20	99	07
	Newfoundland				15	01	07
Nicaraguan	Nicaragua (Nicaraguense)	Nicaragua	Central America	6	04	98	04
	Niger	Niger	Africa		24	02	07
Nipponese (Nipon)	Nipponese			5	20	05	07
Nigerian	Nigerian	Nigeria	Africa	2	24	02	07
Nordic	Nordic (Icelandic)			1	17	01	07
	North American				15	99	99
		Northern Ireland	Europe			01	07
Norwegian	Norwegian	Norway	Europe	1	12	01	07
Nubian				2		02	07
Occidental				1		01	99
Octaroon				2		02	99
Okinawan	Okinawan			5	20	05	07
		Oman	Middle East			01	07
	Oriental				20	78	07
	Pacific Islander				20	78	07
Pakistani	Pakistani	Pakistan	Asia	9	21	18	07
Palauan		Palau	Australasia & Pacific	9		68	
Palestinian	Palestinian			1	22	01	07
Panamanian	Panama (Panameno)	Panama	Central America	6	04	98	04
		Papua New Guinea	Australasia & Pacific			99	07
	Paraguay (Paraguayo)	Paraguay	South America		04	98	04
Parsi				1		01	99
	Pennsylvania Dutch				10	01	07
Persian	Persian			1	22	01	07
Peruvian	Peru (Peruano)	Peru	South American	1	04	01	07
Philipino	Philipino	Philippines	Asia	8	20	07	07
Polish	Polish	Poland	Europe	1	13	01	07
Polynesian	Polynesian			9	20	68	07
Ponapean				9		68	07
Portuguese	Portuguese	Portugal	Europe	1	19	01	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
	Prussia				10	01	07
Puerto Rican	Puerto Rican (Puertorriqueno)	Puerto Rico		1	02	01	02
Punjabi	Punjabi			9	20	68	07
	Qatar	Qatar	Middle East		22	99	07
Quadroon				2		02	99
Red	Red			3	07	03	07
Rhodesian		Rhodesia			24	02	07
		Reunion	Africa			99	07
Romanian		Romania	Europe	1		01	07
	Romany				22	99	07
Rotanese				9		68	99
	Rumanian				18	99	07
Russian	Russian	Russia	Europe	1	18	01	07
	Rwanda	Rwanda	Africa		24	02	07
Ryukyan				5		05	07
Salpanese				9		68	99
Salvadorian	Salvadoreno			6	04	98	04
Samoa(n)	Samoan	American Samoa	Australasia & Pacific	9	20	38	07
		Saint Kitts- Nevis				02	07
		Saint Lucia				02	07
		Saint Vincent				02	07
		San Marino				01	07
		Sao Tome and Principe	Africa			02	07
Saudia-Arabian	Saudi Arabian	Saudi Arabia	Middle East	1	22	01	07
Saxon(y)				1		01	07
Scandinavian	Scandinavian			1	12	01	07
Scotch	Scottish	Scotland	Europe	1	08	01	07
	Scotch-Irish				08	01	07
Selawik				3		03	07
Semitic				1		01	99
		Senegal	Africa			02	07
Serbian	Serbian	Serbia	Europe	1	19	01	07
	Serbo-Croation				19	01	07
Servian				1		01	99

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Seychelloise		Seychelles	Africa	2		02	07
Siamese	Siamese			9	20	68	07
Sicilian	Sicilian			1	14	01	07
	Sierra Leone	Sierra Leone	Africa		24	02	07
Sikh	Sikhs			9	21	68	07
	Singaporean	Singapore	Asia		20	68	07
Singhalease	Singhalease			9	21	68	07
Sino Burman				4		04	07
Slovakian	Slovak	Slovakia	Europe	1	18	01	07
	Sloavic (Slovenian)	Slovenia	Europe		19	01	07
	Slovikian				19	01	07
	Slovish				19	01	07
		Solomon Islands	Australasia & Pacific			68	07
	Somalian	Somalia	Africa		24	99	07
	South African	South Africa	Africa		24	99	07
South American				1		01	06
	Southern European				19	01	99
Spanish	Spain (Spaniard)	Spain	Europe	1	05	01	05
		Sri Lanka	Asia			68	07
Sudanese	Sudanese	Sudan	North Africa	2	23	02	07
Sunni				1		01	07
	Swaziland				24	02	07
Swedish	Swedish	Sweden		1	12	01	07
	Swiss	Switzerland	Europe		16	01	07
Syrian	Syrian	Syria	Middle East	1	22	01	07
Tahitian				9		68	07
Taimskin				3		03	99
Taiwanese	Taiwanese	Taiwan	Asia	4	20	04	07
		Tajikistan	Asia			68	07
Tamil-Ceylonese				9		68	07
Tamil-Malayan				9		68	07
Tanzanian	Tanzanian	Tanzania	Africa	2	24	02	07
Teutonic				1		01	07
Thai	Thai	Thailand	Asia	9	20	68	07
Tibetan		Tibet		9		68	07
	Togolese	Тодо	Africa		24	02	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Tongan		Tonga	Australasia & Pacific	9		68	07
Triguano				6		98	99
Trinidadian	Trinidadian	Trinidad and Tobago		2	15	02	07
Tunisian	Tunisian	Tunisia	North Africa	1	23	01	07
Turk	Turkish	Turkey	Middle East	1	22	01	07
		Turkmenistan	Asia			68	07
		Tuvalu	Australasia & Pacific			68	07
Ubontilian				9		68	07
Ugandan	Ugandan	Uganda	Africa	2	24	02	07
Ukrainian	Ukrainian	Ukraine	Europe	1	18	01	07
		United Arab Emirates	Middle East			01	07
	United Kingdom				08	99	07
		United States of America	North America			99	99
Unknown or Blank	Unknown			0	99	99	99
	Upper Volta		Africa		24	99	07
	Uruguay (Uruguayo)	Uruguay	South America		04	01	04
Ute				3		03	07
		Uzbekistan	Asia			68	07
	Valencian				05	01	05
		Vanuatu	Australasia & Pacific			68	07
Venezuela(n)	Venezuela (Venezolano)	Venezuela	South America	1	04	01	04
Vietnam(ese)	Vietnamese	Vietnam	Asia	9	20	48	07
	Viking				12	01	07
W				1		01	99
Welsh	Welsh	Wales (United Kingdom)	Europe	1	08	01	07
West Indies (Indian)	West Indian			2	15	02	07
		Western Sahara	Africa			99	99
		Western Samoa	Australasia & Pacific			38	07
White	White			1	99	01	99
	White Russian				18	01	07

Race (CDC)	Ancestry/ Ethnicity (CDC)	Country	Region	CDC Race*	CDC Ethnic*	FARS Detail Race	FARS Hispanic Origin
Wiam (White American)				1		01	99
Yapanes				9		68	07
	Yellow				20	78	07
	Yemen	Yemen	Middle East		22	99	07
Yugoslavian	Yugoslavian	Yugoslavia	Europe	1	19	01	07
	Zaire	Zaire	Africa		24	02	07
	Zambian	Zambia	Africa		24	02	07
	Zanzibar				24	02	07
		Zimbabwe	Africa			02	07
Zoroastrian				1		01	07

# NCHS Race Codes

CDC RACE CODE	RACE DESCRIPTION
0	Unknown/Blank
1	White/Mexican/Puerto Rican, Other Caucasian
2	Black
3	Indian (American, Canadian, Alaskan, Aleut/Eskimo)
4	Chinese
5	Japanese
6	Other Non-White
7	Hawaiian/Part Hawaiian
8	Filipino
9	Asian/Pacific Island Other

#### **NCHS Ancestry Codes**

CDC ANCESTRY CODE	ANCESTRY / ETHNICITY DESCRIPTION
01	Mexican
02	Puerto Rican
03	Cuban
04	Central or South American
05	Other & Unknown Spanish
06	"American"
07	Indian (American, Alaskan, Canadian, or Mexican Indian, Eskimo, & Aleut)
08	English, Scottish, Welsh, Scotch-Irish
09	Irish
10	German
11	French
12	Norwegian, Swedish, Danish
13	Polish
14	Italian

CDC ANCESTRY CODE	ANCESTRY / ETHNICITY DESCRIPTION
15	Other North, Central, and South American or Canadian
16	Other Western European
17	Other Northern European
18	Other Eastern European
19	Other Southern European (Excluding Spain)
20	Southwest Asian & Pacific Islander
21	South Central Asian
22	Other Asian
23	North African
24	Other African
99	Unknown
Blank	Blank

# **Appendices**

2017 Consistency Checks	
<u>0 Series</u>	<u>A Series</u>
<u>1 Series</u>	<u>B Series</u>
<u>2 Series</u>	<u>C Series</u>
<u>3 Series</u>	<u>D Series</u>
<u>4 Series</u>	<u>E Series</u>
<u>5 Series</u>	<u>F Series</u>
<u>6 Series</u>	<u>G Series</u>
<u>7 Series</u>	<u>P Series</u>
<u>8 Series</u>	<u>U Series</u>
<u>9 Series</u>	<u>V Series</u>

# **References**

# **2017 Consistency Checks**

The following pages contain Consistency Checks, Intra-consistency Checks and Special Processing Rules. It is arranged in alpha/numeric order.

All questions concerning the FARS/CRSS Coding Manual and coding issues should be directed through the CDAN Helpdesk, to Coding Questions.

#### 0 Series

Error Code	Error Test
050P	If PERSON TYPE equals 04-08, 19, and NUMBER OF VEHICLE FORMS SUBMITTED equals 001, then <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must equal
	001.
060P	If VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is not equal to 000,
	999, then the VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST must
	equal some VEHICLE NUMBER in the case, and the UNIT TYPE must equal 1.
OPB1	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741, then at least one
	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 11.

Error Code	Error Test
170F	If MONTH equals current month, then DAY must be at least 2 days prior to current day or 99.
1A0P	IF RELATED FACTORS-CRASH LEVEL equals 14, then NUMBER OF VEHICLE FORMS SUBMITTED must be greater than 001.
1A1P	If RELATED FACTORS-CRASH LEVEL equals 05, then ROADWAY SURFACE CONDITIONS must equal 06 for at least one vehicle.
1COP	If the MODEL YEAR is not equal to 9998 or 9999, then the MODEL YEAR must not be greater than CRASH YEAR plus ONE.
1D0P	If SPECIAL USE equals 01, then BODY TYPE must equal 02-09, 12, 14-21, 28, 29, 49, 99.
1D0Q	If SPECIAL USE equals 00-03, then EMERGENCY MOTOR VEHICLE USE must equal 0.
1F1P	If RELATION TO JUNCTION (b) does not equal 02, 03, then the second TRAFFICWAY IDENTIFIER should be blank.
1G0P	If one RELATED FACTORS-VEHICLE LEVEL equals 99, then both factors must equal 99.
1H0F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS SPEEDING CONVICTIONS must be blank.
1H1F	If DRIVER PRESENCE equals 0, 9, then DRIVER'S LICENSE STATE must be blank.
1H2F	If DRIVER PRESENCE equals 0, 9, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must be blank.
1H3F	If DRIVER PRESENCE equals 0, 9, then NON-CDL LICENSE STATUS and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must be blank.
1H4F	If DRIVER PRESENCE equals 0, 9, then COMPLIANCE WITH LICENSE RESTRICTIONS must be blank.
1H6F	If DRIVER PRESENCE equals 0, 9, then VIOLATIONS CHARGED must be blank.
1H7F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS RECORDED CRASHES must be blank.
1H8F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS RECORDED SUSPENSIONS must be blank.

Error Code	Error Test
1H9F	If DRIVER PRESENCE equals 0, 9, then PREVIOUS DWI CONVICTIONS must be blank.
1HAF	If DRIVER PRESENCE equals 0, 9, then PREVIOUS OTHER MOVING VIOLATION
	CONVICTIONS must be blank.
1HBF	If DRIVER PRESENCE equals 0, 9, then DATE OF LAST CRASH, SUSPENSION, CONVICTION
	must be blank.
1HCF	If DRIVER PRESENCE equals 0, 9, then DATE OF FIRST CRASH, SUSPENSION, CONVICTION
	must be blank.
1HDF	If DRIVER PRESENCE equals 0, 9, then DRIVER HEIGHT (feet and inches) must equal
	blank.
1HEF	If DRIVER PRESENCE equals 0, 9, then DRIVER WEIGHT must equal blank.
1HFF	If DRIVER PRESENCE equals 0, 9, then SPEEDING RELATED must be blank.
1HJF	If DRIVER'S VISION OBSCURED BY equals 95, then DRIVER PRESENCE must equal 0 or 9.
110P	If DRIVER'S LICENSE STATE equals 99, then NON-CDL LICENSE STATUS must not equal 0-
	4, 6, and COMMERCIAL MOTOR VEHICLE LICENSE STATUS must not equal 00-08.
1JOP	If any counter equals 99, then all counters must equal 99.
1J1P	If any counter equals 99, then DATE OF LAST CRASH, SUSPENSION, CONVICTION must
	equal 999999.
1J2P	If any counter equals 99, then DATE OF FIRST CRASH, SUSPENSION, CONVICTION must
	equal 999999.
1KOP	If DRIVER'S LICENSE STATE equals 99, then LICENSE COMPLIANCE WITH CLASS OF
	VEHICLE must not equal 0-3.
1LOP	If any RELATED FACTORS-DRIVER LEVEL equals blanks, then all RELATED FACTORS-
	DRIVER LEVEL must equal blanks.
1L2P	If any DRIVER'S VISION OBSCURED BY equals 00 or 95 or 99, then only that one code
	and no other must be coded for this vehicle.
1L4P	If any DRIVER'S VISION OBSCURED BY equals 09, then at least one CONTRIBUTING
	CIRCUMSTANCES, MOTOR VEHICLE must equal 97.
1L5P	If any DRIVER'S VISION OBSCURED BY equals 10, then at least one CONTRIBUTING
	CIRCUMSTANCES, MOTOR VEHICLE must equal 07 or 08 or 09.
1M1F	If RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) equals 13, then PERSON TYPE
	should equal 08.
1N0F	If PERSON TYPE equals 06, then RELATED FACTORS-PERSON LEVEL (Not a MV Occupant)
	must not equal 09, 13, 69, 70, 86, 90.
1N1F	If PERSON TYPE equals 10, then RELATED FACTORS-PERSON LEVEL must not equal 09,
	21, 37, 40-42, 51, 52, 56, 57, 60-70, 72-78, 80-83, 90, 91.
1N4F	If NON-MOTORIST SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting
	equals 2, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 13.
1P1F	If PERSON TYPE equals 04, 05, 08, 10, or 19 Then NON-MOTORIST LOCATION AT TIME
	OF CRASH should not equal 16 for this person.
1P2F	If PERSON TYPE equals 10, then NON-MOTORIST LOCATION AT TIME OF CRASH must
	equal 25.
1P3F	If PERSON TYPE equals 10, then NON-MOTORIST ACTION/CIRCUMSTANCES must not
	equal 01-12, 16, and NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal
	01-20.
1P4F	If PERSON TYPE equals 04, then NON-MOTORIST ACTION/ CIRCUMSTANCES must not
	equal 04, 12.

Error Code	Error Test
1P5F	If PERSON TYPE equals 06-08, 19, then NON-MOTORIST ACTION/CIRCUMSTANCES must
	not equal 04.
1P7F	If PERSON TYPE equals 04, then NON-MOTORIST ACTION/ CIRCUMSTANCES should not
	equal 10, 11.
1P8F	If PERSON TYPE equals 06, 07, then NON-MOTORIST ACTION/CIRCUMSTANCES should
	not equal 10-12.
1P9F	If PERSON TYPE equals 08, then NON-MOTORIST ACTION/ CIRCUMSTANCES should not
	equal 11.
1P0G	If PERSON TYPE equals 05, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must
	not equal 07, 08, 10, 13-18, 20.
1P1G	If PERSON TYPE equals 19, then NON-MOTORIST ACTION/ CIRCUMSTANCES should not
	equal 11, 12.
1P3G	If PERSON TYPE equals 04, 06, 07, then NON-MOTORIST CONTRIBUTING
	CIRCUMSTANCES should not equal 04.
1P4G	If PERSON TYPE equals 04, 06-08, 19, then NON-MOTORIST CONTRIBUTING
	CIRCUMSTANCES should not equal 05.
1P5G	If PERSON TYPE equals 08, then NON-MOTORIST CONTRIBUTING CIRCUMSTANCES
	should not equal 20.
1P6G	If PERSON TYPE equals 04, 06-08, 19, then CONDITION (IMPAIRMENT) AT TIME OF
	CRASH must not equal 03.
1P7G	If PERSON TYPE equals 05-07, 19, then CONDITION (IMPAIRMENT) AT TIME OF CRASH
	should not equal 04.
1P8G	If PERSON TYPE equals 10, then CONDITION (IMPAIRMENT) AT TIME OF CRASH should
	not equal 01-10, 96.
1P9G	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 20, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 15.
1P0H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must not equal 02-04, 07-10, 15, 16, 20.
1P1H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 22, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must not equal 01, 02, 04, 07, 08, 11,15, 20.
1P2H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must not equal 12, 15.
1P3H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must not equal 01, 03, 04, 10, 11.
1P4H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must not equal 01-04, 10-12, 15-17, 20.
1P5H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 28, 98, 99, then NON-
	MOTORIST CONTRIBUTING CIRCUMSTANCES should not equal 01, 03, 04, 10-12, 15, 16,
	20.
1P6H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 16, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES should not equal 04, 16.
1P7H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 21, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES should not equal 01, 05, 11, 12, 17.
1P8H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 23, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES should not equal 02.

Error Code	Error Test
1P9H	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 24, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES should not equal 02, 05, 12, 15, 16.
1PH0	If NON-MOTORIST LOCATION AT THE TIME OF CRASH equals 25, then NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES should not equal 07-09.
1PJ1	If NON-MOTORIST LOCATION AT TIME OF CRASH equals 16, then the PERSON TYPE for
	this person should equal 06 or 07.
1PK2	If NON-MOTORIST LOCATION AT TIME OF CRASH equals 21, then SIDEWALK PRESENT
	must equal 1.
1PK3	If NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 10, then MARKED
	CROSSWALK PRESENT must equal 1.
1Q0F	If PERSON TYPE equals 01, and BODY TYPE equals 80-84, 88, 89, then SEATING POSITION
	must not equal 12-55, 99.
1ROP	If SEATING POSITION equals 51, and BODY TYPE equals 50-52, 55, 58, 59, then INJURY
	SEVERITY must not equal 0, 9.
1R1P	If DIED AT SCENE/EN ROUTE equals 7, 8, then INJURY SEVERITY must equal 4.
1TOP	If SPEED LIMIT for every vehicle is greater than 55, and not equal to 98 or 99, then LAND
	USE AND FUNCTIONAL SYSTEM (a) should not equal 2 or 6, and LAND USE AND
	FUNCTIONAL SYSTEM (b) should not equal 06, 07, or 96.
1U1F	If INJURY SEVERITY equals 4, then DEATH DATE must not equal 888888888.
1U2F	If INJURY SEVERITY equals 4, then DEATH TIME must not equal 8888.
1V0P	If DEATH MONTH or DAY equals 88, or DEATH YEAR equals 8888, then all must equal 8s.
1W0P	If any RELATED FACTORS-PERSON LEVEL equals 99, then all factors must equal 99.
1Y0P	If RELATION TO JUNCTION (b) equals 06, then RAIL GRADE CROSSING IDENTIFIER must
	not equal 0000000.
1Z0N	SEQUENCE OF EVENTS for this vehicle should not include more than one occurrence of
	01. Please see SEQUENCE OF EVENTS remarks for 01 (Rollover/Overturn) to confirm
	coding.
1Z1N	SEQUENCE OF EVENTS for this vehicle should not equal 01, 67 consecutively or 67, 01
	consecutively.
1Z1P	If any SEQUENCE OF EVENTS equals 66, then ROADWAY GRADE should equal 6 for this
	vehicle.
1Z2P	If any SEQUENCE OF EVENTS equals 01 and (BODY TYPE equals 01-79, 82, 90-99 or any
	RELATED FACTORS-VEHICLE LEVEL equals 30), then ROLLOVER must equal 1, 2 or 9.

Error Code	Error Test
200P	If CITY is greater than 0000 and less than 9997, and COUNTY is greater than 000 and less
	than 997, then COUNTY and CITY must be valid codes for the STATE.
210P	If CITY is greater than 0000 and less than 9997, then COUNTY must not equal 999.
220P	If LIGHT CONDITION equals 4, and STATE is not equal to 02, then CRASH TIME must equal 0300-0900, 9999.
2300	If LIGHT CONDITION equals 5, and STATE is not equal to 02, then CRASH TIME must equal 1600-2200, 9999.
250P	If RELATION TO JUNCTION (b) equals 01, 02, 04, 06, 07, 16-19, 98, 99, and RELATION TO TRAFFICWAY equals 03, then TRAFFICWAY DESCRIPTION should equal 2, 3 for at least one vehicle involved in the first harmful event.

Error Code	Error Test
251P	If RELATION TO TRAFFICWAY equals 98, 99, then TYPE OF INTERSECTION should equal 98, 99.
252P	If RELATION TO TRAFFICWAY equals 01, 02, 03, 04, 07, 08, 10, 11, 98 or 99, then UNIT
	TYPE for VEHICLE NUMBER (OTHER VEHICLE) involved in the first harmful event must not equal 3.
253P	If RELATION TO TRAFFICWAY equals 03, then CRASH TYPE should equal 06-10, 98 or 99
	for the in-transport vehicles involved in the first harmful event.
254P	If RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 20, then TRAFFICWAY DESCRIPTION must equal 6 for at least one vehicle involved in the first
	harmful event.
255P	If RELATION TO TRAFFICWAY equals 01 or 11, then UNIT TYPE for VEHICLE NUMBER
	(THIS VEHICLE) involved in the first harmful event must equal 1.
256P	If RELATION TO TRAFFICWAY equals 01 or 11, then UNIT TYPE for VEHICLE NUMBER
	(OTHER VEHICLE) involved in the first harmful event should equal 1 or 4.
257P	If RELATION TO TRAFFICWAY equals 05, then UNIT TYPE for VEHICLE NUMBER (OTHER
	VEHICLE) involved in the first harmful event must equal 1, 3 or 4.
260P	If ROUTE SIGNING equals 1, then NATIONAL HIGHWAY SYSTEM must equal 1.
2B0P	If JACKKNIFE equals 1-3, then VEHICLE TRAILING must not equal 0, 9.
2D0P	If SPECIAL USE equals 02, then BODY TYPE should equal 15, 16, 19-21, 28, 29, 45, 48, 50-52, 55, 58, 59.
2F0F	If NUMBER OF OCCUPANTS equals 00, then DRIVER PRESENCE must equal 0.
2G0P	If either RELATED FACTORS-VEHICLE LEVEL equals blanks, then the other factor must also equal blanks.
2H0F	If DRIVER PRESENCE equals 0, 9, then RELATED FACTORS-DRIVER LEVEL must not equal 04, 08, 12, 13, 15, 16, 19, 52, 53, 58, 59, 73, 74, 77-88.
2H1F	If UNIT TYPE equals 1 and DRIVER PRESENCE equals 0 or 9, then DRIVER'S VISION OBSCURED BY must equal 95.
210P	If DRIVER'S LICENSE STATE equals 99, then COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 0-3.
2JOP	If all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98 and any counter are not equal to 00, 99, then DATE OF LAST CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
2J1P	If all counters are not blanks and PREVIOUS RECORDED CRASHES is not equal to 98, and any counter are not equal to 00, 99, then DATE OF FIRST CRASH, SUSPENSION, CONVICTION must not equal 000000, 999999.
2КОР	DATE OF FIRST CRASH, SUSPENSION, CONVICTION must be less than or equal to DATE OF LAST CRASH, SUSPENSION, CONVICTION.
2LOP	If any RELATED FACTORS-DRIVER LEVEL equals 99, then all RELATED FACTORS-DRIVER LEVEL must equal 99.
2M0F	If PERSON TYPE equals 01, then SEATING POSITION must not equal 21-55.
2Q0F	If PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01, 02, 04, 08, 10, 17, <b>33-34</b> , 39-41, 45, 48, 90, 91, then SEATING POSITION must not equal 31-50.
2ROP	If RESTRAINT SYSTEM/HELMET USE equals <i>01-04, 08-12, 20</i> , then BODY TYPE must not equal 80-83, 88, 89, 90, 91.
2R1P	If ANY INDICATION OF MIS-USE OF RESTRAINT SYSTEM/ HELMET USE equals 1, then RESTRAINT SYSTEM/HELMET USE must equal 01-05, 08-12, 19, 97.

Error Code	Error Test
2SOP	If RESTRAINT SYSTEM/HELMET USE equals 05, 16, 17, 19 or 29, then AIR BAG DEPLOYED
	should equal 20, 98.
2S1P	If RESTRAINT SYSTEM/HELMET USE equals 16, 17, 20, then ANY INDICATION OF MIS-USE
	OF RESTRAINT SYSTEM/HELMET USE must equal 0.
2U0P	If BODY TYPE equals 80-97, then AIR BAG DEPLOYED should equal 20, 98.
2U0Q	If BODY TYPE equals 80-84, 88, 89, then AREAS OF IMPACT - INITIAL CONTACT POINT
	should not equal 14.
2U1F	If INJURY SEVERITY is not equal to 4, then DEATH DATE must equal 888888888.
2U2F	If INJURY SEVERITY is not equal to 4, then DEATH TIME must equal 8888.
2U3F	If INJURY SEVERITY equals 3, then TRANSPORTED TO FIRST MEDICAL FACILITY BY should not equal 0.
2VOP	If DEATH DAY is 01-31, and DEATH MONTH is 01-12, then DEATH DAY must be a valid day for DEATH MONTH.
2W0P	If any RELATED FACTORS-PERSON LEVEL equals blanks, then all factors must equal blanks.
2Z0F	If any SEQUENCE OF EVENTS equals 12, 14, 45, 54, 55, then NUMBER OF VEHICLE
	FORMS SUBMITTED must be greater than 001.

Error Code	Error Test
300P	If NATIONAL HIGHWAY SYSTEM equals 0, 9, then LAND USE AND FUNCTIONAL SYSTEM
	(b) must not equal 01.
320P	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and ROUTE SIGNING does not
	equal 7, then NATIONAL HIGHWAY SYSTEM must equal 1.
330P	If NATIONAL HIGHWAY SYSTEM equals 0, 9, then ROUTE SIGNING must not equal 1.
340P	If ROUTE SIGNING equals 1, then the first position of TRAFFICWAY IDENTIFIER #1 must
	be "I" and the second position must be "-".
341P	If the first position of TRAFFICWAY IDENTIFIER #1 equals "I" and the second position
	equals "-", then ROUTE SIGNING must equal 1 or 7.
350P	If ROUTE SIGNING equals 2, then the first two positions of TRAFFICWAY IDENTIFIER #1
	must be "US" and the third position must be "-".
351P	If the first two positions of TRAFFICWAY IDENTIFIER #1 equals "US" and third position
	equals "-", then ROUTE SIGNING must equal 2 or 7.
360P	If ROUTE SIGNING equals 3, then the first two positions of TRAFFICWAY IDENTIFIER #1
	must be "SR" and the third position must be "-".
361P	If the first two positions of TRAFFICWAY IDENTIFIER #1 equals "SR" and third position
	equals "-", then ROUTE SIGNING must equal 3 or 7.
362P	If ROUTE SIGNING equals 4, then the first two positions of TRAFFICWAY IDENTIFIER #1
	must be "CR" and the third position must be "-".
3A0P	If SPECIAL USE equals 07, then BODY TYPE must equal 60-64, 66, 67, 71, 72, 78, 79, 99.
3B0P	If JACKKNIFE equals 2, 3, then TRAVEL SPEED must not equal 000.
3B1P	If CRASH TYPE equals 21-23, then TRAVEL SPEED must equal 000 for this vehicle.
3B2P	If CRASH TYPE equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60, then AREAS OF
	IMPACT-INITIAL CONTACT POINT must equal 12 for this vehicle.
3B3P	If CRASH TYPE equals 21-23, 25-27, 29-31, 35, 37, 39 or 41, then AREAS OF IMPACT-
	INITIAL CONTACT POINT must equal 6 for this vehicle.

Error Code	Error Test
3B4P	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10, then
	CRASH TYPE must not equal 44-69, 71-73, 76, 77, 79, 81-83, 86-92.
3B5P	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 11, then
	CRASH TYPE must not equal 44-67, 69-71, 73, 77-81, 83, 86-92.
3B6P	If CRASH TYPE equals 87, then AREAS OF IMPACT-INITIAL CONTACT POINT must equal
	01-05, 81-83 for this vehicle.
3B7P	If CRASH TYPE equals 89, then AREAS OF IMPACT-INITIAL CONTACT POINT must equal
	07-11, 61-63 for this vehicle.
3B8P	If CRITICAL EVENT - PRECRASH (EVENT) equals 20, then CRASH TYPE for this vehicle
	should equal 92.
3BAP	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0, then CRASH TYPE must equal 00,
	04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 93 or 98.
3BCP	If CRASH TYPE equals 34, 36, 38, 40, 54, 56, 58 or 60, then DRIVER MANEUVERED TO
	AVOID must not equal 00.
3BDP	If CRASH TYPE equals 46, 47, and ATTEMPTED AVOIDANCE MANEUVER equals 01 or 99,
	then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must not
	equal 01.
3BEP	If CRASH TYPE equals 01 or 06, and ATTEMPTED AVOIDANCE MANEUVER equals 01,
	then PRE-IMPACT STABILITY should not equal 2-5 or 7.
3BFP	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 08 or
	09, then CRASH TYPE must not equal 46 or 47.
3BGP	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then
20110	DRIVER PRESENCE must equal 0 or 9.
3BHP	If ATTEMPTED AVOIDANCE MANEUVER does not equal 05-12, 15, 16, 98, then PRE -
2000	IMPACT STABILITY must not equal 7.
3C00	If CRASH TYPE equals 68, 72, 76 or 82, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 98.
3COP	If UNIT TYPE equals 1, and EXTENT OF DAMAGE equals 6, then VEHICLE REMOVAL
SCUP	should equal 2, 8, 9.
3C10	If CRASH TYPE equals 70, 78 or 80, then PRE-EVENT MOVEMENT (PRIOR TO
3010	RECOGNITION OF CRITICAL EVENT) should equal 10 or 98.
3C1P	If EXTENT OF DAMAGE equals 0, 2, then VEHICLE REMOVAL must not equal 2.
3C1Q	If EXTENT OF DAMAGE equals 0, 2, then VEHICLE REMOVAL should equal 3 or 5.
3C20	If this vehicle is involved in the first harmful event and its CRASH TYPE equals 29-31,
5620	then this vehicle's PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL
	EVENT) should equal 02.
3C2P	If VEHICLE REMOVAL equals 2, then EXTENT OF DAMAGE must equal 6, 8, 9.
3C30	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 12, then
3030	CRASH TYPE should equal 98.
3C3P	If EXTENT OF DAMAGE equals 6, then VEHICLE REMOVAL must not equal 3.
3C40	If CRASH TYPE equals 46, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF
	CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER
	should equal 07, 09 or 12.
3C50	If CRASH TYPE equals 92, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF
	CRITICAL EVENT) should equal 08, 09, 13, 98, 99.

Error Code	Error Test
3C60	If CRASH TYPE equals 25-27, 29-31, then PRE-EVENT MOVEMENT (PRIOR TO
	RECOGNITION OF CRITICAL EVENT) should not equal 05 or 07.
3C70	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 13, then
	CRASH TYPE should equal 92 or 98.
3C80	If CRASH TYPE equals 47, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF
	CRITICAL EVENT) should equal 06, 15, 16, or ATTEMPTED AVOIDANCE MANEUVER
	should equal 06, 08 or 11.
3CA0	If EXTENT OF DAMAGE for this vehicle equals 0, then DAMAGED AREAS must equal 15.
3D00	If CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01,
	then CRITICAL EVENT – PRECRASH (EVENT) should not equal 12-14, 54, 66-68, 71-73 or
	80-85.
3D0P	If SPECIAL USE for any vehicle equals 02, then SCHOOL BUS RELATED must equal 1.
3D10	If CRASH TYPE equals 50-67, and ATTEMPTED AVOIDANCE MANEUVER equals 00-01,
	then CRITICAL EVENT – PRECRASH (EVENT) should not equal 12-14, 51-53, 60, 61, 65,
	66, 70, 71, 80-85 or 87-92.
3D50	If PRE-IMPACT STABILITY equals 1, then CRASH TYPE should not equal 02, 07, 34, 36, 54
	or 56.
3D60	If CRASH TYPE equals 46 or 47, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION
	OF CRITICAL EVENT) should not equal 01.
3D70	If CRITICAL EVENT – PRECRASH (EVENT) equals 01-04, then CONTRIBUTING
	CIRCUMSTANCES, MOTOR VEHICLE must not equal 00.
3DB0	If any CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE equal 00 or 98 or 99, then
	only that one code and no other must be coded for this vehicle.
3E00	If CRITICAL EVENT – PRECRASH (EVENT) equals 65-68 or 70-73 for a vehicle involved in
	the first harmful event, then RELATION TO JUNCTION (b) should not equal 01 or 18.
3G0P	If the first RELATED FACTORS-VEHICLE LEVEL equals 00, then the other factor must also
	equal 00.
3H0F	If DRIVER PRESENCE equals 1, then there must be one and only one Person Level form
	for that vehicle with PERSON TYPE equal to 01, or there must be no Person Level form
	for that vehicle with PERSON TYPE equal to 01, and at least two Person Level forms for
	that vehicle with PERSON TYPE equal to 09.
3I1P	If DRIVER'S LICENSE STATE equals 99, then all driver history counters PREVIOUS
	RECORDED CRASHES must equal 99.
3I2P	If DRIVER'S LICENSE STATE equals 99, then all driver history counters PREVIOUS
	RECORDED SUSPENSIONS AND REVOCATIONS must equal 99.
3I3P	If DRIVER'S LICENSE STATE equals 99, then all driver history counters PREVIOUS DWI
	CONVICTIONS must equal 99.
3I4P	If DRIVER'S LICENSE STATE equals 99, then all driver history counters PREVIOUS
	SPEEDING CONVICTIONS must equal 99.
315P	If DRIVER'S LICENSE STATE equals 99, then all driver history counters PREVIOUS OTHER
	MOVING VIOLATION CONVICTIONS must equal 99.
3JOP	If all counters equal 00, then DATE OF LAST CRASH, SUSPENSION, CONVICTION must
	equal 000000.
3J1P	If all counters equal 00, then DATE OF FIRST CRASH, SUSPENSION, CONVICTION must
	equal 000000.

Error Code	Error Test
ЗКОР	DATE OF LAST CRASH, SUSPENSION, CONVICTION must be less than or equal to CRASH DATE.
3LOP	If any RELATED FACTORS-DRIVER LEVEL equals 00, then all remaining RELATED FACTORS-DRIVER LEVEL must equal 00.
3M0F	If PERSON TYPE equals 01, then RESTRAINT SYSTEM/ HELMET USE must not equal 04, 10-12.
3P0F	If PERSON TYPE equals 03-08, 10, 19, then INJURY SEVERITY should not equal 6.
3Q0F	If PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 01-17, 19, 20, 22, <b>28-34</b> , 39, 41, 42, 50-52, 55, 58, 59, 65, <b>80-97</b> , then SEATING POSITION must not equal 50.
3ROP	If AIR BAG DEPLOYED does not equal <b>20</b> , 98, or 99, then SEATING POSITION should not equal 12, 22, 32, 41-55.
3SOP	If SEATING POSITION equals 55, then EJECTION must equal 8.
3UOP	If DEATH DATE equals CRASH DATE, and CRASH TIME is not equal to 9999, then DEATH TIME must not be less than CRASH TIME.
3W0P	If any RELATED FACTORS-PERSON LEVEL equals 00, then all subsequent factors must equal 00.

Error Code	Error Test
420P	If MANNER OF COLLISION equals 07, 08, then there must be at least two vehicle forms
	with AREAS OF IMPACT-INITIAL CONTACT POINT equal to 01-05, 07-11, 61-63, 81-83, 98,
	99.
421P	If MANNER OF COLLISION equals 01, then AREAS OF IMPACT-INITIAL CONTACT POINT
	for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT- INITIAL
	CONTACT POINT for the other vehicle in the first harmful event must equal 06.
422P	If MANNER OF COLLISION equals 02, then AREAS OF IMPACT-INITIAL CONTACT POINT
	for one vehicle in the first harmful event must equal 12, and AREAS OF IMPACT- INITIAL
	CONTACT POINT for the other vehicle in the first harmful event must equal 12.
423P	If MANNER OF COLLISION equals 06, then AREAS OF IMPACT-INITIAL CONTACT POINT
	for one vehicle in the first harmful event must equal 01, 11, 12, 98, 99, and AREAS OF
	IMPACT- INITIAL CONTACT POINT for the other vehicle in the first harmful event must
	equal 01-05, 07-11, 61-63, 81-83, 98, 99.
424P	If MANNER OF COLLISION equals 09, then AREAS OF IMPACT- CONTACT POINT for one
	vehicle in the first harmful event must equal 06, and AREAS OF IMPACT- INITIAL
	CONTACT POINT for the other vehicle in the first harmful event must equal 01-05, 07-
	11, 61-63, 98, 99.
425P	If MANNER OF COLLISION equals 10, then AREAS OF IMPACT-INITIAL CONTACT POINT
	for one vehicle in the first harmful event must equal 06, and AREAS OF IMPACT- INITIAL
	CONTACT POINT for the other vehicle in the first harmful event must equal 06, 98, 99.
426P	If MANNER OF COLLISION equals 02, then CRASH TYPE must not equal 64-67 for the
	vehicles involved in the first harmful event.
427P	If MANNER OF COLLISION equals 06, then CRASH TYPE must not equal 20-43 or 50-53
	for the vehicles involved in the first harmful event.
428P	If CRASH TYPE equals 20-91, then NUMBER OF VEHICLE FORMS SUBMITTED must be
	greater than 001.

Error Code	Error Test
429P	If NUMBER OF VEHICLE FORMS SUBMITTED equals 001, then CRASH TYPE must equal
	00, 01-16, 92, 98, 99.
42AP	If NUMBER OF MOTOR VEHICLES FORMS SUBMITTED equals 001, and RELATION TO
	TRAFFICWAY equals 02, 04, 06-08, and ATTEMPTED AVOIDANCE MANEUVER equals 00
	or 01, then CRITICAL EVENT - PRECRASH (EVENT) should equal 01-06, 08-14 or 19.
42BP	If there is only one vehicle involved in the First Harmful Event where UNIT TYPE equals
	1, then the number of vehicles where CRASH TYPE is coded 00, 1-16, 92, 93 or 99
	(excluding from the vehicles being counted, those where CRASH TYPE equals 98) must
	not equal 0 or be greater than 1.
42CP	If there are two vehicles involved in the FIRST HARMFUL EVENT, then those two
	vehicles' CRASH TYPES must belong to the same CRASH TYPE Configuration.
431P	If NUMBER OF VEHICLE FORMS SUBMITTED equals 002 and UNDERRIDE/OVERRIDE
	equals 1-8, 9 for one vehicle, then UNDERRIDE/OVERRIDE for the other vehicle must
	equal 0.
432P	If NUMBER OF VEHICLE FORMS SUBMITTED equals 001, UNDERRIDE/OVERRIDE must
	equal 0.
440F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 01,
	then there must be at least one Person Level (Not a MV Occupant) form with NON-
	MOTORIST LOCATION AT TIME OF CRASH equal to 01-03, 09-11, 13, 16, 23, 98 or 99.
450F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 07,
	then there must be at least one Person Level (Not a MV Occupant) form with NON-
	MOTORIST LOCATION AT TIME OF CRASH equal to 14.
460F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 02,
	then there must be at least one Person Level (Not a MV Occupant) form with NON-
	MOTORIST LOCATION AT TIME OF CRASH equal to 02, 20.
470F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 03,
	08, 10, then there must be at least one Person Level (Not a MV Occupant) form with
	NON-MOTORIST LOCATION AT TIME OF CRASH equal to 20, 22, 28, 98, 99.
480F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 04,
	06, then there must be at least one Person Level (Not a MV Occupant) form with NON-
	MOTORIST LOCATION AT TIME OF CRASH equal to 09, 16, 20, 21, 24, 25, 28, 98, 99.
490F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 05,
	then there must be at least one Person Level (Not a MV Occupant) form with NON-
	MOTORIST LOCATION AT TIME OF CRASH equal to 24, 25.
4A0P	If BODY TYPE equals <b>80-93</b> , <b>95, 96</b> , then SPECIAL USE must not equal 01-03, 06, 07.
4C1P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19,
	94, 95, <b>96,</b> 97, and VEHICLE TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS
	must not be greater than 20.
4C2P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than
	22.
4C3P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than 25.
4C4P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 80-89, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than
	15.

Error Code	Error Test
4C5P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than
	30.
4C6P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and
	VEHICLE TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS must not be
	greater than 55.
4C7P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than 77.
4C8P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than 10.
4C9P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than 20.
4C0P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 99, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS must not be greater than 10.
4D0P	If SPECIAL USE equals 03, then BODY TYPE must equal 21, 28, 29, 50-52, 55, 58, 59.
4EOP	If VEHICLE TRAILING equals 1 or 2 or 3, then TRAILER VEHICLE IDENTIFICATION NUMBER
	must not equal 7s or blanks for all three sets.
4E1P	If VEHICLE TRAILING equals 4, then TRAILER VEHICLE IDENTIFICATION NUMBER must
	not equal 7s for any of the three sets.
4F1P	If NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 01-05, 07-10, 13, 17,
	<b>90-97</b> , and VEHICLE TRAILING equals 0, then NUMBER OF OCCUPANTS must not be
	greater than 15.
4F2P	If NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 06, 11, and VEHICLE
	TRAILING equals 0, then NUMBER OF OCCUPANTS must not be greater than 22.
4F3P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING
-	equals 0, then NUMBER OF OCCUPANTS must not be greater than 25.
4F4P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals <b>80-89</b> , and VEHICLE
	TRAILING equals 0, then NUMBER OF OCCUPANTS must not be greater than 5.
4F5P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 15, 16, 42, 73, and VEHICLE
	TRAILING equals 0, then NUMBER OF OCCUPANTS must not be greater than 30.
4F6P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and
	VEHICLE TRAILING equals 0, then NUMBER OF OCCUPANTS must not be greater than 55.
4F7P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING
	equals 0, then NUMBER OF OCCUPANTS must not be greater than 50.
4F8P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING
	equals 0, then NUMBER OF OCCUPANTS must not be greater than 10.
4F9P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING
-	equals 0, then NUMBER OF OCCUPANTS must not be greater than 20.
4F0P	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 99, and VEHICLE TRAILING
	equals 0, then NUMBER OF OCCUPANTS must not be greater than 10.
4F9Q	
	• • • • • • • • •
4G0P	
4F9Q 4G0P	<ul> <li>If NUMBER OF OCCUPANTS is less than 99, and BODY TYPE equals 06, 11, 12, 14-16, 12 and VEHICLE TRAILING equals 0 then NUMBER OF OCCUPANTS should not be greater than 15.</li> <li>A RELATED FACTORS-VEHICLE LEVEL between 30 and 44 can be used only once per vehicle form.</li> </ul>

Error Code	Error Test
4H0F	If DRIVER PRESENCE equals 0, 9, then there must not be a Person Level form for that
	vehicle with PERSON TYPE equal to 01.
4H1P	If DRIVER HEIGHT/INCHES is less than 12, then DRIVER HEIGHT/FEET must not be blank
	nor equal to 0.
4H2P	If DRIVER HEIGHT/INCHES is greater than 11, then DRIVER HEIGHT/FEET must equal 0.
4H3P	If DRIVER HEIGHT/FEET is 2-8, then DRIVER HEIGHT/ INCHES must equal 00-11.
4H4P	If DRIVER HEIGHT/FEET equals 9, then DRIVER HEIGHT/ INCHES must equal 99.
4H5P	If DRIVER HEIGHT/INCHES equals 99, then DRIVER HEIGHT/ FEET must equal 9.
4H6P	If DRIVER HEIGHT/INCHES equals 98, then DRIVER HEIGHT/FEET must equal 0.
4H7P	If DRIVER HEIGHT/FEET is 0, then DRIVER HEIGHT/INCHES must equal 24-96, 98.
4JOP	If all counters are not blanks, and the sum of all counters less than 98 is equal to 1, then DATE OF LAST CRASH, SUSPENSION, CONVICTION must equal DATE OF FIRST CRASH, SUSPENSION, CONVICTION.
4КОР	If Month of DATE OF LAST CRASH, SUSPENSION, CONVICTION equals 00, then Year (of same) must equal 0000.
4K1P	If Year of DATE OF LAST CRASH, SUSPENSION, CONVICTION equals 0000, then Month (of same) must equal 00.
4K2P	If Month of DATE OF FIRST CRASH, SUSPENSION, CONVICTION equals 00, then Year (of same) must equal 0000.
4K3P	If Year of DATE OF FIRST CRASH, SUSPENSION, CONVICTION equals 0000, then Month (of same) must equal 00.
4LOP	If any RELATED FACTORS-DRIVER LEVEL equals 39 for this vehicle, then TRAFFIC CONTROL DEVICE should not equal 00 for this vehicle.
4N1P	If VEHICLE CONFIGURATION does not equal 00, then MOTOR CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.
4N2P	If MOTOR CARRIER IDENTIFICATION NUMBER equals 00-000000000, then VEHICLE CONFIGURATION must equal 00.
4N3P	If MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 000000000, then MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) must equal 00.
4N4P	If MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000, then BODY TYPE must equal <b>12</b> , <b>16</b> , 21, 28, <b>34</b> , 40, 45, 48-52, 55, <b>58-66</b> 67, 71, 72, 78, 79, 92, 93, 99, or HM2 must equal 2.
4N5P	If BODY TYPE does not equal <b>12, 16,</b> 21, 28, <b>34</b> , 40, 45, 48-52, 55, <b>58-66</b> , 67, 71, 72, 78, 92, 93, or HM2 does not equal 2, then MOTOR CARRIER IDENTIFICATION NUMBER must equal 00-00000000, 99-999999999.
4N7P	If MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 888888888 or 777777777 or 999999999, then MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) should be filled respectively as 88 or 77 or 99.
4NAP	If MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) equals 01-58, 95, 96, then MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) should not equal 888888888, 777777777, 9999999997, 999999999.
4NBP	If MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) 01-58, 95, 96, then MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must not equal 000000000.

Error Code	Error Test
4NCP	If MOTOR CARRIER IDENTIFICATION NUMBER (Issuing Authority) is 00 or 77 or 88 or 99,
	then MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) must be filled
	respectively as 00000000 or 77777777 or 88888888 or 9999999999.
4Q0F	If PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 80-84, 88, 89, then SEATING
	POSITION must not equal 12, 14-19, 22-50.
4Q1F	If PERSON TYPE equals 02, 03, and BODY TYPE equals 21, then SEATING POSITION must
	not equal 50, 52.
4R0P	If SEATING POSITION equals 54, then VEHICLE TRAILING must not equal 0 or 9.
4SOP	If BODY TYPE equals <b>80-84,</b> 88, 89, then EJECTION must equal 8.
4S1P	If BODY TYPE equals 80-89, 96, and HM1 does not equal 1 then COMPLIANCE WITH CDL
	ENDORSEMENTS MUST equal 0.
4U0F	Each original submission must have at least one Person Level form with INJURY
	SEVERITY coded 4.
4V1F	If INJURY SEVERITY equals 4, then DEATH DATE and DEATH TIME for this person must be
	within 720 hours of the CRASH DATE and CRASH TIME.
4V2F	If CRASH MONTH equals 12, and DEATH MONTH equals 01, then DEATH YEAR must
	equal CRASH YEAR plus 1.
4V3F	If CRASH MONTH equals 12, then DEATH MONTH must equal 01, 12, 88, 99.
4V4F	If CRASH MONTH equals 02-11, and DEATH MONTH is not equal to 88 or 99, then
- <b>v</b> - <b>i</b>	DEATH MONTH must equal CRASH MONTH or CRASH MONTH plus 1.
4V5F	If CRASH MONTH equals 01, and DEATH MONTH is not equal to 88, or 99, then DEATH
4051	MONTH must equal CRASH MONTH or CRASH MONTH plus 1 or CRASH MONTH plus 2.
4V6P	If DEATH MONTH is not equal to blanks, then DEATH DAY and DEATH YEAR must not
4000	equal blanks.
4V7P	If DEATH DAY is not equal to blanks, then DEATH MONTH and DEATH YEAR must not
4078	equal blanks.
4V8P	If DEATH YEAR is not equal to blanks, then DEATH MONTH and DEATH DAY must not
4088	·
	equal blanks.
4W0P	A RELATED FACTORS-PERSON LEVEL (MV Occupant) between 05 and 92 can be used
	only once per person form.
4W1P	A RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) between 08 and 91 can be
414/20	used only once per person form.
4W2P	If RELATED FACTORS - PERSON (NOT A MV OCCUPANT) LEVEL equals 93, then NON-
	MOTORIST SAFETY EQUIPMENT <b>Subfield 1 Non-Motorist Helmet Use</b> must equal 2.
4X2A	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19, then NON-MOTORIST
	SAFETY EQUIPMENT Subfield 4-Non-Motorist Use of Reflective Clothing/Carried Item
	should not equal 2.
4X2B	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 19, then NON-MOTORIST
	SAFETY EQUIPMENT Subfield 5- Non-Motorist Use of Lighting should not equal 2.
4X2F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 00 or 98 or 99, then
	only that one code and no other must be coded for this driver.
4X2G	If any NON-MOTORIST ACTION/CIRCUMSTANCES equals 08, then the NON-MOTORIST
	ACTION/CIRCUMSTANCES must not also equal 03 for this person.
4X3A	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 11, then PERSON TYPE
	must equal 05.

Error Code	Error Test
4X3F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH (NM14) equals 00 or 98 or 99,
	then only that one code and no other must be coded for this person.
4X4F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09, then POLICE
	REPORTED ALCOHOL INVOLVEMENT (P16) or POLICE REPORTED DRUG INVOLVEMENT
	(P19) should equal 1 for this person.
4X5F	If NON-MOTORIST ACTION/CIRCUMSTANCES is selected 04, then NON-MOTORIST
	ACTION/CIRCUMSTANCES attributes 05 or 06 or 16 should also be selected.
4X6F	If any CONDITION (IMPAIRMENT) AT TIME OF CRASH (NM14) equals 09, then POLICE
	REPORTED ALCOHOL INVOLVEMENT (NM15) or POLICE REPORTED DRUG INVOLVEMENT
	(NM18) should equal 1 for this person.
4X7F	If any NON-MOTORIST ACTION/CIRCUMSTANCES equals 98 or 99, then only that one
	code and no other must be coded for this person.
4X8F	If any NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 00 or 99, then only that
	one code and no other must be coded for this person.
4X8G	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01 and 11 for the
	same person.
4Z0P	If SEQUENCE OF EVENTS equals 02, then FIRE OCCURRENCE for this vehicle must equal
	1.
4Z1P	If UNIT TYPE equals 1 and FIRE OCCURRENCE equals 1, then at least one SEQUENCE OF
	EVENTS must equal 02.

Error Code	Error Test
500F	If FIRST HARMFUL EVENT equals 01-11, 14, 15-21 23-26, 30-35, 44-53, 57-59, 72,73, then MANNER OF COLLISION must not equal 01, 02, 06-11, 98, 99.
510F	If FIRST HARMFUL EVENT equals 12, 54, 55, then MANNER OF COLLISION must not equal 00.
520F	If FIRST HARMFUL EVENT equals 10, then TRAFFIC CONTROL DEVICE must not equal 01-04, 07-09, 20-50, 98 for the vehicle involved in the first harmful event.
530F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 99, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 09, 98, 99.
531F	If FIRST HARMFUL EVENT equals 08, 09, 15, and RELATION TO TRAFFICWAY equals 11, then there must be at least one Person Level (Not a MV Occupant) form with NON-MOTORIST LOCATION AT TIME OF CRASH equal to 11.
540F	If FIRST HARMFUL EVENT equals 02, then the vehicle involved in the first harmful event must have FIRE OCCURRENCE equal to 1.
550F	If FIRST HARMFUL EVENT equals 08, then at least one person must have PERSON TYPE equal 05, 10.
560F	If FIRST HARMFUL EVENT equals 09, then at least one person must have PERSON TYPE equal to 06, 07.
570F	If FIRST HARMFUL EVENT equals 05, 06, then at least one PERSON TYPE equal to 01-03, 09 must have INJURY SEVERITY equal to 1-5, or blank.

Error Code	Error Test
580F	If FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT)
	LEVEL does not equal 32, 89 for at least one occupant in the not in-transport motor
	vehicle involved in the first harmful event, then RELATION TO TRAFFICWAY should not
	equal 01.
590F	If FIRST HARMFUL EVENT equals 15, then at least one Person Level form must have a
	PERSON TYPE of 08.
5AAP	The Final Stratum should equal the Original Stratum.
5A0P	If BODY TYPE equals 80, 81, 83, 84, 88, 89, and any RELATED FACTORS - VEHICLE LEVEL
	does not equal 30, then ROLLOVER must equal 0.
5BOP	If JACKKNIFE equals 0 and BODY TYPE equals 66, then VEHICLE TRAILING must not equal
	1-4.
5B0Q	If JACKKNIFE equals 0, then VEHICLE TRAILING must equal 0, 5, 6, or 9.
5D0P	If SPECIAL USE equals 04, then BODY TYPE must equal 01-12, 15-17, 19-22, 28-34, 39-41,
	45, 48-50, 55, 58, 59, 60-64, 66, 67, 71, 72, 78, 79, 90, 99.
5F0F	If NUMBER OF OCCUPANTS equals 00-98, and BODY TYPE does not equal 50-52, 55, 58,
	59, then the number of Person Level forms for that vehicle must be equal to the
	NUMBER OF OCCUPANTS.
510P	If NON-CDL LICENSE STATUS equals 0, then COMPLIANCE WITH LICENSE RESTRICTIONS
	must not equal 1-3, 9.
5I1P	If NON-CDL LICENSE STATUS for this person equals 9, then COMMERCIAL MOTOR
	VEHICLE LICENSE STATUS should equal 99.
5JOP	If the sum of all counters less than 98 is greater than fifteen, then DATE OF LAST CRASH,
	SUSPENSION, CONVICTION must not equal DATE OF FIRST CRASH, SUSPENSION,
	CONVICTION.
5KOP	The Year of DATE OF FIRST CRASH, SUSPENSION, CONVICTION must be within five years
	of the Year of CRASH DATE.
5L0F	If RELATED FACTORS-DRIVER LEVEL equals 20, then DRIVER PRESENCE must not equal 1,
	9.
5L1F	If RELATED FACTORS-DRIVER LEVEL equals 04, 08, 12, 13, 15, 16, 19, 52, 53, 58, 59, 73,
	74, 77-88, then DRIVER PRESENCE must not equal 0 or 9.
5M0F	If PERSON TYPE equals 01, then all RELATED FACTORS-PERSON LEVEL (MV Occupant)
	must equal 00.
5M0G	If SPECIAL USE equals 06, and PERSON TYPE equals 02 or 09, then RELATED FACTORS –
	PERSON (MV OCCUPANT) LEVEL should equal 86 or 92.
5M0H	If PERSON TYPE equals 1, then RELATED FACTORS – PERSON (MV OCCUPANT) LEVEL
	must equal 0.
5NOF	If PERSON TYPE equals 02, then RELATED FACTORS-PERSON LEVEL must not equal 21,
	26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51-53, 57-70, 72-78, 80-83, 91.
5Q0F	If PERSON TYPE equals 02, and BODY TYPE equals 50-52, 55, 58, 59, then SEATING
	POSITION must not equal 11, 21-50, 98, 99.
5S0P	If BODY TYPE equals <b>80-84</b> , 88, 89 or 90, then EXTRICATION must equal 0.
5T7P	If ALCOHOL TEST STATUS equals <b>0</b> , then ALCOHOL TEST TYPE must equal 00, and
	ALCOHOL TEST RESULT must equal 996.
5T8P	If ALCOHOL TEST STATUS equals 9, then ALCOHOL TEST TYPE and ALCOHOL TEST RESULT
	must equal 999.

Error Code	Error Test
5T9P	If ALCOHOL TEST STATUS equals 2, then ALCOHOL TEST TYPE must equal 01-10, 95, 98,
	and ALCOHOL TEST RESULT must equal 000-940, 997, 998.
5TCP	If ALCOHOL TEST STATUS equals 8, then ALCOHOL TEST TYPE must equal 95 and
	ALCOHOL TEST RESULT must equal 995.
5W0P	If RELATED FACTORS-PERSON LEVEL equals 18, then SEX must equal 2, and AGE must be
	greater than 012.
5Y0F	If FIRST HARMFUL EVENT equals 08, 09, 15, then NUMBER OF FORMS SUBMITTED FOR
	PERSONS NOT IN MOTOR VEHICLES must not equal 00.
5Z0F	If SEQUENCE OF EVENTS equals 08, then at least one person must have PERSON TYPE
	equal to 05, 10.

Error Code	Error Test
610P	If TRAFFIC CONTROL DEVICE equals 00, then DEVICE FUNCTIONING must equal 0.
622P	If HIT-AND-RUN equals 1, then it is unlikely that NUMBER OF OCCUPANTS equals 0-98.
640F	If TRAFFIC CONTROL DEVICE equals 23 for any vehicle, then RELATED FACTORS-CRASH
	LEVEL should equal 21.
641F	If RELATED FACTORS-CRASH LEVEL equals 21, then TRAFFIC CONTROL DEVICE should not
	equal 00 for every vehicle.
642F	If TRAFFIC CONTROL DEVICE equals 00 for every vehicle, then RELATED FACTORS-CRASH
	LEVEL should not equal 21.
650P	If TRAFFIC CONTROL DEVICE equals 65 for any vehicle, then RAIL GRADE CROSSING
	IDENTIFIER must not equal 0000000.
651P	RAIL GRADE CROSSING IDENTIFIER must equal BLANKS, 0000000, 99999999, or
	nnnnnA; where n is a numeric character and A is an uppercase alphabetic character.
660P	If TRAFFIC CONTROL DEVICE is not equal to 00, then DEVICE FUNCTIONING must not
	equal 0.
660Q	If TRAFFIC CONTROL DEVICE does not equal 97, then it is unlikely that DEVICE
	FUNCTIONING equals 8.
661P	If TRAFFIC CONTROL DEVICE equals 97, the DEVICE FUNCTIONING must equal 8.
670F	If FIRST HARMFUL EVENT equals 12, 14, 45, 54, 55, then NUMBER OF VEHICLE FORMS
	SUBMITTED must be greater than 001.
671F	If the only harmful event in SEQUENCE OF EVENTS for this vehicle equals 02 or 04, then
	CRITICAL EVENT – PRECRASH (EVENT) must equal 98.
6A1P	If UNDERRIDE/OVERRIDE equals 1-8, then BODY TYPE must not equal 80-84, 88-91.
6D0P	If SPECIAL USE equals 05, then BODY TYPE must equal 01-12, 14-17, 19-22, <b>28-34</b> , 39-41,
	45, 48, 49, 55, 58-64, 66, 67, 71, 72, 78-82, 88-91, 94, 95, <b>96,</b> 97-99.
6G0P	If RELATED FACTORS-VEHICLE LEVEL equals 32, then REGISTRATION STATE must not
	equal 00, 92.
6G0Q	If any RELATED FACTORS - VEHICLE LEVEL equals 30, then BODY TYPE must equal 80 for
	this vehicle.
6H0P	If DRIVER PRESENCE equals 0, 9, then DRIVER'S ZIP CODE must be blank.
6H1P	If DRIVER PRESENCE equals 0, 9, then CONDITION (IMPAIRMENT) AT TIME OF CRASH
	(D23) must be blank.
610P	If NON-CDL LICENSE STATUS equals 9, and COMMERCIAL MOTOR VEHICLE LICENSE
	STATUS equals 00, then COMPLIANCE WITH LICENSE RESTRICTIONS must not equal 1-3.

Error Code	Error Test
6КОР	If VIOLATION CHARGED equals 71, then RELATED FACTORS-DRIVER LEVEL must not
	equal 19.
6LOP	If COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER
	LEVEL equals 19, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must equal 3.
6Q0F	If PERSON TYPE equals 02, 03, 09, and BODY TYPE equals 60-67, 71, 72, 78, 79, then
	SEATING POSITION must not equal 31-49.
6SOP	If EJECTION equals 1, then EXTRICATION must not equal 1, 9.
6V0P	DEATH DATE must not be less than CRASH DATE.
6Z0F	If SEQUENCE OF EVENTS equals 09, then at least one person must have PERSON TYPE
	equal to 06, 07.

Error Code	Error Test
730P	If RELATION TO JUNCTION (b) equals 07, then RELATION TO TRAFFICWAY must not
	equal 04-07, 10, 11, 99.
740P	If RELATION TO JUNCTION (b) equals 07, then TRAFFICWAY DESCRIPTION must equal 2,
	3 for at least one vehicle.
750P	If RELATION TO JUNCTION (b) equals 07, then RAIL GRADE CROSSING IDENTIFIER must
	equal 000000.
770P	If RELATION TO TRAFFICWAY equals 07, then RELATION TO JUNCTION must equal 01,
	03, 08, 19, 98, 99.
772P	If RELATION TO TRAFFICWAY equals 07, then RELATION TO JUNCTION (a) must not
	equal 1.
773P	If RELATION TO JUNCTION (b) equals 01, then RELATION TO JUNCTION (a) must equal 0.
773Q	If RELATION TO JUNCTION(b) equals 04, 06, 07, or 16, then RELATION TO JUNCTION (a)
	should not equal 1.
775P	If RELATION TO JUNCTION (b) equals 17 or 18 or 19, then RELATION TO JUNCTION (a)
	must equal 1.
776P	If RELATION TO JUNCTION (b) equals 01, 04-08, 16-19, then TYPE OF INTERSECTION
	must equal 1.
778P	If RELATION TO JUNCTION (b) equals 01, 04-08, 16-20, then TYPE OF INTERSECTION
	must equal 01.
77AP	If CRASH TYPE equals 14, then RELATION TO JUNCTION (b) must not equal 02.
77BP	If CRASH TYPE equals 68-91, then RELATION TO JUNCTION (b) should not equal 01.
77CP	If CRASH TYPE equals 14, then RELATION TO JUNCTION (b) should equal 01, 03, 19.
77DP	If RELATION TO TRAFFICWAY equals 07, and RELATION TO JUNCTION (a) equals 1, then
	RELATION TO JUNCTION (b) should not equal 03, 08.
780P	If RELATION TO TRAFFICWAY equals 10, then RELATION TO JUNCTION (b) must not
	equal 02, 04, 08.
781P	If TYPE OF INTERSECTION equals 02-07, 10, then TRAFFICWAY IDENTIFIER (b) should not
	be blank.
782P	If TYPE OF INTERSECTION equals 02-07, 10, then RELATION TO JUNCTION (b) must equal
	02, 03.
783P	If RELATION TO JUNCTION (b) equals 98, 99, then TYPE OF INTERSECTION should equal
	01, 98, 99.

Error Code	Error Test
784P	If TYPE OF INTERSECTION equals 01, then RELATION TO JUNCTION (b) must not equal 02, 03.
7B0F	If JACKKNIFE equals 2, 3, then DRIVER PRESENCE must equal 1.
7D0P	If SPECIAL USE equals 06, then BODY TYPE must equal 11, 14-17, 19, 21, 22, 28, 29, 40, 41, 45, 48, 49, 61, 62, 64, 79, 97, 99.
7E0P	If INJURY SEVERITY equals 4, then DEATH CERTIFICATE NUMBER must NOT equal 0000-00-000000.
7E1P	If INJURY SEVERITY equals 4, then RACE must not equal 00.
7E2P	If INJURY SEVERITY equals 4, then HISPANIC ORIGIN must not equal 00.
7E3P	If INJURY SEVERITY does not equal 4, then RACE AND HISPANIC ORIGIN must equal 00.
7F0P	If DEATH CERTIFICATE NUMBER is not blank or 0000-00-000000, then INJURY SEVERITY must equal 4.
7F1P	If RACE equals 00, then INJURY SEVERITY must not equal 4.
7F2P	If HISPANIC ORIGIN equals 00, then INJURY SEVERITY must not equal 4.
7F3P	If RACE is not equal to 00, and HISPANIC ORIGIN is not equal to 00, then INJURY SEVERITY must equal 4.
710P	If COMPLIANCE WITH LICENSE RESTRICTIONS equals 1, and RELATED FACTORS-DRIVER LEVEL equals 19, then NON-CDL LICENSE STATUS must equal 6.
7КОР	If any VIOLATIONS CHARGED equals 71, then NON-CDL LICENSE STATUS must equal 0, 1, 2, or COMMERCIAL MOTOR VEHICLE LICENSE STATUS must equal 01, 02, 05.
7K1P	VIOLATIONS CHARGED code 99 must not be used more than once per driver.
7LOP	Any RELATED FACTORS-DRIVER LEVEL can be used only once per driver form.
7M0F	If PERSON TYPE equals 03, then RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 21, 26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51, 52, 57-70, 72-78, 80-83, 91.
7M1F	If PERSON TYPE equals 03, and SEATING POSITION is not equal to 11 or 13, and INJURY SEVERITY does not equal 4, then DRUG TEST STATUS must not equal 8, any DRUG TEST TYPE must not equal 6, and any DRUG TEST RESULTS must not equal 095.
7P0F	If PERSON TYPE equals 01, then AGE must not be less than 002.
7Q0F	If PERSON TYPE equals 09, and BODY TYPE equals 50-52, 55, 58, 59, then SEATING POSITION must not equal 12-50, 52-54.
7R0P	If FATAL INJURY AT WORK equals 0, 1, 9, then INJURY SEVERITY must equal 4.
7V0F	If DEATH YEAR equals 9999, then CRASH MONTH must not be 01-11.
7W0P	If FATAL INJURY AT WORK equals 8, then INJURY SEVERITY must not equal 4.
7Z0F	If any SEQUENCE OF EVENTS equals 05, 06, then at least one occupant of this vehicle (PERSON TYPES 01, 02, 09) must have INJURY SEVERITY equal to 1-5, or blank.

Error Code	Error Test
840P	If any RELATED FACTORS-CRASH LEVEL equals 99, then all RELATED FACTORS-CRASH LEVEL must equal 99.
850P	If the first RELATED FACTORS-CRASH LEVEL equals 00, then all RELATED FACTORS-CRASH LEVEL must be 00. If the second equals 00, then the third must also.
860P	If any RELATED FACTORS-CRASH LEVEL is blank, then all RELATED FACTORS-CRASH LEVEL must be blanks.
870P	A RELATED FACTORS-CRASH LEVEL 01-07, 13-28 can be used only once per crash.

Error Code	Error Test
880F	If RELATED FACTORS-CRASH LEVEL equals 16, then there must be a Person Level (Not a
	MV Occupant) form with PERSON TYPE equal to 04-08, 19.
890F	If RELATED FACTORS-CRASH LEVEL equals 15, then there must be a Person Level (Not a
	MV Occupant) form with PERSON TYPE equal to 04-08, 10, 19.
8D0P	If SPECIAL USE equals 08, then BODY TYPE must not equal 60-64, 66, 67, 71, 72, 78, 79,
	99.
810P	If NON-CDL LICENSE STATUS equals 0-4, 9, then RELATED FACTORS-DRIVER LEVEL must
	not equal 19.
8JOP	If NON-CDL LICENSE TYPE equals 0, then NON-CDL LICENSE STATUS must equal 0.
8J1P	If NON-CDL LICENSE STATUS equals 0, then NON-CDL LICENSE TYPE must equal 0.
8J2P	If RELATED FACTORS-DRIVER LEVEL equals 73, 74, then COMPLIANCE WITH LICENSE
	RESTRICTIONS must equal 2.
8KOP	If VIOLATIONS CHARGED equals 07, 08, then HIT-AND-RUN must not equal 0.
8LOP	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-2, 9, then RELATED FACTORS-
	DRIVER LEVEL must not equal 19.
8L8Q	If AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS, then the
	corresponding event in that row must not equal 12 or 55.
8L8R	If the CRASH EVENTS event equals 54, then AREAS OF IMPACT (THIS VEHICLE) must
	equal 18, 19, <i>or 20</i> in that row.
8L8S	If AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the
	corresponding event in that row equals 14, 45 or 54, then RELATED FACTORS-CRASH
01.0T	LEVEL must equal 14.
8L8T	If RELATED FACTORS-CRASH LEVEL equals 14, then there must exist at least one event in the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE or OTHER VEHICLE) equals
	18, 19, or 20 and the corresponding event in that row equals 14, 45 or 54.
8L8U	If AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20 in the CRASH EVENTS and the
8180	corresponding event in that row equals 08, 09, 15, 49, then RELATED FACTORS-CRASH
	LEVEL must equal 15.
8L8V	If RELATED FACTORS-CRASH LEVEL equals 15, then there must exist at least one event in
	the CRASH EVENTS where AREAS OF IMPACT (THIS VEHICLE) equals 18, 19, or 20, and
	the corresponding event in that row equals 08-10, 15, 18, 49, or 91.
8L8W	If SEQUENCE OF EVENTS is not equal to 45, then AREAS OF IMPACT (OTHER VEHICLE)
	should not equal 18 or 19.
8L8X	If AREAS OF IMPACT (THIS VEHICLE) equals 18, then there should be a previous event
	involving that vehicle where the CRASH EVENTS event equals 60.
8L8Y	If SEQUENCE OF EVENTS is equal to 45 (Working Motor Vehicle), then AREAS OF IMPACT
	(THIS VEHICLE) and AREAS OF IMPACT (OTHER VEHICLE) should not both equal 18 or 19
	in that same event row.
8L9P	If BODY TYPE does not equal 80-84, 88-91, and the CRASH EVENTS event equals 54, and
	the corresponding AREAS OF IMPACT (THIS VEHICLE) equals 19 or 20 in that row, then
	there should be a previous event with CRASH EVENTS event equal to 18, 73, or 91
	involving that vehicle.
8M0F	If PERSON TYPE equals 04, then RELATED FACTORS-PERSON LEVEL (Not a MV Occupant)
	must not equal 13, 86, 90.
8P0P	If PERSON TYPE equals 01, and AGE is less than 008; then BODY TYPE must not equal 01-
	17, 19-22, <b>28-34</b> , 39-42, 45, 48-52, 55, 58-67, 71, 72, 78-83, 89, 92, 93.

Error Code	Error Test
8Q0F	If PERSON TYPE equals 08, then RELATED FACTORS-PERSON LEVEL must not equal 09,
	86, 90.
8T0F	If NON-MOTORIST SAFETY EQUIPMENT Subfield 1 Non-Motorist Helmet Use equals 2,
	then PERSON TYPE should equal 06-08.
8V0P	If DEATH YEAR equals 9999, then DEATH MONTH and DEATH DAY must equal 99.
8Z0F	If any SEQUENCE OF EVENTS equals 15, then at least one Person Level (Not a MV
	Occupant) form must have a PERSON TYPE code of 08.

## 9 Series

Error Code	Error Test
900P	If VEHICLE IDENTIFICATION NUMBER (VIN) does not equal 0s, 8s or 9s, and VEHICLE
	MODEL YEAR is a valid year and greater than or equal to 1980 and VEHICLE MODEL
	YEAR equals, then the 10th digit of the valid VEHICLE IDENTIFICATION NUMBER
	(VIN) should equal (contact NHTSA Headquarters for VIN Assistance).
901P	If any VEHICLE IDENTIFICATION NUMBER (VIN) that does not equal 0s, 8s, or 9s, then
	VEHICLE IDENTIFICATION NUMBER (VIN) must be unique within a crash.
902P	If VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and
	VEHICLE IDENTIFICATION NUMBER is not equal to '0000000000000000'; then VEHICLE
	IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H, J-N, P, R-Z, 0-9, or,
	blank; VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, X, or blank;
	VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, 1-9, or,
	blank; VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or blank.
903P	If VEHICLE MODEL YEAR > 1980, VEHICLE MODEL YEAR is not equal to 9998 or 9999, and
	VEHICLE IDENTIFICATION NUMBER is not equal to '0000000000000000'; then VEHICLE
	IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N, P, R-Z, or 0-9;
	VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9, or X; VEHICLE
	IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T, V-Y, or 1-9; VEHICLE
	IDENTIFICATION NUMBER positions 12-14 should equal A-H, J-N, P, R-Z, 0-9 or blank;
	VEHICLE IDENTIFICATION NUMBER positions 15-17 should equal 0-9 or blank.
904P	If TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to '0000000000000000',
	then TRAILER VEHICLE IDENTIFICATION NUMBER positions 1-8, 11-14 should equal A-H,
	J-N, P, R-Z, 0-9, or, blank; TRAILER VEHICLE IDENTIFICATION NUMBER position 9 should
	equal 0-9, X, or blank; TRAILER VEHICLE IDENTIFICATION NUMBER position 10 should
	equal A-H, J-N, P, R-T, V-Y, 1-9, or, blank; TRAILER VEHICLE IDENTIFICATION NUMBER
	positions 15-17 should equal 0-9 or blank.
905P	If TRAILER VEHICLE IDENTIFICATION NUMBER is not equal to '0000000000000000',
	then TRAILER VEHICLE IDENTIFICATION NUMBER positions 1-8, 11 should equal A-H, J-N,
	P, R-Z, or 0-9; TRAILER VEHICLE IDENTIFICATION NUMBER position 9 should equal 0-9 or
	X; TRAILER VEHICLE IDENTIFICATION NUMBER position 10 should equal A-H, J-N, P, R-T,
	V-Y, or 1-9; TRAILER VEHICLE IDENTIFICATION NUMBER positions 12-14 should equal A-
	H, J-N, P, R-Z, 0-9 or blank; TRAILER VEHICLE IDENTIFICATION NUMBER positions 15-17
	should equal 0-9 or blank.
920P	If any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, equals Not
	Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)], then
	the other three must also equal Not Reported.

Error Code	Error Test
921P	If MAKE is not 97, 98, 99, and equals, and MODEL equals, then MODEL YEAR
	must equal, or CRASH YEAR plus 1.
930P	If any one of the fields MAKE, MODEL, BODY TYPE, and MODEL YEAR, does not equal
	Not Reported [MAKE (97), MODEL (997), BODY TYPE (98), and MODEL YEAR (9998)],
	THEN the other three must also not be coded as Not Reported.
960P	If MAKE is not 98, 99, and equals, and MODEL equals, then BODY TYPE must
	equal (MAKE, MODEL, and BODY TYPE must be valid according to Vehicle Tables).
981P	If BODY TYPE equals 80-84, 88, 89, 90, 91, then RESTRAINT SYSTEM/HELMET USE must
	equal 05, 16, 17, 19, 29, 97, 98.
982P	If BODY TYPE does not equal 80-91, then RESTRAINT SYSTEM/HELMET USE must not
	equal 05, 16, 17, 19, 29.
990P	If any counter equals 99, then all counters and DATE OF LAST CRASH, SUSPENSION,
	CONVICTION and DATE OF FIRST CRASH, SUSPENSION, CONVICTION must equal 9999.
9A2P	If UNIT TYPE equals 2, 3, then REGISTERED VEHICLE OWNER must equal 6.
9A3P	If UNIT TYPE equals 2-4, then DRIVER PRESENCE must equal 0.
9A5P	If PERSON TYPE equals 03, then UNIT TYPE must equal 2-4.
9B3P	If UNDERRIDE/OVERRIDE equals 7, then there must be at least one vehicle with UNIT
	TYPE equal to 1.
9B4P	If UNDERRIDE/OVERRIDE equals 8, then there must at least one vehicle with UNIT TYPE
	equal 2-4.
9B5P	If UNIT TYPE equals 2, 3, then UNDERRIDE/OVERRIDE must equal 0.
9B7P	If UNIT TYPE equals 2-4, then PERSON TYPE of all occupants of this vehicle must equal
	03.
9B9P	If any SEQUENCE OF EVENTS equals 55, then there must be at least one other vehicle
	with UNIT TYPE equal to 1.
9BAP	If MANNER OF COLLISION equals 07, and PRE-EVENT MOVEMENT (PRIOR TO
	RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles
	involved in the first harmful event, then CRASH TYPE should equal 44-49, 98, 99 for the
	vehicles involved in the first harmful event.
9BCP	If MANNER OF COLLISION equals 08, and PRE-EVENT MOVEMENT (PRIOR TO
	RECOGNITION OF CRITICAL EVENT) equals 10 or 11 for neither one of the vehicles
	involved in the first harmful event, then CRASH TYPE should equal 64-67, 98, 99 for the
	vehicles involved in the first harmful event.
9BDP	If MANNER OF COLLISION equals 01, then CRASH TYPE should not equal 44-49 for the
	vehicles involved in the first harmful event.
9C0P	If FIRST HARMFUL EVENT equals 55, then there must be at least one vehicle with UNIT
	TYPE equal to 1.
9C1P	If UNIT TYPE equals 4, then RELATED FACTORS-VEHICLE LEVEL must not equal 39.
9C4P	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9, then DRIVER MANEUVERED
	TO AVOID must only equal 95.
9C5P	If DRIVER MANEUVERED TO AVOID equals 95, then DRIVER PRESENCE must equal 0 or 9.
9C6P	If UNIT TYPE equals 2-4, then RELATED FACTORS-DRIVER LEVEL must equal 0.
9JOP	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0-1, then COMPLIANCE WITH
	LICENSE RESTRICTIONS must not equal 1-3, 9.
9K0P	If HM2 equals 2, then REGISTRATION STATE must not equal 00.

Error Code	Error Test
9M0F	If PERSON TYPE equals 05, then RELATED FACTORS-PERSON LEVEL (Not a MV Occupant)
	must not equal 13, 21, 26, 40, 42, 51, 52, 57, 68-70, 73-83.
9P0F	If PERSON TYPE equals 04-08, 10, 19, then EXTRICATION must not equal 1, 9.
9V0P	If DEATH MONTH equals 99, then DEATH DAY must equal 99.

## A Series

Error Code	Error Test
A010	If STATE equals 02, and LIGHT CONDITION equals 4, then CRASH TIME should equal 0300-1000, 9999.
A020	If STATE equals 02, and LIGHT CONDITION equals 5, then CRASH TIME should equal 1500-2359, 9999.
A030	If CRASH MONTH equals 05-09, then ATMOSPHERIC CONDI-TIONS should not equal 03, 04, 11, 12.
A040	If CRASH MONTH equals 05-09, then ROADWAY SURFACE CONDITIONS should not equal 03, 04, 10.
A041	If CRASH MONTH equals 05-09, then SEQUENCE OF EVENTS, FIRST HARMFUL EVENT, MOST HARMFUL EVENT should not equal 48.
A042	If CRASH EVENTS-SEQUENCE OF EVENTS equals 17, 19-21, 23-26, 30-35, 38-43, 52, 53, 57, <i>93</i> for a vehicle, then at least one previous CRASH EVENTS-SEQUENCE OF EVENTS should equal 63, 64, 71, or 79 for that vehicle.
A043	SEQUENCE OF EVENTS for the last event in the CRASH EVENTS TABLE must not equal 60-71, 79.
A050	If CRASH TIME equals 0900-1600, then LIGHT CONDITION should not equal 2-6.
A060	If CRASH TIME equals 2300-0400, then LIGHT CONDITION should not equal 1, 4, 5, 9.
A070	If NOTIFICATION TIME EMS is not 8888, 9998 or 9999, then NOTIFICATION TIME EMS should not be more than 120 minutes later than CRASH TIME.
A080	If DRIVER PRESENCE equals 0, and FIRST HARMFUL EVENT equals 12, and NUMBER OF VEHICLE FORMS SUBMITTED equals 002, then one RELATED FACTORS-DRIVER LEVEL should equal 20.
A090	If NUMBER OF VEHICLE FORMS SUBMITTED is greater than 001, then there should be at least one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
A100	If FIRST HARMFUL EVENT is not equal to 02, 04, 05, 10, 16, 18, then there should be one vehicle with TRAVEL SPEED of 001-151, 997-999, or blanks.
A110	If FIRST HARMFUL EVENT equals 10, then LAND USE AND FUNCTIONAL SYSTEM (b) should not equal 01-03.
A11A	If FUNCTIONAL SYSTEM (b) equals 01, then OWNERSHIP must equal 01 or 31.
A12A	If either FUNCTIONAL SYSTEM (b) or OWNERSHIP equals 96, then both must equal 96.
A131	If RELATION TO JUNCTION (b) equals 02, 04, 06, 16, 17, or 20, then RELATION TO TRAFFICWAY must equal 01.
A13A	If LAND USE (a) equals 6, then FUNCTIONAL SYSTEM (b) must equal 96.
A141	If RELATION TO JUNCTION (b) equals 18, then RELATION TO TRAFFICWAY must equal 01 or 11.
A14A	If FUNCTIONAL SYSTEM (b) equals 96, then LAND USE a must equal 6.
A150	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION (a) equals 0, then RELATION TO JUNCTION should not equal 02-04, 06, 08.

Error Code	Error Test
A15A	If FUNCTIONAL SYSTEM (b) equals 99, then LAND USE (a) should equal 9, OWNERSHIP
	should equal 99, and NATIONAL HIGHWAY SYSTEM should equal 9.
A160	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-06, then ROADWAY SURFACE TYPE
	should equal 1, 2, 8 or 9 for at least one vehicle.
A170	If ROADWAY SURFACE TYPE equals 3-5 for every vehicle, then LAND USE AND
	FUNCTIONAL SYSTEM (b) should not equal 01-06.
A180	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, then SPECIAL JURISDICTION
	should not equal 1-5, 8, 9.
A190	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, then SPECIAL JURISDICTION
	should not equal 4.
A1A0	If ROADWAY SURFACE CONDITIONS equals 01 for a vehicle involved in the first harmful
	event, then ATMOSPHERIC CONDITIONS should not equal 02-04, 11, 12.
A1B0	If TRAFFIC CONTROL DEVICE equals 20, 21 for a vehicle involved in the first harmful
	event, then RELATION TO JUNCTION (b) should not equal 01, 18.
A1C0	If ROADWAY SURFACE CONDITIONS equals 01, then DRIVER'S VISION OBSCURED BY
	should not equal 08.
A1E0	If RELATION TO JUNCTION (b) equals 19, then RELATION TO TRAFFICWAY must not
	equal 01, 05, 11, 98, 99.
A1E1	If RELATION TO JUNCTION (b) equals 20, then RELATION TO TRAFFICWAY must equal 01.
A200	If RELATION TO JUNCTION (b) equals 07, then LAND USE AND FUNCTIONAL SYSTEM (b)
	should not equal 06, 07 or 96.
A210	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION
	(a) equals 0, then TRAFFIC CONTROL DEVICE should not equal 01-04, 07, 20, 23, 40, 50,
	65.
A220	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, and RELATION TO JUNCTION
	(a) equals 0, then SPEED LIMIT should not equal 05-40 for any vehicle.
A230	If SEQUENCE OF EVENTS equals 10, then LAND USE AND FUNCTIONAL SYSTEM (b)
	should not equal 01-03.
A240	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, and RELATION TO JUNCTION (a)
	equals 0, then TRAVEL SPEED should not equal 005-040 for any vehicle.
A250	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01-03, and RELATION TO JUNCTION
	(a) equals 1, and RELATION TO JUNCTION (b) does not equal 03, 05, 20, then TOTAL
	LANES IN ROADWAY should not equal 1 for the vehicles involved in the first harmful
	event.
A270	If any VIOLATIONS CHARGED equals 31-35, 37, then TRAFFIC CONTROL DEVICE should
	equal 01-20, 98.
A280	If ROUTE SIGNING equals 1, then SPECIAL JURISDICTION should not equal 1-5, 8, 9.
A290	If ROUTE SIGNING equals 1 and RELATION TO JUNCTION (a) equals 0, then RELATION TO
	JUNCTION (b) should not equal 02-04, 06, 08, 16.
A291	If RELATION TO JUNCTION (b) equals 07, then ROUTE SIGNING should not equal 5, 6.
A292	If any TRAFFICWAY DESCRIPTION, TOTAL LANES IN ROADWAY, ROADWAY ALIGNMENT,
	ROADWAY GRADE, ROADWAY SURFACE TYPE, or ROADWAY SURFACE CONDITIONS
	equals 0, 00, then all must equal 0, 00, and SPEED LIMIT must equal 00 for this vehicle.
A293	If WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 02, 03, then TRAFFIC
	CONTROL DEVICE should equal 01-03, 20, 40, 97 or 98 for the vehicle(s) involved in the
	first harmful event.

Error Code	Error Test
A294	If WORK ZONE equals 1-3, and RELATION TO JUNCTION (b) equals 01, 04, 05, 08, 17-19,
	then TRAFFIC CONTROL DEVICE should equal 00, 21, 28, 40, 50, 97 or 98 for the
	vehicle(s) involved in the first harmful event.
A300	If ROUTE SIGNING equals 1, then TRAFFICWAY DESCRIPTION should equal 2, 3, 6 for at
	least one vehicle.
A310	If ROUTE SIGNING equals 1, and RELATION TO JUNCTION (a) equals 0, then TOTAL
	LANES IN ROADWAY should not equal 1 for any vehicle.
A320	If ROUTE SIGNING equals 1 and RELATION TO JUNCTION (a) equals 0, then SPEED LIMIT
	should not equal 05-40 for any vehicle.
A330	If ROUTE SIGNING equals 1, 2, then ROADWAY SURFACE TYPE should equal 1, 2, 8 for at
	least one vehicle.
A350	If ROUTE SIGNING equals 1, then FIRST HARMFUL EVENT should not equal 10.
A360	If RELATION TO JUNCTION (b) equals 07, then ROUTE SIGNING should not equal 4.
A370	If FIRST HARMFUL EVENT equals 99, then MANNER OF COLLISION should not equal 00,
	01-11.
A380	If FIRST HARMFUL EVENT equals 01 and this vehicle is involved in the first harmful event
	and BODY TYPE does not equal 80, 81, 83, 84, 88, 89, for this vehicle, and RELATION TO
	TRAFFICWAY equals, then LOCATION OF ROLLOVER should equal
	respectively.
A390	If FIRST HARMFUL EVENT equals 17, 19-21, 23-26, 30-35, 38-43, 52, 53, 57, <i>93,</i> then
	RELATION TO TRAFFICWAY should not equal 01, 02, 07, 11.
A3C0	If FIRST HARMFUL EVENT equals 02-07, 16, 44, 51, 72, then CRASH TYPE must equal 00
	for the vehicle involved in the first harmful event.
A3D0	If FIRST HARMFUL EVENT equals 01-07, 16, 44, 51, 72, then CRASH TYPE must not equal
	20-91.
A3E0	If CRASH TYPE equals 13, then FIRST HARMFUL EVENT must equal 08, 09, 11, 15 or 49.
A3G0	If INTERSTATE HIGHWAY equals 1, RELATION TO JUNCTION (a) equals 1, and RELATION
	TO JUNCTION (b) is not equal to 03 or 05 or 20, then TOTAL LANES IN ROADWAY should
	not equal 1 for at least one vehicle involved in the first harmful event.
A3H0	If INTERSTATE HIGHWAY equals 1, RELATION TO JUNCTION (a) equals 1, and RELATION
	TO JUNCTION (b) is not equal to 03 or 05 or 20, then TRAFFICWAY DESCRIPTION should
4210	not equal 4 for at least one vehicle involved in the first harmful event.
A3I0	If INTERSTATE HIGHWAY equals 1, then RELATION TO JUNCTION (b) should not equal
4210	02, 04, 06, 08 or 16.
A3J0	If INTERSTATE HIGHWAY equals 1, RELATION TO JUNCTION (a) equals 1, and RELATION
	TO JUNCTION (b) is not equal to 03 or 05 or 20, then SPEED LIMIT should not equal 01- 40 for at least one vehicle involved in the first harmful event.
A2K0	
A3K0	If FIRST HARMFUL EVENT equals 10, then INTERSTATE HIGHWAY should not equal 1.
A41A	If FIRST HARMFUL EVENT equals 02, 04, 07, 16, 44 or 54, then CRITICAL EVENT - PRECRASH (EVENT) should equal 98 for the vehicles involved in the FIRST HARMFUL
	EVENT.
A420	If FIRST HARMFUL EVENT equals 10, then RELATION TO JUNCTION (b) should equal 06.
A420 A421	If FIRST HARMFUL EVENT equals 10, then RELATION TO JONCTION (b) should equal 06.           If FIRST HARMFUL EVENT equals 24, 25, 30, 33, 34, 35, 40, 46, 52, 57, 59, then RELATION
M421	TO TRAFFICWAY should equal 03, 04, 08 or 10.
	TO TRAFFICWAT SHOULD EQUALUS, 04, 08 01 10.

Error Code	Error Test
A430	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 10-11
	for a vehicle involved in the first harmful event, then RELATION TO JUNCTION (b) should
	not equal 01, 18.
A440	If RELATION TO JUNCTION (b) equals 06, then TRAFFIC CONTROL DEVICE should equal
	65 for any vehicle involved in the first harmful event.
A470	If WORK ZONE equals 0, and TRAFFICWAY DESCRIPTION equals 1-3, 5, then TOTAL
	LANES IN ROADWAY should not equal 1.
A480	If CRASH TYPE equals 00, then FIRST HARMFUL EVENT must equal 02-07, 16, 44, 51, 72.
A481	If TRAFFICWAY DESCRIPTION equals 6, and RELATION TO JUNCTION (b) does not equal
	02, 03, then TOTAL LANES IN ROADWAY should equal 1, 2, 8, 9.
A482	If TRAFFICWAY DESCRIPTION equals 4 or 6, then TOTAL LANES IN ROADWAY should not
	equal 5-7.
A490	If TRAFFICWAY DESCRIPTION equals 2, 3, 5, then ROADWAY SURFACE TYPE should not
	equal 4, 5, 7.
A491	If TRAFFICWAY DESCRIPTION equals 2 or 3, then TOTAL LANES IN ROADWAY should not
	equal 7.
A492	If TRAFFICWAY DESCRIPTION equals 2, 3, 5, 6, then SPEED LIMIT must not equal 00.
A493	If TRAFFICWAY DESCRIPTION equals 2, 3, 5, then SPEED LIMIT should be greater than 15.
A494	If TRAFFICWAY DESCRIPTION equals 6, then ROADWAY GRADE should not equal 3, 4.
A495	If TRAFFICWAY DESCRIPTION equals 0, then the first event in SEQUENCE OF EVENTS for
	this vehicle should not equal 63, 64, 69 or 71.
A4A0	If CRASH TYPE equals 01-16, then FIRST HARMFUL EVENT must not equal 12.
A4B0	If CRASH TYPE equals 01-10 or 14, then RELATION TO TRAFFICWAY must not equal 01,
	02, 07 or 11. If the FHE occurs on a different road than the road it departed, see $\frac{98}{28}$
	(Other Crash Type).
A4B2	If CRASH TYPE equals 11, then RELATION TO TRAFFICWAY must not equal 01, 03, 04, 05,
	08, 10 or 11.
A4B3	If CRASH TYPE equals 12 or 13, then RELATION TO TRAFFICWAY must not equal 03, 05,
-	08 or 10.
A4B4	If CRASH TYPE equals 12 or 13, then RELATION TO TRAFFICWAY should not equal 04
	unless the First Harmful Event occurs in a bicycle lane.
A4BP	If FIRST HARMFUL EVENT equals 54 or 55, then CRASH TYPE must equal 98 for the
	vehicles involved in the first harmful event.
A4C0	If RELATION TO JUNCTION (b) equals 04, then at least one PRE-EVENT MOVEMENT
	(PRIOR TO RECOGNITION OF CRITICAL EVENT) for the vehicles involved in the first
	harmful event should equal 10, 11, 13 or 98.
A4D0	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 14, then
	ROADWAY ALIGNMENT must equal 2-4.
A4D1	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 01, then
	ROADWAY ALIGNMENT should not equal 2-4.
A4DP	If CRASH TYPE equals 20-91, then FIRST HARMFUL EVENT must equal 12.
A4EP	If CRASH TYPE equals 11, then FIRST HARMFUL EVENT must equal 14.
A500	If TOTAL LANES IN ROADWAY equals 3-7, then ROADWAY SURFACE TYPE should not
	equal 4, 5, 7.
A510	If any AMOSPHERIC CONDITIONS equals 02-04, 11, 12, then ROADWAY SURFACE
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CONDITIONS should not equal 01, 07, 08, 99 for any vehicle.

Error Code	Error Test
A520	If SEQUENCE OF EVENTS equals 10, then TRAFFIC CONTROL DEVICE should not equal 01-
	09, 20-29, 40-50, 98.
A521	If any SEQUENCE OF EVENTS equals 46, then SPEED LIMIT should equal 05-55, 98 or 99
	for this vehicle.
A540	If NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and ARRIVAL TIME EMS is not
	8888, 9997, 9998, 9999, then ARRIVAL TIME EMS should not be more than 120 minutes
	later than NOTIFICATION TIME EMS.
A550	If ARRIVAL TIME EMS is not 8888, 9997, 9998, or 9999, and EMS TIME AT HOSPITAL is
	not 8888, 9997, 9998, 9999, then EMS TIME AT HOSPITAL should not be more than 60
	minutes later than ARRIVAL TIME EMS.
A551	If EMS TIME AT HOSPITAL equals 8888, 9997, 9998, then TRANSPORTED TO FIRST
	MEDICAL FACILITY BY should not equal 1, 3, 5 for any PERSON.
A560	If NOTIFICATION TIME EMS is not 8888, 9998, or 9999, and EMS TIME AT HOSPITAL is
	not 8888, 9997, 9998, 9999, then EMS TIME AT HOSPITAL should not be more than 180
	minutes later than NOTIFICATION TIME EMS.
A60F	If FIRST HARMFUL EVENT equals 14, then CRASH TYPE should equal 01-11, 14, 15, 92,
	98, 99.
A610	If RELATION TO TRAFFICWAY equals 01, and RELATION TO JUNCTION (b) equals 05, then
	TRAFFICWAY DESCRIPTION should equal 6 for at least one vehicle involved in the first
	harmful event.
A611	If TRAFFICWAY DESCRIPTION equals 6 for at least one vehicle involved in the first
	harmful event, then RELATION TO JUNCTION (b) should equal 02, 03, 05, 17-20.
A61F	If FIRST HARMFUL EVENT equals 08, 09, 11, 15, 49, and RELATION TO TRAFFICWAY
	equals 01, 02, 07, 11, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF
	CRITICAL EVENT) is not equal to 00, 13 for the vehicle involved in the first harmful event,
	then CRASH TYPE should equal 13 for the vehicle involved in the first harmful event.
A61G	If the FIRST HARMFUL EVENT equals 08, and PERSON TYPE equals 05, and NON-
	MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful
	event, then CRASH TYPE should not equal 13 for this vehicle.
A61H	If the FIRST HARMFUL EVENT equals 09, and PERSON TYPE equals 06, 07, and NON-
	MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful
	event, then CRASH TYPE should not equal 13 for this vehicle.
A61J	If the FIRST HARMFUL EVENT equals 15, and PERSON TYPE equals 08, and NON-
	MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful
	event, then CRASH TYPE should not equal 13 for this vehicle.
A61K	If the FIRST HARMFUL EVENT equals 49, and PERSON TYPE equals 04, and NON-
	MOTORIST LOCATION AT THE TIME OF CRASH equals 21, 22, 24, 25, 28, and the VEHICLE
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is involved in the first harmful
	event, then CRASH TYPE should not equal 13 for this vehicle.
A612	If PERSON TYPE equals 04, and <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 10, 49, or 74
	for that vehicle number in the CRASH EVENTS table.

Error Code	Error Test
A613	If PERSON TYPE equals 05, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 08 for that
	vehicle number in the CRASH EVENTS table.
A614	If PERSON TYPE equals 06, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 09 for that
	vehicle number in the CRASH EVENTS table.
A615	If PERSON TYPE equals 07, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 09 for that
	vehicle number in the CRASH EVENTS table.
A616	If PERSON TYPE equals 08, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 15 for that
	vehicle number in the CRASH EVENTS table.
A617	If PERSON TYPE equals 10, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 08 for that
	vehicle number in the CRASH EVENTS table.
A618	If PERSON TYPE equals 19, and VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST equals, then at least one SEQUENCE OF EVENTS must equal 99 for that
	vehicle number in the CRASH EVENTS table.
A619	If the total count of <i>persons with</i> PERSON TYPE equal to 05 <i>that have the same VEHICLE</i>
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST is, then the number of
	events equal to 08 <i>for that vehicle</i> in the CRASH EVENTS table should equal
A61A	If the total count of PERSON TYPES is equal to 08 for the vehicle in <b>VEHICLE</b> NUMBER OF
	MOTOR VEHICLE STRIKING NON-MOTORIST is, then the number of events equal to
	15 in the CRASH EVENTS table should equal for that vehicle.
A61B	If the total count of PERSON TYPES is equal to 10 for the vehicle in <b>VEHICLE</b> NUMBER OF
	MOTOR VEHICLE STRIKING NON-MOTORIST is, then the number of events equal to
	08 in the CRASH EVENTS table should equal for that vehicle.
A620	If CRASH TYPE equals 06-10, and TRAFFICWAY DESCRIPTION equals 3, then RELATION
	TO TRAFFICWAY should equal 03.
A62F	If FIRST HARMFUL EVENT equals 18, 43, 73, <b>91, or 93,</b> and RELATION TO TRAFFICWAY
	equals 01 or 11, then CRASH TYPE should equal 12 or 15 for the vehicle involved in the
	first harmful event.
A63F	If FIRST HARMFUL EVENT equals 01, then CRASH TYPE should equal 01-10, 98, 99 for the
	vehicle involved in the first harmful event.
A65F	If FIRST HARMFUL EVENT equals 14, and RELATED FACTORS - PERSON (MV OCCUPANT)
	LEVEL equals 32 or 89 for an occupant of the parked vehicle involved in the FIRST
	HARMFUL EVENT, then CRASH TYPE should equal 15, 92 or 98 for the in-transport
	vehicle involved in the First Harmful Event.
A66F	If FIRST HARMFUL EVENT equals 14 and CRASH TYPE equals 01-10 or 14, then RELATED
	FACTORS - PERSON (MV OCCUPANT) LEVEL must not equal 32 or 89 for any occupant of
	the parked vehicle involved in the FIRST HARMFUL EVENT.
A700	If SPEED LIMIT is greater than 65 for every vehicle, then ROUTE SIGNING should equal 1-
A720	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 01, 02, then TRAFFICWAY
	DESCRIPTION should equal 2, 3, 6 for at least one vehicle.

Error Code	Error Test
A770	If FIRST HARMFUL EVENT equals 46, then TRAFFIC CONTROL DEVICE should equal 01-04
	for the vehicle involved in the first harmful event.
A780	If FIRST HARMFUL EVENT equals 46, then TRAFFIC CONTROL DEVICE should not equal 00
	for the vehicle involved in the first harmful event.
A790	If FIRST HARMFUL EVENT equals 46, then RELATION TO JUNCTION (b) should not equal
	01, 07.
A800	If FIRST HARMFUL EVENT equals 46, then RELATION TO TRAFFICWAY should not equal
	01, 02, 05, 07, 11.
A801	If FIRST HARMFUL EVENT equals 12, then RELATION TO TRAFFICWAY must not equal 5.
A810	If FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1, and
	RELATION TO JUNCTION (b) does not equal 02, 03, 05, then LAND USE AND
	FUNCTIONAL SYSTEM (b) should not equal 01.
A820	If FIRST HARMFUL EVENT equals 46, and RELATION TO JUNCTION (a) equals 1 and
	RELATION TO JUNCTION (b) does not equal 02, 03, 05, then ROUTE SIGNING should not
A830	equal 1. If FIRST HARMFUL EVENT equals 46, then SPEED LIMIT should be less than 55 for the
A050	vehicle involved in the first harmful event.
A840	If ROUTE SIGNING equals 7, then LAND USE AND FUNCTIONAL SYSTEM (b) should equal
A840	01-03.
A850	If LAND USE AND FUNCTIONAL SYSTEM (b) equals 02, and ROUTE SIGNING equals 2,
LOJU	then NATIONAL HIGHWAY SYSTEM should equal 1.
A860	If NATIONAL HIGHWAY SYSTEM equals 1, then LAND USE AND FUNCTIONAL SYSTEM (b)
	should equal 01-03.
A881	If RELATION TO TRAFFICWAY equals 11, then TRAFFICWAY DESCRIPTION should equal 5
	for at least one vehicle.
A882	If RELATION TO TRAFFICWAY equals 07, then ROUTE SIGNING should not equal 1.
A883	If RELATION TO TRAFFICWAY equals 07, then LAND USE AND FUNCTIONAL SYSTEM (b)
	should not equal 01.
A890	If RELATION TO JUNCTION equals 01, then TRAFFIC CONTROL DEVICE should not equal
	01-03 for any vehicle involved in the first harmful event.
A900	If SPEED LIMIT equals 60, 65 for every vehicle, then LAND USE AND FUNCTIONAL
	SYSTEM (b) should not equal 04-07 or 96.
A910	If LAND USE AND FUNCTION SYSTEM (b) equals 04-07 or 96, then NATIONAL HIGHWAY
	SYSTEM should equal 0, 9.
A920	If NATIONAL HIGHWAY SYSTEM equals 0, 9, then LAND USE AND FUNCTIONAL SYSTEM
	(b) should not equal 02, and ROUTE SIGNING should not equal 2.
A930	If INTERSTATE HIGHWAY equals 1 and RELATION TO JUNCTION (a) equals 1, and
	RELATION TO JUNCTION (b) is not equal to 03 or 05 or 20, then TRAFFIC CONTROL
	DEVICE should not equal 01-03, 20, 23 or 65 for at least one vehicle involved in the first
	harmful event.
A940	If STATE NUMBER equals 11, then maximum SPEED LIMIT (not including 98 or 99) should
A04E	equal 55.
A945	If STATE NUMBER equals 15, then maximum SPEED LIMIT (not including 98 or 99) should
A950	equal 60. If STATE NUMBER equals 02, 09, 10, 25, 34, 36, 41, 43, 44, 50, then maximum SPEED
JJU	LIMIT (not including 98 or 99) should equal 65.
	במאוד (חטל חוכומטווא אס טר אד) אוטטוע פעמו סס.

Error Code	Error Test
A955	If STATE NUMBER equals 01, 05, 06, 12, 13, 17, 18, 19, 21, 24, 26, 27, 28, 29, 33, 37, 39,
	42, 45, 47, 51, 53, 54, 55, then maximum SPEED LIMIT (not including 98 or 99) should
	equal 70.
A960	If STATE NUMBER equals 04, 08, 20, 22, 23, 31, 35, 38, 40, 48, then maximum SPEED
	LIMIT (not including 98 or 99) should equal 75.
A961	If STATE NUMBER equals 16, 30, 32, 46, 49, 56, then maximum SPEED LIMIT (not
	including 98 or 99) should equal 80.
A965	If PSU equals MA, VT, NY, NJ, OR, WI, then maximum SPEED LIMIT (not including 98 or
	99) should equal 65.
A970	If PSU equals AL, CA, FL, GA, IA, IL, KY, MD, MI, MN, NC, OH, PA, SC, TN, VA, WA, then
	maximum SPEED LIMIT (not including 98 or 99) should equal 70.
A975	If PSU equals AZ, CO, LA, ME, OK, TX, UT, then maximum SPEED LIMIT (not including 98
	or 99) should equal 75.
A980	If PSU equals SD, then maximum SPEED LIMIT (not including 98 or 99) should equal 80.
AB1P	If VEHICLE CONFIGURATION equals 01, then CARGO BODY TYPE must NOT equal 22.
AC0A	If RELATION TO JUNCTION (b) equals 02, 03, then the second TRAFFICWAY IDENTIFIER
	should not be all blank.
AC1A	If FIRST HARMFUL EVENT equals 54, then MANNER OF COLLISION should equal 11.
ADOP	If VEHICLE CONFIGURATION equals 04, 06-08, then VEHICLE TRAILING must not equal 0.
AEOP	If VEHICLE CONFIGURATION equals 05 and CARGO BODY TYPE does not equal 12, then
	VEHICLE TRAILING must equal 0.
AE1P	If VEHICLE CONFIGURATION equals 05-08, then BODY TYPE must equal 66.
AF1P	If VEHICLE CONFIGURATION equals 20, <b>21</b> , then CARGO BODY TYPE must equal 22.
AF2P	If VEHICLE CONFIGURATION equals 20, 21, then BODY TYPE must equal <b>12, 16,</b> 20, 21, 50-52, 55, 58, 59.
AHOP	If VEHICLE CONFIGURATION does not equal 00, 99, then BODY TYPE should equal 12, 15,
	16, 21, 28, <b>34</b> , 40, 41, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92, 93, or HM2 must equal 2.
AH1P	If BUS USE equals 08, then BODY TYPE must equal 21, 22, 28, 29, 50-59.
AH2P	If BUS USE equals 06, then BODY TYPE should equal 21 or 52 or 55.
AK00	If CARGO BODY TYPE equals 22, 96, then JACKKNIFE should equal 0.
ALOP	If CARGO BODY TYPE equals 22, then BODY TYPE must equal <b>12, 16,</b> 21, 50-52, 55, 58, 59.
AL1P	If SEQUENCE OF EVENTS equals 51, 62, 70, then VEHICLE TRAILING must not equal 0.
AL2P	If SEQUENCE OF EVENTS equals 45, then WORK ZONE should equal 1-4.
AL3P	If UNIT TYPE equals 2-4, then MOST HARMFUL EVENT must not equal 54 for this vehicle.
AL5P	If UNIT TYPE equals 1, then at least one event in the SEQUENCE OF EVENTS must equal the MOST HARMFUL EVENT.
AL7P	If UNIT TYPE equals 2-4, then MOST HARMFUL EVENT should not equal 04-07, 16, 51, 72.
AL8P	If SEQUENCE OF EVENTS equals 51, 70, then JACKKNIFE must equal 2, 3.
AL9P	If there is one and only one parked vehicle (UNIT TYPE equals 2 or 3) in the crash, then
	MOST HARMFUL EVENT for the parked vehicle must not equal 14.
AMOP	If CARGO BODY TYPE does not equal 00, 99, then BODY TYPE should equal <b>12</b> , 15, 16,
	21, 28, <b>34</b> , 40, 41, 45, 48-52, 55, <b>58-66,</b> 67, 71, 72, 78, 92, 93, or HM2 must equal 2.
AM1P	If FIRST HARMFUL EVENT equals 54, or SEQUENCE OF EVENTS equals 54 for any vehicle, then one RELATED FACTORS-CRASH LEVEL must equal 14.

Error Code	Error Test
AM2P	If any SEQUENCE OF EVENTS equals 25 or 57, then TRAFFICWAY DESCRIPTION should
	equal 3, 6.
AQ0P	If REGISTRATION STATE equals 00, 92, then REGISTERED VEHICLE OWNER must equal 0,
	5, 6.
AROP	If SPECIAL USE equals 04, then REGISTERED VEHICLE OWNER must not equal 0, 1-2, 4.
ASOP	If RELATED FACTORS-VEHICLE LEVEL equals 32, then REGISTERED VEHICLE OWNER must
	not equal 0.
AT00	An ATMOSPHERIC CONDITIONS 01-08, 10-12, 98, 99 can be used only once per crash.
AT10	If first ATMOSPHERIC CONDITIONS equals 99, then second ATMOSPHERIC CONDITIONS
	must equal 00.
AT20	If first ATMOSPHERIC CONDITIONS equals 01-08, 10-12, 99, then second ATMOSPHERIC
	CONDITIONS must not equal 99.
AT30	First ATMOSPHERIC CONDITIONS must not equal 00.
AT40	If the first ATMOSPHERIC CONDITIONS equals 01, then the second ATMOSPHERIC
	CONDITIONS must equal 00.
AT50	The second ATMOSPHERIC CONDITIONS must not equal 01.
AVOP	If REGISTERED VEHICLE OWNER equals 3, 4, then REGISTRATION STATE must not equal
	99.
AZ20	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9, then PRE-EVENT
	MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ2P	If FIRST HARMFUL EVENT does not equal 02-07, 16, 44, 51, 72, and CRITICAL EVENT-
	PRECRASH (EVENT) equals 14, and ATTEMPTED AVOIDANCE MANEUVER equals 01, then
	CRASH TYPE must equal 14 for the vehicle involved in the first harmful event.
AZ30	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then
	ATTEMPTED AVOIDANCE MANEUVER must equal 00.
AZ50	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then
	PRE-IMPACT STABILITY must equal 0.
AZ5P	If CRITICAL EVENT-PRECRASH (EVENT) equals 70-73 for a vehicle involved in the first
	harmful event, then RELATION TO JUNCTION (b) should equal 04 or 08.
AZ60	If PRE-IMPACT STABILITY equals 0, then PRE-EVENT MOVEMENT (PRIOR TO
	RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ6P	If any DRIVER MANEUVERED TO AVOID equals 00, then PRE-EVENT MOVEMENT (PRIOR
	TO RECOGNITION OF CRITICAL EVENT) must not equal 17.
AZ70	If PRE-IMPACT LOCATION equals 0, then PRE-EVENT MOVEMENT (PRIOR TO
	RECOGNITION OF CRITICAL EVENT) must equal 00.
AZ7P	If any DRIVER MANEUVERED TO AVOID equals 00 or 95 or 98 or 99, then only that one
	code and no other must be coded for this vehicle.
AZ80	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 00, then
	PRE-IMPACT LOCATION must equal 0.
AZA0	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) equals 05 or
	07, then TRAVEL SPEED must equal 000 for this vehicle.
AZA2	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not
	equal 10, 11, or 12, then RELATED FACTORS – DRIVER LEVEL should not equal 48.
AZA3	If RELATED FACTORS – DRIVER LEVEL equals 48, then PRE-EVENT MOVEMENT (PRIOR
	TO RECOGNITION OF CRITICAL EVENT) should equal 10, 11, or 12.

Error Code	Error Test
AZBP	If any DRIVER MANEUVERED TO AVOID equals 03, then CRITICAL EVENT – PRECRASH
	(EVENT) should equal 87-89.
AZCP	If any DRIVER MANEUVERED TO AVOID equals 05, then CRITICAL EVENT – PRECRASH
	(EVENT) should equal 80-85.
AZDQ	If DRIVER MANEUVERED TO AVOID equals 04, then NUMBER OF VEHICLE FORMS
	SUBMITTED must be greater than 001.
AZEP	If any DRIVER MANEUVERED TO AVOID equals 01, then CRITICAL EVENT – PRECRASH
	(EVENT) should equal 90-92.

#### **B** Series

Error Code	Error Test
B10P	If PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) does not equal 17, and ATTEMPTED AVOIDANCE MANEUVER equals 01, then DRIVER MANEUVERED TO AVOID should equal 00.
B13P	If CRASH TYPE equals 20-49, and ATTEMPTED AVOIDANCE MANEUVER equals 00-01, then CRITICAL EVENT-PRECRASH (EVENT) should not equal 12-14, 54, 66-68, 71-73 or 80-85.
B15P	If CRITICAL EVENT-PRECRASH (EVENT) equals 91, and ATTEMPTED AVOIDANCE MANEUVER equals 00, 01, and the vehicle is involved in the first harmful event, then CRASH TYPE should equal 15.
B16P	If CRITICAL EVENT-PRECRASH (EVENT) equals 90, and ATTEMPTED AVOIDANCE MANEUVER equals 01, and the vehicle is involved in the first harmful event, then CRASH TYPE should equal 12 or 15.
B17P	If CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 09 for this driver, then CRITICAL EVENT: PRECRASH (EVENT) should not equal 08 for this driver's vehicle.
BAOP	If EJECTION equals 0, 7, 8 or 9, then EJECTION PATH must equal 0.
BBOP	If EJECTION equals 1-3, then EJECTION PATH must equal 1-9.
BFOF	If PERSON TYPE equals 04-08, 10, 19, then EJECTION must equal 8.
BIOP	If DRIVER'S LICENSE STATE equals 99, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 2.
BJOP	If DRIVER PRESENCE equals 0, 9, then COMPLIANCE WITH CDL ENDORSEMENTS must be blank.
BJ1P	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 0 or 9, then DRIVER DISTRACTED BY must equal 16.
BJ2P	If UNIT TYPE equals 1, and DRIVER PRESENCE equals 1, then DRIVER DISTRACTED BY must not equal 16 or blank.
BJ3P	If UNIT TYPE equals 1, and DRIVER DISTRACTED BY equals 16, then DRIVER PRESENCE must equal 0 or 9.
BJ4P	If any DRIVER DISTRACTED BY equals 03, then NUMBER OF OCCUPANTS must be greater than 01.
BJ5P	If UNIT TYPE equals 1 and HIT AND RUN equals 1, then DRIVER PRESENCE should not equal 0.
BJ7P	If any DRIVER DISTRACTED BY equals 00 or 01 or 16 or 17 or 18 or 19 or 92 or 93 or 96 or 99, then only that one code and no other must be used.
ВКОР	IF LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 1, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1-3, 9.

Error Code	Error Test
BLOP	If COMPLIANCE WITH CDL ENDORSEMENTS equals 1, and any RELATED FACTORS-
	DRIVER LEVEL equals 19, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE must
	equal 3.
BNOP	If DRIVER PRESENCE equals 0, 9, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS
	must be blank.
BQ0P	If METHOD OF DRUG DETERMINATION BY POLICE equals 8, then POLICE-REPORTED
	DRUG INVOLVEMENT must equal 0, 1, 8, 9.
BROP	If METHOD OF DRUG DETERMINATION BY POLICE equals 1-7, then POLICE-REPORTED
	DRUG INVOLVEMENT must equal 0, 1, 8.
BT1P	If DRUG TEST STATUS equals <b>0</b> , then all DRUG TEST TYPE must equal 0, and all DRUG
	TEST RESULT must equal 000 for this person.
BT2P	If DRUG TEST STATUS equals 8, then DRUG TEST TYPE 1 must equal 6, and all DRUG TEST
	RESULT 1 must equal 095 and remaining DRUG TEST TYPES and DRUG TEST RESULTS
	must be 0 filled.
BT3P	If DRUG TEST STATUS equals 2, then at least one DRUG TEST TYPE must equal 1-8, and
	one corresponding DRUG TEST RESULT must equal 001, 095, 100-295, 300-395, 400-495,
	500-595, 600-695, 700-795, 800-895, 900-995, 996-998.
BT6P	If DRUG TEST STATUS equals 9, then all DRUG TEST TYPE must equal 9, and DRUG TEST
	TYPE 1 must equal 9, and all DRUG TEST RESULT 1 must equal 999 and remaining DRUG
	TEST TYPES and DRUG TEST RESULTS must be 0 filled.
BT7P	If DRUG TEST STATUS equals 2, and DRUG TEST RESULT one equals 001, 095, 100-295,
	300-395, 400-495, 500-595, 600-695, 700-795, 800-895, 900-995, 996, 997, 998, then
	DRUG TEST RESULT two and three must not equal 999.
BT8P	More than one of the same DRUG TEST RESULT values must not be coded for the same
	person except for 000, 996.
BT9P	If DRUG TEST RESULT 1 equals 000, 001, 997, 998, 095, or 999, then DRUG TEST RESULT
	2 and DRUG TEST RESULT 3 must equal 000.
BYOP	DRIVER'S ZIP CODE must be a valid code, blanks, 00000 or 99999.
BZ10	If CRITICAL EVENT- PRECRASH (EVENT) equals 53, then AREAS OF IMPACT-INITIAL
	CONTACT POINT should not equal 12 for this vehicle.
BZ20	If CRITICAL EVENT-PRECRASH (EVENT) equals 51, 52, then AREAS OF IMPACT-INITIAL
	CONTACT POINT should not equal 06 for this vehicle.
BZ40	If CRITICAL EVENT - PRECRASH (EVENT) equals 01, then at least one SEQUENCE OF
	EVENTS must equal 61 for this vehicle.
BZ50	If CRITICAL EVENT - PRECRASH (EVENT) equals 12, and PRE-IMPACT LOCATION is not
	equal to 5, then at least one SEQUENCE OF EVENTS must equal 64 for this vehicle.
BZ51	If CRITICAL PRECRASH EVENT equals 80 and PRE-IMPACT LOCATION does not equal 4,
	then at least one PERSON TYPE should equal 5.
BZ60	If CRITICAL EVENT - PRECRASH (EVENT) equals 13, and PRE-IMPACT LOCATION is not
	equal to 5, then at least one SEQUENCE OF EVENTS must equal 63 for this vehicle.
BZ70	If CRITICAL EVENT - PRECRASH (EVENT) equals 14, then at least one SEQUENCE OF
	EVENTS must equal 71 for this vehicle.
BZ80	If MANNER OF COLLISION equals 00, then PRECRASH – CRASH TYPE must equal 00, 01-
	16, 92, 98, 99 for the vehicle in the first harmful event.
BZ90	If CRASH TYPE equals 01-05, and PRE-IMPACT LOCATION is not equal to 0 or 5, then at
	least one SEQUENCE OF EVENTS prior to the first harmful event must equal 63.

Error Code	Error Test
BZ91	If CRASH TYPE equals 06-10, and PRE-IMPACT LOCATION is not equal to 0 or 5, then at
	least one SEQUENCE OF EVENTS prior to the first harmful event must equal 64.

## **C** Series

Error Code	Error Test
CBOP	If REGISTERED VEHICLE OWNER equals 6, then DRIVER PRESENCE must equal 0.
ССОР	IF COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, 99, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1.
CGOP	If LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, then COMPLIANCE WITH CDL ENDORSEMENTS must not equal 1, 3.
CIOP	If VEHICLE TRAILING equals 1-4, then JACKKNIFE must not equal 0.
CJ00	If PREVIOUS RECORDED CRASHES equals 98, then DRIVER'S LICENSE STATE should equal 09, 13, 28, 30, 35, 49.
СКОР	If PERSON TYPE equals 07, then RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) must not equal 09, 13, 69, 70, 86-87, 90.
CLOP	If PERSON TYPE equals 09, then RELATED FACTORS-PERSON LEVEL (MV Occupant) must not equal 21, 26, 28, 29, 33, 37, 40-42, 44, 45, 47, 51, 52, 56-70, 72-78, 80-83, 91.
СМОР	If PERSON TYPE equals 19, then RELATED FACTORS-PERSON LEVEL (Not a MV Occupant) must not equal 13, 69, 70, 90.
CSI1	NUMBER OF VEHICLE FORMS must equal the actual number of Vehicle Level forms for this case.
CSI2	There must be exactly one Driver Level form corresponding to each Vehicle Level form.
CSI3	NUMBER OF MOTOR VEHICLE OCCUPANT FORMS SUBMITTED must equal the actual number of Person Level (Motor Vehicle Occupant) forms for this case.
CSI4	NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES must equal the actual number of persons not in motor vehicles in this case.
CSI5	If VEHICLE NUMBER at the Person Level is greater than 000, then VEHICLE NUMBER at the Person Level must equal a VEHICLE NUMBER at the Vehicle Level.
CSI6	For each VEHICLE NUMBER, PERSON NUMBERS must be consecutive, beginning with 001 and with no gaps.
CSI7	PERSON NUMBERS for persons not in motor vehicles must be consecutive, beginning with 001 and with no gaps.

## **D** Series

Error Code	Error Test
D010	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS RECORDED CRASHES should equal 99.
D020	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS should equal 99.
D030	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS DWI CONVICTIONS should equal 99.
D040	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS SPEEDING CONVICTIONS should equal 99.
D050	If DRIVER'S LICENSE STATE equals 96, 97, then PREVIOUS OTHER MOVING VIOLATION CONVICTIONS should equal 99.

Error Code	Error Test
D060	If NON-CDL LICENSE STATUS equals 1-4, 6, or COMMERCIAL MOTOR VEHICLE LICENSE
	STATUS equals 1-8, and PERSON TYPE equals 01, then AGE should not be less than 015.
D170	If DRIVER'S LICENSE STATE does not equal 93-99, Then DRIVER'S ZIP CODE should not
	equal 99999.
D080	If VIOLATION CHARGED equals 01-06, 09, 31-69, 81-91, 98, then RELATED FACTORS-
	DRIVER LEVEL should not all equal 00, 99.
D090	If VIOLATIONS CHARGED equals 11-19, and PERSON TYPE equals 01, 03, then POLICE-
	REPORTED ALCOHOL INVOLVEMENT should equal 1, or POLICE-REPORTED DRUG
	INVOLVEMENT should equal 1.
D100	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS
D440	RECORDED CRASHES should equal 99.
D110	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS
D120	RECORDED SUSPENSIONS AND REVOCATIONS should equal 99. If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS DWI
D120	CONVICTIONS should equal 99.
D130	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS
0130	SPEEDING CONVICTIONS should equal 99.
D140	If NON-CDL LICENSE STATUS equals 9, then all driver history counters PREVIOUS OTHER
5110	MOVING VIOLATION CONVICTIONS should equal 99.
D150	If the sum of all counters less than 98 is greater than five but less than fifteen, then
	DATE OF LAST CRASH, SUSPENSION, CONVICTION should not equal DATE OF FIRST
	CRASH, SUSPENSION, CONVICTION.
D160	If NON-CDL LICENSE STATUS does not equal 9, or COMMER-CIAL MOTOR VEHICLE
	LICENSE STATUS does not equal 99, then DRIVER'S ZIP CODE should not equal 99999.
D180	If DRIVER LICENSE STATE equals 95-97, then DRIVER ZIP CODE should not equal 99999.
D260	If NON-CDL LICENSE STATUS equals 9, or COMMERCIAL MOTOR VEHICLE LICENSE
	STATUS equals 99, then COMPLIANCE WITH LICENSE RESTRICTIONS should not equal 0.
D270	If BODY TYPE equals 50-52, 55, 63, 66, 72, or HM1 equals 2, then COMMERCIAL MOTOR
	VEHICLE LICENSE STATUS should not equal 00.
D280	If VEHICLE CONFIGURATION equals 05-08, 21, or HM1 equals 2, then COMMERCIAL
<b>D</b> 200	MOTOR VEHICLE LICENSE STATUS should not equal 00.
D300	If HM2 equals 2, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal
D310	00 or 99.
D310	If HM2 equals 2, then COMPLIANCE WITH CDL ENDORSE-MENTS should equal 1-3.           If DRIVER'S LICENSE STATE does not equal 93-99, then DRIVER'S ZIP CODE should equal
D320	99999 or be a valid zip code for DRIVER'S LICENSE STATE.
D330	If DRIVER PRESENCE equals 0, and REGISTRATION STATE is not equal to 00, 92, 99, then
5550	REGISTERED VEHICLE OWNER should equal 3-6.
D340	If NON-CDL LICENSE STATUS equals 1-4, 6, 9, or COMMERCIAL MOTOR VEHICLE LICENSE
	STATUS equals 01-08, 99, then LICENSE COMPLIANCE WITH CLASS OF VEHICLE should
	not equal 0.
D350	If VIOLATIONS CHARGED equals 71, then NON-CDL LICENSE STATUS should not equal 0,
	3, 6, 9.
D380	If NON-CDL LICENSE STATUS equals 9, then LICENSE COMPLIANCE WITH CLASS OF
	VEHICLE should equal 1, 9.

Error Code	Error Test
D390	If NON-CDL LICENSE STATUS equals 0, then LICENSE COMPLIANCE WITH CLASS OF
	VEHICLE should not equal 2, 3, 8, 9.
D400	If NON-CDL LICENSE STATUS equals 0-4, then LICENSE COMPLIANCE WITH CLASS OF
	VEHICLE should not equal 3, 8, 9.
D410	IF LICENSE COMPLIANCE WITH CLASS OF VEHICLE equals 0, then COMPLIANCE WITH CDL
	ENDORSEMENTS should not equal 1-3, 9.
D420	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 0, then COMPLIANCE WITH
	CDL ENDORSEMENTS should not equal 1-3.
D430	If COMPLIANCE WITH CDL ENDORSEMENTS equals 1-3, then COMMERCIAL MOTOR
	VEHICLE LICENSE STATUS should not equal 00.
D440	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, then BODY TYPE should
	not equal 50-52, 55, 63, 66, 72, and HM2 should not equal 2.
D450	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 00, then VEHICLE
	CONFIGURATION should not equal 05-08, 21, and HM2 should not equal 2.
D460	If COMMERCIAL MOTOR VEHICLE LICENSE STATUS equals 9, then COMPLIANCE WITH
	CDL ENDORSEMENTS should equal 0, 3, 9.
D470	If any RELATED FACTORS-DRIVER LEVEL equals 37, then at least one RELATED FACTORS-
	CRASH LEVEL should equal 20.
D480	If DRIVER'S LICENSE STATE equals 09, 13, 28, 30, 35, 49, then PREVIOUS RECORDED
	CRASHES should equal 98.
D500	If VIOLATIONS CHARGED equals 05, then at least one RELATED FACTORS-CRASH LEVEL
	should equal 20.
D530	If any VIOLATIONS CHARGED equals 36 for a vehicle involved in the first harmful event,
	then RELATION TO JUNCTION (b) should equal 06.
D560	If VIOLATIONS CHARGED equals 66, then BODY TYPE should equal 80-83, 88, 89.
D570	If any VIOLATIONS CHARGED equal 83, then not all occupants of this vehicle should have
	RESTRAINT SYSTEM/HELMET USE equal 01-05, 08, 10-12, 16, 19.
D580	If VIOLATIONS CHARGED equals 85, then HM1 should equal 2.
D5A0	If VIOLATIONS CHARGED equals 21-25, 29, then SPEEDING RELATED must equal 2-5.
D5B0	If any VIOLATIONS CHARGED equals 11-13, 18, 19, then at least one CONDITION
	(IMPAIRMENT) AT TIME OF CRASH (D23) should equal 09.
D5E0	If any VIOLATIONS CHARGED equals 00 or 97, then only that one code and no other
	must be coded for this driver.
D600	If DRIVER HEIGHT/INCHES is greater than 11, then DRIVER HEIGHT/INCHES should not
	be less than 48.
D610	If DRIVER HEIGHT/FEET is not blank and not equal to 0, then DRIVER HEIGHT/FEET
	should not be less than 3.
D620	If NON-CDL LICENSE TYPE equals 7, then AGE (for the driver) should equal 014-016.
D630	If NON-CDL LICENSE TYPE equals 2, then AGE (for the driver) should equal 015-017.
D640	If AGE equals 014-017, and PERSON TYPE equals 01, then NON-CDL LICENSE TYPE should
	equal 2, 7.
D650	If AGE equals 018-120, and PERSON TYPE equals 01, then NON-CDL LICENSE TYPE should
	equal 1.
D680	If NON-CDL LICENSE TYPE does not equal 0, 9, then NON-CDL LICENSE STATUS should
	not equal 0, 9.

Error Code	Error Test
D690	If NON-CDL LICENSE TYPE equals 2, 7, and COMPLIANCE WITH LICENSE RESTRICTIONS
	equals 2, then RELATED FACTORS-DRIVER LEVEL should equal 73, 74.
D700	If NON-CDL LICENSE TYPE equals 1, and COMPLIANCE WITH LICENSE RESTRICTIONS
	equals 2, then RELATED FACTORS-DRIVER LEVEL should equal 74.
D710	If DRIVER'S LICENSE STATE equals 02, 04, 09, 15, 20, 30, 38, 40, then NON-CDL LICENSE
	TYPE should not equal 2.
D730	If RELATED FACTORS-DRIVER LEVEL equals 73, then COMPLIANCE WITH LICENSE
	RESTRICTIONS should equal 2, and NON-CDL LICENSE TYPE should equal 2, 7.

### E Series

Error Code	Error Test
E01P	If NOTIFICATION TIME EMS equals 9998, then ARRIVAL TIME EMS must equal 9998, and
	EMS TIME AT HOSPITAL must equal 8888 or 9998.
E02P	If ARRIVAL TIME EMS equals 9998, then EMS TIME AT HOSPITAL must equal 8888 or
	9998.
E03P	If ARRIVAL TIME EMS equals 8888, then NOTIFICATION TIME EMS and EMS TIME AT
	HOSPITAL must equal 8888.
E04P	If NOTIFICATION TIME EMS equals 8888, then ARRIVAL TIME EMS and EMS TIME AT
	HOSPITAL must equal 8888.
E05P	If EMS TIME AT HOSPITAL equals 9997, then ARRIVAL TIME EMS must equal 9997.
E06P	If ARRIVAL TIME EMS equals 9997, then EMS TIME AT HOSPITAL must equal 9997.
E07P	If ARRIVAL TIME EMS equals 9997, then NOTIFICATION TIME EMS must not equal 8888,
	9998.
E08P	If NOTIFICATION TIME EMS is not 8888, 9998, and EMS TIME AT HOSPITAL is not 8888,
	9996, 9997, 9998, then ARRIVAL TIME EMS must not equal 9997 or 9998.

### **F** Series

Error Code	Error Test
FAOF	If FIRST HARMFUL EVENT equals blank, case status is flawed.
FA1F	CRASH TYPE for all in-transport vehicles not involved in the first harmful event must equal 98.
FD0F	If DRIVER PRESENCE is blank, case status is flawed.
FPOF	If PERSON TYPE is blank, case status is flawed.
FP1F	If AREAS OF IMPACT - INITIAL CONTACT POINT equals blank, case status is flawed.
FP2F	If UNIT TYPE equals 1, and CRASH TYPE equals blank, case status is flawed.
FP3F	If UNIT TYPE is blank, case status is flawed.
FP4F	If CRASH DATE is blank, case status is flawed.
FP5F	If CRASH TIME is blank, case status is flawed.
FP6F	If UNIT TYPE equals 1, and CRITICAL EVENT – PRECRASH (CATEGORY) equals blank, case status is flawed.
FP7F	If UNIT TYPE equals 1, and CRITICAL EVENT – PRECRASH (EVENT) equals blank, case status is flawed.
FP8F	If INJURY SEVERITY is blank, case status is flawed.
FP9F	If PERSON TYPE equals 05, 06, 07, 08 and the PEDESTRIAN/ BIKE - CRASH TYPE equals blank, case status is flawed.

## G Series

Error Code	Error Test
G01P	If STATE is and GLOBAL POSITION - LATITUDE (degrees) is not equal to 77, 88, 99,
	then LATITUDE (degrees) must be equal to, or greater than ( <u>1d</u> ) and LATITUDE
	(degrees) must not be greater than ( <u>2d</u> ).
G02P	If STATE is and GLOBAL POSITION - LATITUDE (degrees) equals ( <u>1d</u> ), then
	LATITUDE (minutes) must be equal to, or greater than ( <u>1s</u> ).
G03P	If STATE is and GLOBAL POSITION - LATITUDE (degrees) equals ( <u>2d</u> ), then
	LATITUDE (minutes) must not be greater than ( <u>2s</u> ).
G04P	If STATE is and GLOBAL POSITION - LONGITUDE (degrees) is not equal to 777, 888,
	999, then LONGITUDE (degrees) must be equal to, or greater than, ( <u>3d</u> ) and
	LONGITUDE (degrees) must not be greater than ( <u>4d</u> ).
G05P	If STATE is and GLOBAL POSITION - LONGITUDE (degrees) equals ( <u>3d</u> ), then
	LONGITUDE (minutes) must be equal to, or greater than ( <u>3s</u> ).
G06P	If STATE is and GLOBAL POSITION - LONGITUDE (degrees) equals ( <u>4d</u> ), then
	LONGITUDE (minutes) must not be greater than ( <u>4s</u> ).
G07P	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes or seconds) is all 8s, then
	all parts of LATITUDE must be all 8s.
G08P	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes or seconds) is all 8s,
	then all parts of LONGITUDE must be all 8s.
G09P	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes or seconds) is all 9s, then
	all parts of LATITUDE must be all 9s.
G10P	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes or seconds) is all 9s,
	then all parts of LONGITUDE must be all 9s.
G11P	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes or seconds) is blank, then
	all parts of LATITUDE must be blank.
G12P	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes or seconds) is blank,
	then all parts of LONGITUDE must be blank.
GOAP	If any part of GLOBAL POSITION - LONGITUDE (degrees, minutes or seconds) is all 7s,
	then all parts of LONGITUDE must be all 7s.
GOBP	If any part of GLOBAL POSITION - LATITUDE (degrees, minutes or seconds) is all 7s, then
	all parts of LATITUDE must be all 7s.

## P Series

Error Code	Error Test
P010	If PERSON TYPE equals 01, then AGE should not be less than 012.
P01F	If PERSON TYPE equals 01-03, 09, and RESTRAINT SYSTEM/ HELMET USE equals 01-04, 08, 10-12, and BODY TYPE does not equal 80-89, then EJECTION should equal 0 or 7.
P020	If PERSON TYPE equals 02, 03, 09, and RESTRAINT SYSTEM/HELMET USE equals 04, 10- 12, then AGE should be less than 010, or equal to 998 or 999.
P030	If PERSON TYPE equals 01, then SEATING POSITION should not equal 12-19.
P040	If PERSON TYPE equals 02, 09, then SEATING POSITION should not equal 11.
P050	If EJECTION equals 1, then RESTRAINT SYSTEM/HELMET USE should not equal 01-04, 08, 10-12.
P060	If SEATING POSITION equals 18, 28, 38, 48, 50-55, then RESTRAINT SYSTEM/HELMET USE should not equal 01, 03.

Error Code	Error Test
P071	If PERSON TYPE equals 02, 04-08, 10, and INJURY SEVERITY does not equal 4, then
	ALCOHOL TEST STATUS should not equal 9, and ALCOHOL TEST TYPE should not equal
	99, and ALCOHOL TEST RESULT should not equal 999.
P072	If PERSON TYPE equals 02, 03, and INJURY SEVERITY equals 0, and ALCOHOL TEST
	RESULT equals 996, then POLICE-REPORTED ALCOHOL INVOLVEMENT should equal 0, 8.
P073	If PERSON TYPE equals 02, 04-08, 10, and INJURY SEVERITY does not equal 4, then DRUG
	TEST STATUS should not equal 9, and any DRUG TEST TYPE should not equal 9, and any
	DRUG TEST RESULTS should not equal 999.
P074	If PERSON TYPE equals 02, 04-08, 10, and INJURY SEVERITY does not equal 4, then
	ALCOHOL TEST STATUS must not equal 8, ALCOHOL TEST TYPE must not equal 95, and
	ALCOHOL TEST RESULT must not equal 995.
P075	If PERSON TYPE equals 02, 04-08, 10 or 19, and INJURY SEVERITY does not equal 4, then
	DRUG TEST STATUS must not equal 8, any DRUG TEST TYPE must not equal 6, and any
	DRUG TEST RESULTS must not equal 095.
P080	ALCOHOL TEST RESULTS should not equal 340-940.
P090	If INJURY SEVERITY equals 0, then TRANSPORTED TO FIRST MEDICAL FACILITY BY must
	equal 0.
P091	If TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 1, 3, 5, then EMS TIME AT
	HOSPITAL should not equal 8888, 9997, 9998.
P093	If all persons TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 2, 4, then
	NOTIFICATION TIME EMS, ARRIVAL TIME EMS, EMS TIME AT HOSPITAL must equal 8888.
P094	If EJECTION equals 8, then SEATING POSITION must equal 55, or BODY TYPE must equal
	80- <b>85, 87-89.</b>
P095	If TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 0 for every person in the case,
	then EMS TIME AT HOSPITAL must not equal 0000-2399, 9999.
P110	If METHOD OF ALCOHOL DETERMINATION BY POLICE equals 1-5, 8, then POLICE-
	REPORTED ALCOHOL INVOLVEMENT should equal 0, 1.
P130	If BODY TYPE equals 60-67, 71, 72, 78, 79, and PERSON TYPE equals 01, 03, and INJURY
	SEVERITY equals 4, then FATAL INJURY AT WORK should equal 1.
P140	If POLICE-REPORTED DRUG INVOLVEMENT equals 8, 9, then METHOD OF DRUG
	DETERMINATION BY POLICE should equal 8.
P150	If POLICE-REPORTED DRUG INVOLVEMENT equals 1, then DRUG TEST STATUS should
	not equal 0.
P160	If POLICE-REPORTED DRUG INVOLVEMENT equals 1, and METHOD OF DRUG
	DETERMINATION BY POLICE equals 2, then not all DRUG TEST RESULTS should equal
<b>D</b> 470	
P170	If METHOD OF DRUG DETERMINATION BY POLICE equals 1-7, then POLICE-REPORTED
<b>B</b> 440	DRUG INVOLVEMENT should equal 0, 1.
P1A0	If AGE is less than 012, and INJURY SEVERITY equals 4, then FATAL INJURY AT WORK
<b>D</b> 200	should equal 0.
P200	If POLICE-REPORTED ALCOHOL INVOLVEMENT equals 8, 9, then METHOD OF ALCOHOL
<b>D</b> 2C0	DETERMINATION BY POLICE should equal 9.
P260	If SEATING POSITION equals 18, 19, or 99, then AIR BAG DEPLOYED should equal <b>20, 98</b> ,
	99.

Error Code	Error Test
P290	If AIR BAG DEPLOYED equals 01-03, 07-09, and BODY TYPE equals 01-49, and MODEL
	YEAR equals 1998 or newer, then SEATING POSITION should equal 11, 13, 21, 23, 31 or
	33.
P300	If POLICE-REPORTED ALCOHOL INVOLVEMENT equals 1, and INJURY SEVERITY equals 4,
	then ALCOHOL TEST STATUS should not equal <b>0</b> .
P310	If EJECTION equals 1-3, and BODY TYPE does not equal 90, 91, 96, 97, then RESTRAINT
	SYSTEM/HELMET USE must not equal 05, 16, 17, 19, 29.
P320	If SEATING POSITION equals 22, 23, 31-53, then RESTRAINT SYSTEM/HELMET USE must
	not equal 05, 16, 17, 19, 29.
P340	If SEATING POSITION equals 50, 52-55, then RESTRAINT SYSTEM/HELMET USE should
	equal <b>20</b> .
P50P	If DIED AT SCENE/EN ROUTE equals 7, then TRANSPORTED TO FIRST MEDICAL FACILITY
	BY must equal 0.
P510	If EMS TIME AT HOSPITAL equals 8888, 9997, 9998, then DIED AT SCENE/EN ROUTE
	should not equal 8 for any PERSON.
P51P	If DIED AT SCENE/EN ROUTE equals 8, then TRANSPORTED TO FIRST MEDICAL FACILITY
	BY must equal 1-6.
P520	If CRASH DATE and DEATH DATE are the same, and CRASH TIME and DEATH TIME are
	the same, then TRANSPORTED TO FIRST MEDICAL FACILITY BY should equal 0, and DIED
	AT SCENE/EN ROUTE should equal 7.
P52P	If DIED AT SCENE/EN ROUTE equals 9, then TRANSPORTED TO FIRST MEDICAL FACILITY
	BY must equal 8 or 9.
P530	If EMS TIME AT HOSPITAL equals 9996, then DIED AT SCENE/EN ROUTE must equal 8 for
	at least one person.
P53P	If INJURY SEVERITY equals 0-3, 5, 6, then DIED AT SCENE/EN ROUTE must equal 0.
P54P	If DIED AT SCENE/EN ROUTE equals 8, then EMS TIME AT HOSPITAL should not equal 8888, 9997, 9998.
P55P	If TRANSPORTED TO FIRST MEDICAL FACILITY BY equals 9, then DIED AT SCENE/EN
	ROUTE must equal 0, 9.
P56P	If DIED AT SCENE/EN ROUTE equals 7, then DEATH TIME should be within 30 minutes of
	the CRASH TIME.
PB00	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 110-910, then at least
	one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.
PB02	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 111-980, then at least one
	SEQUENCE OF EVENTS for the striking vehicle must equal 09.
PB04	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the
	first harmful event equals 211, 212, 461, 465, 680, 830, 890, 900 or 910, then RELATION
	TO JUNCTION (b) must not equal 02. Note: this edit is restricted to vehicles which are
	involved in only one event with pedestrian(s).
PB05	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the
	first harmful event equals 311, 312 or 313, then RELATION TO TRAFFICWAY must equal
	01 or 11. Note: this edit is restricted to vehicles which are involved in only one event
	with pedestrian(s).
PB06	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 730, then TRAFFIC
	CONTROL DEVICE for the striking vehicle must equal 01-03.

Error Code	Error Test
PB07	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE for a person involved in the first
	harmful event equals 311, 312, 313, 321, 322 or 323, then RELATION TO JUNCTION (b)
	must equal 04 or 08. Note: this edit is restricted to vehicles which are involved in only
	one event with bicyclist(s).
PB08	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST for a person involved in the first
	harmful event equals 141-144, 147, 151-157 or 159, then RELATION TO JUNCTION (b)
	must equal 02 or 03. Note: this edit is restricted to vehicles which are involved in only
	one event with bicyclist(s).
PB09	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 141, 143, 151-158, 217 or
	218, then TRAFFIC CONTROL DEVICE for the striking vehicle must not equal 00.
PB10	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 151, 156, 157, 217 or 218,
	then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04.
PB11	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 143 or 154, then TRAFFIC
	CONTROL DEVICE for the striking vehicle must equal 01-04, 08, 20, 21, 28 or 29.
PB12	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the
	first harmful event equals 510, 520 or 590, then RELATION TO TRAFFICWAY must not
	equal 01 or 11. Note: this edit is restricted to vehicles which are involved in only one
	event with pedestrian(s).
PB15	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 910, then at least one
	NON-MOTORIST ACTION/CIRCUMSTANCES must equal 03.
PB16	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 142, 144, 147, 153, 155,
	156, 157, 159, 311, 312, 313, 318, 319 or 357, then at least one NON-MOTORIST
	CONTRIBUTING CIRCUMSTANCES must equal 02.
PB17	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN for a person involved in the
	first harmful event equals 211-214 or 219, then PRE-EVENT MOVEMENT (PRIOR TO
	RECOG-NITION OF CRITICAL EVENT) must equal 08, 09, 13, or 98. Note: this edit is
<b>DD</b> 40	restricted to vehicles which are involved in only one event with pedestrian(s).
PB18	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742, then at least one
<b>DD</b> 40	NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 01.
PB19	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 08, then PEDESTRIAN/BIKE TYPING
	- CRASH TYPE - PEDESTRIAN must not equal 510, 520, 590, 830 or 890.
PB20	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 510, 520 or 590, then at
0024	least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 02.
PB21	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 160, then TRAFFIC
0000	CONTROL DEVICE for the striking vehicle should equal 00.
PB22	If SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05 or 08, then
0000	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 342.
PB23	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 342, and PERSON TYPE
0024	equals 05 or 08, then SCHOOL BUS RELATED should equal 1.
PB24	If PERSON TYPE equals 05 or 08, and NON-MOTORIST LOCATION AT TIME OF CRASH
	equals 14, 16, 20, 21, 22, 24 or 25, then PEDESTRIAN/BIKE TYPING - CRASH TYPE -
0025	PEDESTRIAN should equal 230, 320, 410, 420, 430, 440, 459, 510, 520, 590, 830 or 890.
PB25	If PERSON TYPE equals 05 or 08, and NON-MOTORIST LOCATION AT TIME OF CRASH
	equals 01-03 or 09, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should
	equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795 or 799.

Error Code	Error Test
PB26	If NON-MOTORIST CONTRIBUTING CIRCUMSTANCES equals 02, and PERSON TYPE
	equals 06 or 07, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal
	142, 144, 147, 153, 155, 156, 157, 159, 311, 312, 313, 318, 319 or 357.
PB27	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 05, and PERSON TYPE equals 05 or
	08, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410 or 420.
PB28	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 06, and PERSON TYPE equals 05 or
	08, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 430 or 440.
PB29	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 04, and PERSON TYPE equals 05 or
	08, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 410, 420,
	430, 440 or 459.
PB30	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220, then at least one
	DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's
	VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB31	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 147, 157 or 357, then at
	least one DRIVER'S VISION OBSCURED BY must equal 06 for the vehicle number
	identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST.
PB32	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742, then at least one
	DRIVER'S VISION OBSCURED BY must not equal 00 or 95 for the vehicle number
	identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST.
PB33	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 156, then DRIVER'S VISION
	OBSCURED BY for the striking vehicle must not equal 06.
PB34	If NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01,
	and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02, then
	PEDESTRIAN/ BIKE TYPING - CRASH TYPE - PEDESTRIAN must not equal 320, 330, 360,
	680, 830, 890, 900, or 910.
PB35	If NUMBER OF FORMS SUBMITTED FOR PERSONS NOT IN MOTOR VEHICLES equals 01,
	and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02, then
	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN must equal 1.
PB36	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 250, then PERSON TYPE
	must equal 08.
PB37	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 311, 312 or 313, then at
	least one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 08 or 10.
PB38	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 410 or 420, then at least
	one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 05.
PB39	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 430 or 440, then at least
	one NON-MOTORIST ACTION/CIRCUMSTANCES must equal 06.
PB40	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE equals 610, then at least one PRE-
	EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, or
	13 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR
	VEHICLE STRIKING NON-MOTORIST.
PB41	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 215, then PRE-EVENT
	MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08 or 09 for the
	vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE
	STRIKING NON-MOTORIST.

Error Code	Error Test
PB42	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 111, 211 or 212, then PRE-
	EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11, 16, or
	17 for the vehicle number identified in this person's VEHICLE NUMBER OF MOTOR
	VEHICLE STRIKING NON-MOTORIST.
PB43	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 112, 151, 213, 214, 217 or
	218, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must
	equal 10, 16, or 17 for the vehicle number identified in this person's VEHICLE NUMBER
	OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB44	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 240, then EMERGENCY
	MOTOR VEHICLE USE should equal 2-6 for at least one vehicle.
PB45	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 781 or 782, then PRE-
	EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 17
	for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE
	STRIKING NON-MOTORIST.
PB46	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST equals 221-225, then PRE-EVENT
	MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the
	vehicle number identified in this person's VEHICLE NUMBER OF MOTOR VEHICLE
	STRIKING NON-MOTORIST.
PB49	If PERSON TYPE equals 05 or 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION
	OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b>
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one
	PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 211-214 or 219.
PB50	If PERSON TYPE equals 05 or 08, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION
	OF CRITICAL EVENT) equals 10-12 or 16 for the vehicle number identified in this
	person's <b>VEHICLE</b> NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least
	one PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 461, 465, 469,
2222	510, 781, 782, 791, 792, 794, 795 or 799.
PB52	If PERSON TYPE equals 06 or 07, and PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION
	OF CRITICAL EVENT) equals 13 for the vehicle number identified in this person's <b>VEHICLE</b>
	NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLIST should equal 610.
PB56	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 791, 792, 794, 795, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or
	17 for the vehicle number identified in this person's <b>VEHICLE</b> NUMBER OF MOTOR
	VEHICLE STRIKING NON-MOTORIST.
PB58	NON-MOTORIST ACTION/CIRCUMSTANCES must not equal 05, 06, or 16 in combination.
PB59	If NON-MOTORIST ACTION/CIRCUMSTANCES equals 16, and PERSON TYPE equals 05 or 08, then PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN should equal 459.
PB60	If PERSON TYPE equals 05 or 08, and DRIVER PRESENCE equals 0 for the motor vehicle
PDUU	which strikes the non-motorist, then PEDESTRIAN/BIKE TYPING - CRASH TYPE -
	PEDESTRIAN should equal 220.
PB61	
LDOT	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 220, then DRIVER
DR62	PRESENCE should equal 0 for the motor vehicle striking the non-motorist.           If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230, then at least one
PB62	NON-MOTORIST ACTION/CIRCUMSTANCES must equal 12.

Error Code	Error Test
PB63	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 230, then at least one
	RELATED FACTOR - CRASH LEVEL should equal 19 or 23.
PB64	If any NON-MOTORIST ACTION/CIRCUMSTANCES equals 03 or 09, then the NON-
	MOTORIST ACTION/CIRCUMSTANCES must not also equal 05, 06 or 16 for this person.
PB66	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, or 22.
PB67	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-25, 28, 98,
	99.
PB68	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20-24, 28, 98,
	99.
PB69	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.
PB70	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98 or 99.
PB71	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1, then NON-
0070	MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, 16 or 22.
PB72	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 2, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23,
0072	24, 25, 28, 98, 99.
PB73	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3, then NON- MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23,
	• • • • • • • • • • • • • • • • • • • •
PB74	24, 28, 98, 99. If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4, then NON-
FD74	MOTORIST LOCATION AT TIME OF CRASH LOCATION - BICTCLE Equals 4, then NON-
PB75	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 9, then NON-
1075	MOTORIST LOCATION AT TIME OF CRASH bock now - Bicrock equals 9, then Now - MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98 or 99.
PB76	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 01, then NON-MOTORIST
10/0	LOCATION AT TIME OF CRASH must equal 03.
PB77	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 02, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 01, 02 or 10.
PB78	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 03, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 11, 13.
PB79	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 04, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 14, 16, 20, 98 or 99.
PB80	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 05, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 21, 23, 24, 98 or 99.
PB81	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 06, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98 or 99.
PB82	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 07 or 08, then NON-
	MOTORIST LOCATION AT TIME OF CRASH must equal 25.
PB83	If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 09, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 09, 20, 22, 28, 98 or 99.
PB84	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 1, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 03, 09, 11 or 13.

Error Code	Error Test
PB85	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 2, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 14, 16 or 20.
PB86	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 3, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 01, 02, 10, 21, 23, 98 or 99.
PB87	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 4, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 24.
PB88	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 5 or 6, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 25.
PB89	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 8, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98 or 99.
PB90	If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 9, then NON-MOTORIST
	LOCATION AT TIME OF CRASH must equal 22, 98 or 99.
PB91	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1, then
	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 01, 02 or 09.
PB92	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2, then
	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 03, 04, 05, 06, 07, 08 or
	09.
PB93	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3, then
	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 02, 03, 04, 05, 06, or 09.
PB94	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4, then
	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 07, 08 or 09.
PB95	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9, then
	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 02, 05 or 09.
PB96	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1, then PEDESTRIAN/
	BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 8 or 9.
PB97	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3, then PEDESTRIAN/
	BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 4, 8 or 9.
PB98	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4, then PEDESTRIAN/
	BIKE TYPING - BICYCLIST POSITION must equal 4, 5, 6 or 9.
PB99	If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION-BICYCLE equals 9, then PEDESTRIAN/
	BIKE TYPING - BICYCLIST POSITION must equal 9.
PBA0	If PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE
	NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR VEHICLE STRIKING NON-
	MOTORIST, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT)
	should equal 11.
PBA1	If PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217 or
	218, and VEHICLE NUMBER - VEHICLE LEVEL equals VEHICLE NUMBER OF MOTOR
	VEHICLE STRIKING NON-MOTORIST, then PRE-EVENT MOVEMENT (PRIOR TO
	RECOGNITION OF CRITICAL EVENT) should equal 10.
PBA2	If PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 3a, 3b, 3c, 3d, 5a, 5b, 5c, 5d, 7a, 7b, 7c,
	7d, 9a, 9b, 9c, 9d, or 11a, 11b, 11c, 11d, then PEDESTRIAN POSITION must equal 2.
PBA3	If CRASH LOCATION equals 1 (At Intersection) and PEDESTRIAN SCENARIO equals 2a,
	2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or 12a, 12b,
	12c, 12d, then PEDESTRIAN POSITION must equal 1, 9.

Error Code	Error Test
PBA4	If CRASH LOCATION equals 2 (Intersection-Related) and PEDESTRIAN SCENARIO equals
	2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 6a, 6b, 6c, 6d, 8a, 8b, 8c, 8d, 10a, 10b, 10c, 10d, or 12a,
	12b, 12c, 12d, then PEDESTRIAN POSITION must equal 3-9.
PBA5	If PEDESTRIAN SCENARIO equals 1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c,
	4d, then PRE-EVENT MOVEMENT should equal 01, 02, 03, 04, 06, 08, 09, 12, 13, 14, 15,
	16, or 17 for the vehicle number that struck this non-motorist.
PBA6	If PEDESTRIAN SCENARIO equals 5a, 5b, 5c, 5d, 6a, 6b, 6c, 6d, 7a, 7b, 7c, 7d, 8a, 8b, 8c,
	8d, then PRE-EVENT MOVEMENT should equal 10 for the vehicle number that struck
	this non-motorist.
PBA7	If PEDESTRIAN SCENARIO equals 9a, 9b, 9c, 9d, 10a, 10b, 10c, 10d, 11a, 11b, 11c, 11d,
	12a, 12b, 12c, 12d, then PRE-EVENT MOVEMENT should equal 11 for the vehicle
	number that struck this non-motorist.
PBA9	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741, then NON-
	MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 01.
PBB1	If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 742, then NON-
	MOTORIST CONTRIBUTING CIRCUMSTANCES must not equal 11.
PC30	If PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 4, 5,
	and RELATION TO JUNCTION (b) does not equal 04, 05, then RELATION TO TRAFFICWAY
	should not equal 01 or 11.
PC40	If PRE-IMPACT LOCATION for a vehicle involved in the first harmful event equals 1-3, 6,
	then RELATION TO TRAFFICWAY should equal 01 or 11.
PC50	If PRE-IMPACT LOCATION equals 2, then TOTAL LANES IN ROADWAY should not equal 1.

### **U** Series

Error Codes	Error Test
U010	UNLIKELY: SPECIAL JURISDICTION is equal to 4 or 5.
U020	UNLIKELY: FIRST HARMFUL EVENT equals 02, 04, 06, 51, 72.
U030	UNLIKELY: FIRST HARMFUL EVENT equals 12, 55, and MANNER OF COLLISION equals 10, 11.
U040	UNLIKELY: REGISTRATION STATE equals 97.
U050	UNLIKELY: SPECIAL USE equals 04, 08.
U070	UNLIKELY: More than one vehicle with HIT-AND-RUN equal to 1.
U080	If BODY TYPE does not equal 21, 28, 29, 50-59, then UNLIKELY: SPECIAL USE equals 02 or 03.
U120	UNLIKELY: AGE should not be greater than 094, unless equal to 998, 999.
U130	UNLIKELY: SEATING POSITION equals 41-43, 48.
U150	UNLIKELY: NON-MOTORIST LOCATION AT TIME OF CRASH equals 16, 25.
U160	UNLIKELY: INJURY SEVERITY equals 6.
U170	UNLIKELY: RESTRAINT SYSTEM/HELMET USE equals 01.
U210	UNLIKELY: PREVIOUS RECORDED CRASHES is greater than 8 and less than 98.
U220	UNLIKELY: PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS is greater than 10 and less than 98.
U230	UNLIKELY: PREVIOUS DWI CONVICTIONS is greater than 8 and less than 98.
U240	UNLIKELY: PREVIOUS SPEEDING CONVICTIONS is greater than 8 and less than 98.
U250	UNLIKELY: PREVIOUS OTHER MOVING VIOLATION CONVICTIONS is greater than 8 and less than 98.

Error Codes	Error Test
U260	UNLIKELY: DRIVER HEIGHT is less than 3 feet or greater than 7 feet, verify data.
U280	UNLIKELY: DRIVER HEIGHT is less than 36 inches or greater than 84 inches, verify data.
U290	UNLIKELY: DRIVER WEIGHT is less than 50 lbs. or greater than 399 lbs., verify data.
U340	UNLIKELY: HIT-AND-RUN equals 0 or 9, and SEX equals 9.
U350	UNLIKELY: INJURY SEVERITY equals 1-6, and SEATING POSITION equals 98.
U360	UNLIKELY: AGE equals 999 and HIT AND RUN is not equal to 1.
U370	UNLIKELY: EXTENT OF DAMAGE equals 8 if STATE NUMBER does not equal 17, 34, 48, 49, 53.
U390	UNLIKELY: LIGHT CONDITION equals 8.
U410	UNLIKELY: DRIVER'S LICENSE STATE equals 98 <i>if HIT AND RUN does not equal 1</i> .
U420	UNLIKELY: SPECIAL USE equals 98.
U430	UNLIKELY: VEHICLE REMOVAL equals 8.
U440	UNLIKELY: VIOLATIONS CHARGED equals 97.
U450	UNLIKELY: REGISTRATON STATE equals 91 <i>if HIT AND RUN does not equal 1</i> .
U460	UNLIKELY: VEHICLE MODEL equals 997 <i>if HIT AND RUN does not equal 1</i> .
U470	UNLIKELY: BODY TYPE equals 98 <i>if HIT AND RUN does not equal 1</i> .
U480	UNLIKELY: VEHICLE MAKE equals 97 <i>if HIT AND RUN does not equal 1</i> .
U490	UNLIKELY: GVWR/GCWR equals 8 or 9 and VEHICLE MODEL YEAR is greater than 1980
	and not equal to 9998 or 9999 and VIN is not equal to 00000000000000000,
	88888888888888888, or 999999999999999999 and VIN passes the check digit check (i.e.,
	VIN is a Valid VIN).
U510	UNLIKELY: VEHICLE MODEL YEAR equals 9998 <i>if HIT AND RUN does not equal 1</i> .
U520	UNLIKELY: RESTRAINT SYSTEM/HELMET USE equals 98 <i>if HIT AND RUN does not equal</i>
	1.
U530	UNLIKELY: any CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) equals 03, 05 or 07.
U590	UNLIKELY: CONDITION (IMPAIRMENT) AT TIME OF CRASH (NM14) equals 05 or 07.
U640	UNLIKELY: FIRST HARMFUL EVENT equals 99.
U651	UNLIKELY: SEQUENCE OF EVENTS equals 62, 60 consecutively.
U652	UNLIKELY: SEQUENCE OF EVENTS equals 01, 58 or 58, 01 consecutively.
U653	UNLIKELY: SEQUENCE OF EVENTS equals 65, 69 consecutively.
U680	UNLIKELY: MOTOR CARRIER IDENTIFICATION NUMBER (Identification Number) equals 99999997.
U681	UNLIKELY: METHOD OF ALCOHOL DETERMINATION BY POLICE equals 8.
U682	UNLIKELY: CRITICAL EVENT: PRECRASH (EVENT) equals 08 for this vehicle and
	CONDITION (IMPAIRMENT) AT TIME OF CRASH (D23) does not equal 01 for this vehicle's
	driver.
U683	UNLIKELY: OWNERSHIP equals 98 or 99.
U684	UNLIKELY: LAND USE (a) equals 8.
U685	UNLIKELY: FUNCTIONAL SYSTEM (b) equals 98.
U686	UNLIKELY: LAND USE and FUNCTIONAL SYSTEM (a/b) equals 9, 99.
U687	UNLIKELY: TRAILER VEHICLE IDENTIFICATION NUMBER equal 0s for any of the three sets.
U688	UNLIKELY: VEHICLE MODEL equals 707 and VEHICLE MAKE does not equal 77, 98, or 99.
U689	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 001-009.
U690	UNLIKELY: UNIT TYPE equals 2-4 and HIT and RUN equals 1.

Error Codes	Error Test
U691	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 010-019.
U692	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 020-029.
U693	UNLIKELY: ALCOHOL TEST Subfield 3-Test Result equals 030-039.

## V Series

Error Codes	Error Test
V010	MODEL YEAR should not be less than 1940.
V011	If VEHICLE MODEL YEAR is less than 1950, then VEHICLE IDENTIFICATION NUMBER must
	equal 0s.
V020	If VEHICLE TRAILING equals 1, then BODY TYPE should not equal 50-52, 55, 80-83, 88-91.
V031	If RELATED FACTORS-VEHICLE LEVEL equals 39, then BODY TYPE should not equal 01, 12,
	13, 32, 33, 42, 50-52, 55, 58, 59, 65, 73, 80-83, 88-92.
V032	If RELATED FACTORS-VEHICLE LEVEL equals 40, then BODY TYPE should not equal 01, 12,
	13, 32, 33, 42, 50-52, 55, 58, 59, 60-67, 71-73, 78, 80-83, 88-93.
V050	If RESTRAINT SYSTEM/ HELMET USE equals 05, 16, 17, 19, 29, then BODY TYPE must
	equal 80 <b>-91</b> .
V051	If BUS USE equals 01, then BODY TYPE should equal 21 or 50 or 55.
V052	If BUS USE equals 04, then BODY TYPE should equal 51.
V053	If BUS USE equals 05, then BODY TYPE should equal 12, 16, 21, 51, 55 or 58.
V054	If BUS USE equals 07, then BODY TYPE should equal 21, 22, 29, 50-59.
V055	If BUS USE equals 00, then BODY TYPE must not equal 50-59.
V056	If SPECIAL USE equals 02, then BUS USE should equal 01.
V057	If SPECIAL USE equals 03, then BUS USE should equal 04-07, 99.
V058	If EMERGENCY MOTOR VEHICLE USE equals 2-6, then SPECIAL USE should equal 04-08,
	13.
V059	If BUS USE equals 01, then SPECIAL USE must equal 02.
V060	If SPECIAL USE equals 04, then REGISTRATION STATE should equal 94.
V061	If BUS USE equals 04-07, then SPECIAL USE must equal 03.
V070	If HM1 equals 2, then REGISTRATION STATE should not equal 92.
V090	If HM1 equals 2, then COMMERCIAL MOTOR VEHICLE LICENSE STATUS should equal 06,
	99.
V100	If HM1 equals 2, and RELATED FACTORS-DRIVER LEVEL does not equal 19, then
	COMMERCIAL MOTOR VEHICLE LICENSE STATUS should not equal 01, 02, 05.
V16P	If RELATED FACTORS-DRIVER LEVEL equals 88, then VEHICLE TRAILING must not equal 0,
	9.
V170	If NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY
-	TYPE equals 01-05, 07-09, 14, 15, 17, 19, 94, 95, <i>96</i> , 97, then NUMBER OF OCCUPANTS
	should not be greater than 8.
V180	If NUMBER OF OCCUPANTS is less than 99, and VEHICLE TRAILING equals 0, and BODY
	TYPE equals 06, 11, then NUMBER OF OCCUPANTS should not be greater than 12.
V190	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 12, then NUMBER OF OCCUPANTS should not be greater than 15.
V200	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 80-83, 88, 89, then NUMBER OF OCCUPANTS should not be greater than 2.
V210	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 15, 16, 42, 73, then NUMBER OF OCCUPANTS should not be greater than 12.

Error Codes	Error Test
V220	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 60-65, 71, 72, 79, then NUMBER OF OCCUPANTS should not be greater than 12.
V230	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 66, then NUMBER OF OCCUPANTS should not be greater than 5.
V240	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 91, then NUMBER OF OCCUPANTS should not be greater than 2.
V250	If NUMBER OF OCCUPANTS is 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 90, then NUMBER OF OCCUPANTS should not be greater than 8.
V260	If NUMBER OF OCCUPANTS is, 01-98, and VEHICLE TRAILING equals 0, and BODY TYPE
	equals 99, then NUMBER OF OCCUPANTS should not be greater than 5.
V270	If Model Year is greater than 1980, then the VIN should be 17 characters, all
	characters should be alphanumeric (A-Z, a-z, 0-9), and no characters should equal I, O, or Q.
V280	If Model Year is greater than 1980 and VIN is 17 characters, all characters are
1200	alphanumeric (A-Z, a-z, 0-9), and no characters are I, O, or Q, then the VIN should pass
	check digit calculation.
V290	If BODY TYPE equals 90, then NUMBER OF OCCUPANTS should equal 01.
V300	Possible error in VIN Production Number.
V310	If SEATING POSITION equals 54 and VEHICLE TRAILING equals 1-4, then AIR BAG
	DEPLOYED must equal <b>20</b> .
V320	If BODY TYPE equals <b>42, 50-79,</b> and SEATING POSITION does not equal 11,13, 98, then
	AIR BAG DEPLOYED should equal <b>20, 98</b> .
V330	If SCHOOL BUS RELATED equals 1, then BODY TYPE of at least one of the involved
	vehicles should equal 50 (School Bus) or SPECIAL USE for at least one involved vehicle
	should equal 02 - Vehicle Used as School Bus, or BUS USE for at least one vehicle should
	equal 01.
V340	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 01-05, 07-09, 14, 15, 17, 19,
	94, 95, 96, 97, and VEHICLE TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS
	should not be greater than <b>15</b> .
V350	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 06, 11, 16, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than
	12.
V360	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 12, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than 15.
V370	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 80-83, 88, 89, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than
	02.
V380	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 42, 73, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than
	12.
V390	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 60-65, 71, 72, 79, and
	VEHICLE TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS should not be
	greater than 12.
V400	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 66, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than 5.

Error Codes	Error Test
V410	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 91, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than 2.
V420	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 90, and VEHICLE TRAILING
	does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than 8.
V430	If NUMBER OF OCCUPANTS is 01-98, and BODY TYPE equals 98, 99, and VEHICLE
	TRAILING does NOT equal 0, then NUMBER OF OCCUPANTS should not be greater than
	5.
V440	If BODY TYPE equals 50, then SCHOOL BUS RELATED should equal 1.
V46P	If VEHICLE CONFIGURATION equals 21, then BODY TYPE must equal 21, 50-52, 55, 58,
	59.
V470	If VEHICLE CONFIGURATION equals 01, then CARGO BODY TYPE should be 01-05, 07, 12,
	96-98.
V47P	If VEHICLE CONFIGURATION equals 21, then CARGO BODY TYPE must equal 22.
V502	If GVWR/GCWR equals 0, and HM1 equals 1, then VEHICLE CONFIGURATION and CARGO
	BODY TYPE must equal 00.
V503	If GVWR/GCWR equals 1, then HM2 should equal 2, or VEHICLE CONFIGURATION should
	equal 20.
V504	If GVWR/GCWR equals 1, then BODY TYPE should equal 01-22, 28-39, 41-49.
V505	If GVWR/GCWR equals 9, then BODY TYPE should not equal 61-63, 66, 67.
V506	If BODY TYPE equals 60, then GVWR/GCWR should equal 2.
V507	If BODY TYPE equals 01-21, 28-30, 32-39, 45-49, then GVWR/GCWR should equal 0, 1.
V50P	If BODY TYPE equals 61, 62, 67, 71, and VEHICLE CONFIGURATION does not equal 04,
	then GVWR/GCWR must equal 2, 9. (See GVWR/GCWR Remarks on how to use the VIN
	to determine GVWR.)
V51P	If BODY TYPE equals 63, 66, 72, then GVWR/GCWR must equal 3. (See <u>GVWR/GCWR</u>
	Remarks on how to use the VIN to determine GVWR.)
V531	If BUS USE equals 01, 04-07, 98, then VEHICLE CONFIGURATION should equal 20, 21,
	and CARGO BODY TYPE should equal 22.
V532	If VEHICLE CONFIGURATION equals 01, 02, 04-08, 19, 21, then GVWR/GCWR should not
	equal 0 or 1.
V533	If CRASH TYPE equals 03, 08, 38, 40, 58 or 60, then ATTEMPTED AVOIDANCE MANEUVER
	must not equal 00 or 01.
V535	IF ATTEMPTED AVOIDANCE MANEUVER equals 00, then PRE-EVENT MOVEMENT (PRIOR
	TO RECOGNITION OF CRITICAL EVENT) must equal 00.
V538	If JACKKNIFE equals 2, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF
	CRITICAL EVENT) must not equal 04, 05, 07-09 or 13 for this vehicle.
V540	If BODY TYPE equals 42, 73, and HM1 equals 1, then GVWR/GCWR should equal 0, 9.
V550	If REGISTRATION STATE equals 93, 94, then REGISTERED VEHICLE OWNER should equal
	3, 4.
V560	If SPECIAL USE equals 04, then REGISTERED VEHICLE OWNER should equal 3, and
	REGISTRATION STATE should equal 94.
V56P	If VEHICLE CONFIGURATION equals 10, then BODY TYPE must equal 01-22, 28-49.
V570	If HM1 equals 2, then REGISTERED VEHICLE OWNER should not equal 0, 1, 2, 4.
V57P	If VEHICLE CONFIGURATION equals 05, then CARGO BODY TYPE must equal 12, 96, and
	BODY TYPE must equal 66.
V580	If HM1 equals 2, then REGISTERED VEHICLE OWNER should equal 3.

Error Codes	Error Test
V58P	If VEHICLE CONFIGURATION equals 04, then BODY TYPE must not equal 66.
V590	If RELATED FACTORS-VEHICLE LEVEL equals 32, then REGISTERED VEHICLE OWNER
	should equal 1-3.
V59Q	IF ATTEMPTED AVOIDANCE MANEUVER equals 99, then DRIVER MANEUVERED TO
	AVOID should equal 00, 98 or 99.
V592	If RELATED FACTORS-VEHICLE LEVEL equals 37, then REGISTRATION STATE should not
	equal 00, 92.
V593	IF RELATED FACTORS-VEHICLE LEVEL equals 37, then REGISTERED VEHICLE OWNER
	should not equal 0.
V59P	If VEHICLE CONFIGURATION equals 06, then BODY TYPE must equal 66, and VEHICLE
	TRAILING must equal 1.
V600	If REGISTERED VEHICLE OWNER equals 9, then REGISTRATION STATE should equal 99.
V60P	If VEHICLE CONFIGURATION equals 07, then BODY TYPE must equal 66, and VEHICLE
	TRAILING must equal 2.
V61P	If VEHICLE CONFIGURATION equals 08, then BODY TYPE must equal 66, and VEHICLE
	TRAILING must equal 3.
V620	If CRASH MONTH is between January and March, then the VEHICLE MODEL YEAR should
	NOT be greater than the CRASH YEAR unless it equals 9998 or 9999 (contact Coding
	Assistance).
V62P	If CARGO BODY TYPE equals 01-12, 97, 98, and VEHICLE IDENTIFICATION NUMBER does
	not equal Not Reported or Unknown, then GVWR/GCWR must equal 2, 3.
V630	If REGISTRATION STATE equals 00, 92, then REGISTERED VEHICLE OWNER should NOT
	equal 5.
V640	If VEHICLE CONFIGURATION does not equal 00, 99, then BODY TYPE should not equal
	28, <b>34</b> , 42, 45, 48, 49.
V64P	If BODY TYPE equals 50-59, 60-72, 78, then GVWR/GCWR must not equal 0-1.
V65P	If GVWR/GCWR equals 2, 3, then VEHICLE CONFIGURATION must not equal 00 and
	CARGO BODY TYPE must not equal 00.
V660	If CARGO BODY TYPE does not equal 00, 99, then BODY TYPE should not equal 28, <b>34</b> ,
	42, 45, 48, 49.
V670	If REGISTERED VEHICLE OWNER equals 1, 2, then REGISTRATION STATE should NOT
	equal 99.
V68P	If CARGO BODY TYPE equals 12, then VEHICLE TRAILING must equal 5.
V700	If ROLLOVER equals 2, then CRASH TYPE should equal 01-10, 14, 98 or 99 for this
	vehicle.
V74P	If UNIT TYPE equals 1, and ROLLOVER equals 1, 2, 9, or LOCATION OF ROLLOVER equals
	1-7, 9, then at least one SEQUENCE OF EVENTS must equal 01 for this vehicle.
V750	If UNDERRIDE/OVERRIDE equals 1-3, then FIRST HARMFUL EVENT or at least one
	SEQUENCE OF EVENTS (for this vehicle) should equal 12, 55.
V75P	If ROLLOVER is not blank, then LOCATION OF ROLLOVER must not be blank.
V760	If UNDERRIDE/OVERRIDE equals 4-6, then FIRST HARMFUL EVENT or at least one
	SEQUENCE OF EVENTS (for this vehicle) should equal 14, 45.
V76P	If ROLLOVER is blank, then LOCATION OF ROLLOVER must be blank.
V770	If UNDERRIDE/OVERRIDE equals 7, then at least one SEQUENCE OF EVENTS (for this
	vehicle) must equal 12, 55.
V77P	If ROLLOVER equals 1, 2, 9, then LOCATION OF ROLLOVER must equal 1-7, 9.

Error Codes	Error Test
V780	If UNDERRIDE/OVERRIDE equals 8, then at least one SEQUENCE OF EVENTS (for this
	vehicle) must equal 14, 45.
V78P	If ROLLOVER equals 0, then LOCATION OF ROLLOVER must equal 0.
V790	If BODY TYPE equals 20, then VEHICLE CONFIGURATION should equal 00, and CARGO
	BODY TYPE should equal 00.
V79P	If ROLLOVER equals 2, and FIRST HARMFUL EVENT equals 01, then CRASH TYPE must
	equal 01-10, 14, 15 or 98 for the vehicle involved in the first harmful event.
V800	If BODY TYPE equals 21, 22, 28, 29, then VEHICLE CONFIGURATION should equal 00, 04,
	10, 20, 21, 99, and CARGO BODY TYPE should equal 00, 01, 22, 99.
V810	If BODY TYPE equals 67, and VEHICLE TRAILING equals 1-4, then VEHICLE
	CONFIGURATION should equal 04, and CARGO BODY TYPE should equal 01, 03, 04, 09.
V840	If BODY TYPE equals 50-59, then VEHICLE CONFIGURATION should equal 21, and CARGO
	BODY TYPE should equal 22.
V850	If BODY TYPE equals 60, then VEHICLE CONFIGURATION should equal 01, 03, 04, and
	CARGO BODY TYPE should equal 01.
V860	If HIT-AND-RUN equals 0, and BODY TYPE equals 61-64, then VEHICLE CONFIGURATION
	should equal 01, 02, 04, and CARGO BODY TYPE should equal 01-10, 12, 96-98.
V870	If BODY TYPE equals 65, then VEHICLE CONFIGURATION should equal <b>19</b> , and CARGO
	BODY TYPE should equal <b>97</b> .
V880	If HIT-AND-RUN equals 0, and BODY TYPE equals 66, then VEHICLE CONFIGURATION
	should equal 05-08,19, and CARGO BODY TYPE should equal 01-04, 06-12, 96-98.
V890	If BODY TYPE equals 71, 72, then VEHICLE CONFIGURATION should equal 19, and CARGO
1050	BODY TYPE should equal 01-04, 08, 10, 96-98.
V900	If BODY TYPE equals 73, then VEHICLE CONFIGURATION should equal <b>99</b> , and CARGO
1300	BODY TYPE should equal <b>99</b> .
V910	If BODY TYPE equals 78, then VEHICLE CONFIGURATION should equal 19, and CARGO
V310	BODY TYPE should equal 98.
V915	If BODY TYPE equals 67, and VEHICLE TRAILING equals 0, then VEHICLE CONFIGURATION
1010	should equal 01, and CARGO BODY TYPE should equal 97.
V920	If BODY TYPE equals 79, then VEHICLE CONFIGURATION should equal 99, and CARGO
v 520	BODY TYPE should equal 99.
V922	If MAKE equals 98, 99, and MODEL equals, then MODEL YEAR should equal
VJLL	(MODEL and MODEL YEAR should be valid according to Vehicle Tables).
V930	If VEHICLE CONFIGURATION equals 00, or CARGO BODY TYPE equals 00, then BODY
v 330	TYPE should not equal 50-64, 66-72, 78, 79.
V940	If HM1 equals 2, then VEHICLE CONFIGURATION should not equal 00, 99 and CARGO
1940	BODY TYPE should not equal 00, 99.
V950	If vehicle MODEL YEAR is less than 1994, and SEATING POSITION equals 31, 33, 39, then
VJJ0	RESTRAINT SYSTEM/HELMET USE should not equal 01, 03, and BODY TYPE should equal
	12, 15, 16, 19-21.
V960	If REGISTRATION STATE equals 99, then REGISTERED VEHICLE OWNER should equal 5, 6,
v 500	9.
V961	If MAKE equals 98, 99, and MODEL equals, then BODY TYPE should equal
V 901	(MODEL and BODY TYPE should be valid according to the Vehicle Tables).
1/080	- · · · · · · · · · · · · · · · · · · ·
V980	If BODY TYPE equals 50-52, 55, <b>58-67,</b> 71, 72, 78, 93, or HM1 equals 2, then MOTOR
	CARRIER IDENTIFICATION NUMBER must not equal 00-000000000.

Error Codes	Error Test
V981	If VEHICLE CONFIGURATION equals 00, then MOTOR CARRIER IDENTIFICATION NUMBER
	should equal 00-000000000.
V982	If MOTOR CARRIER IDENTIFICATION NUMBER does not equal 00-000000000, then
	VEHICLE CONFIGURATION should not equal 00.
V983	If VEHICLE TRAILING equals 3, then STATE should equal 04, 08, 16, 18, 20, 30-32, 38-41,
	46, 49.
V984	If STATE does not equal 04, 08, 16, 18, 20, 30-32, 38-41, 46, 49, then VEHICLE TRAILING
	should not equal 3.
V985	If VEHICLE TRAILING equals 5, then VEHICLE CONFIGURA-TION should not equal 00, 10,
	19-21.
V986	If VEHICLE TRAILING equals 3, then PSU should equal OH, OK, SD, UT
V990	If any SEQUENCE OF EVENTS equals 61, then CONTRIBUTING CIRCUMSTANCES, MOTOR VEHICLE should not equal 00.
V991	If VEHICLE TRAILING equals 0, then VEHICLE CONFIGURATION must not equal 04, 06-08.
V992	If VEHICLE TRAILING equals 1, then VEHICLE CONFIGURATION must not equal 01, 02, 05, 07 or 08.
V993	If VEHICLE TRAILING equals 2, then VEHICLE CONFIGURATION must not equal 01, 02, 05, 06 or 08.
V994	If VEHICLE TRAILING equals 3, then VEHICLE CONFIGURATION must not equal 01, 02, 05-07.
V995	If VEHICLE TRAILING equals 4, then VEHICLE CONFIGURATION must not equal 01, 02, 05-08.
V997	If VEHICLE TRAILING equals 6, then VEHICLE CONFIGURATION must not equal 04, 06-08.
V998	If VEHICLE TRAILING equals 9, then VEHICLE CONFIGURATION must not equal 04-07 or 08.
VA00	If HM1 equals 1, then HM2, HM5 must equal 0, HM4 must equal 00 and HM3 must equal 0000.
VA10	If HM1 equals 2, then HM2, HM5 must not equal 0, HM4 must not equal 00 and HM3 must not equal 0000.
VA20	If any of HM2, HM5 equals 0, or HM4 equals 00 or HM3 equals 0000, then HM1 must equal 1.
VA30	If any of HM2, HM5 does not equal 0, or HM4 does not equal 00, or HM3 does not equal 0000, then HM1 must equal 2.
VA40	If HM5 equals 2, then HM3 should not equal 8888 or HM4 should not equal 88.
VA50	If HM3 equals 8888, and HM4 equals 88, then HM5 should not equal 2.
VA60	If HM3 does not equal 0000, 8888, or HM4 does not equal 00, 88, then HM2 should
	equal 2.
VA70	If GVWR/GCWR equals 1, and HM2 equals 2, then VEHICLE CONFIGURATION must equal 10.
VA80	HM3 – 4-Digit Hazardous Materials Identification Number must contain 4 digits.
VB60	If PRE-IMPACT STABILITY equals 0, then PRE-IMPACT LOCATION must equal 0.
VB00	If PRE-IMPACT STABILITY is not equal to 0, then PRE-IMPACT LOCATION must not equal
	0.
VBA0	If PRE-IMPACT LOCATION equals 1, then PRE-IMPACT STABILITY should equal 1, 2 or 9.
VH06	If BODY TYPE equals 82, then RELATED FACTORS-VEHICLE LEVEL must not equal 30.

Error Codes	Error Test
VH10	If PRE-IMPACT LOCATION equals 0, then ATTEMPTED AVOIDANCE MANEUVER must
	equal 00.
VH20	If ATTEMPTED AVOIDANCE MANEUVER equals 00, then PRE-IMPACT LOCATION must
	equal 0.
VH25	If UNIT TYPE equals 4, then REGISTERED VEHICLE OWNER should not equal 6, 9.
VH70	If UNIT TYPE equals 2-4, then elements JACKKNIFE, TRAVEL SPEED, and SEQUENCE OF
	EVENTS must all be left blank.
VH75	If UNIT TYPE equals 4, then VEHICLE CONFIGURATION should not equal 05, 20, 21, 10.
VH80	If UNIT TYPE equals 4, then CARGO BODY TYPE should not equal 06, 07, 11, 12, 22.
VH81	If any DAMAGED AREAS equals 15 or 99, then only that one values must be coded.
VH82	If EXTENT OF DAMAGE for this vehicle equals 2, 4, 6, then DAMAGED AREAS must not
	equal 15.
VH83	If the only harmful SEQUENCE OF EVENTS for this vehicle equals 04-06, then DAMAGED
	AREAS should equal 15.
VH84	If the only harmful SEQUENCE OF EVENTS for this vehicle equals 01-03, 16, 44, 51, 72,
	then DAMAGED AREAS should not equal 15.
VH85	If AREAS OF IMPACT-INITIAL CONTACT POINT equals 61-63, then DAMAGED AREAS
	should include at least one of the codes 07-11, or DAMAGED AREAS should equal 15.
VH86	If AREAS OF IMPACT-INITIAL CONTACT POINT equals 81-83, then DAMAGED AREAS
	should include at least one of the codes 01-05, or DAMAGED AREAS should equal 15.
VH87	If HIT-AND-RUN equals 0, and AREAS OF IMPACT-INITIAL CONTACT POINT equals 01-14,
	then the corresponding code should be included in DAMAGED AREAS or DAMAGED
	AREAS should equal 15.

# References

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- National Safety Council. (2007). <u>Manual on Classification of Motor Vehicle Traffic Accidents, Seventh Edition</u> (ANSI D16.1-2007). Itasca, IL: Author.

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