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**National Highway  
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Administration**



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# **2014 FARS NASS GES Pedestrian Bicyclists Manual**

## **Disclaimer**

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# PEDESTRIAN ELEMENTS

PB27 – Marked Crosswalk Present

PB28 – Sidewalk Present

PB29 – School Zone

PB30 – Crash Type - Pedestrian

PB31 – Crash Location - Pedestrian

PB32 – Pedestrian Position

PB33 – Pedestrian Initial Direction of Travel

PB34 – Motorist Initial Direction of Travel

PB35 – Motorist Maneuver

PB36 – Intersection Leg

PB37 – Pedestrian Scenario

PB38 – Crash Group - Pedestrian

# BICYCLE ELEMENTS

PB27 – Marked Crosswalk Present

PB28 – Sidewalk Present

PB29 – School Zone

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PB31B – Crash Location - Bicycle

PB32B – Bicyclist Position

PB33B – Bicyclist Direction

PB38B – Crash Group - Bicyclist

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**Bicyclist Position**

Travel Lane  
Bicycle Lane/Paved Shoulder/Parking Lane  
Sidewalk/Crosswalk/Driveway Access  
Shared-Use Path  
Non-Trafficway - Driveway  
Non-Trafficway - Parking Lot /Other  
Other  
Unknown

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## PEDESTRIAN/BIKE TYPING MARKED CROSSWALK PRESENT

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PBCWALK

**ELEMENT VALUES:**

- 0 ***None Noted***
- 1 Yes
- 9 Unknown

**Remarks:**

*0 (None Noted) is used when the case materials indicate there is no marked crosswalk present OR when it cannot be determined if a marked crosswalk was present (e.g., not displayed on the diagram, not identified in the narrative, or not in a relevant report field). This attribute may also be selected if a marked crosswalk is not indicated in the case materials and the crash occurs in a location where crosswalk presence is unlikely (e.g., rural roadway, interstate).*

*1 (Yes) is used when the case materials indicate the presence of a marked crosswalk at the crash site. To select this attribute you only need to establish presence of a marked crosswalk at this location (i.e., the person does not have to be in the crosswalk and the crosswalk does not have to be relevant to the crash).*

*FARS only: Internet maps or other available sources such as the state highway department may be used to verify marked crosswalk presence when you suspect they could exist.*

*9 (Unknown) is used when the case materials state that it is “unknown” if a marked crosswalk is present.*

**Consistency Checks:**

IF	THEN
<i>(1PK3) NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 10,</i>	<i>MARKED CROSSWALK PRESENT must equal 1.</i>

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## **PEDESTRIAN/BIKE TYPING** **SIDEWALK PRESENT**

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PBSWALK

**ELEMENT VALUES:**

- 0 ***None Noted***
- 1 Yes
- 9 Unknown

**Remarks:**

***0 (None Noted) is used when the case materials indicate there is no sidewalk present OR when it cannot be determined if a sidewalk was present (e.g., not displayed on the diagram, not identified in the narrative, or not in a relevant report field). This attribute may also be selected if a sidewalk is not indicated in the case materials and the crash occurs in a location where a sidewalk is unlikely (e.g., rural roadway, interstate).***

***1 (Yes) is used when the case materials indicate the presence of a sidewalk at the crash site. To select this attribute you only need to establish presence of a sidewalk at this location (i.e., the person does not have to be on the sidewalk and the sidewalk does not have to be relevant to the crash).***

***FARS only: Internet maps or other available sources such as the state highway department may be used to verify sidewalk presence when you suspect they could exist.***

***9 (Unknown) is used when the case materials state that it is “unknown” if a sidewalk is present.***

**Consistency Checks:**

IF	THEN
<b><i>(1PK2) NON-MOTORIST LOCATION AT TIME OF CRASH equals 21,</i></b>	<b><i>SIDEWALK PRESENT must equal 1.</i></b>

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## **PEDESTRIAN/BIKE TYPING** **SCHOOL ZONE**

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PBSZONE

**ELEMENT VALUES:**

- 0 ***None Noted***
- 1 Yes
- 9 Unknown

**Remarks:**

***0 (None Noted) is used when the case materials indicate the crash did not occur in a school zone OR when it cannot be determined if the crash occurred in a school zone (e.g., not displayed on the diagram, not identified in the narrative, or not in a relevant report field). This attribute may also be selected if a school zone is not indicated in the case materials and the crash occurs in a location where a school zone is unlikely (e.g., interstate).***

***1 (Yes) is used when the case materials indicated the crash occurred in a school zone. It does not matter as to the time of the crash, but only that the investigating officer stated or coded the crash was in a school zone.***

***FARS only: Internet maps or other available sources such as the state highway department may be used to verify school zone presence when you suspect they could exist.***

***9 (Unknown) is used when the case materials state that it is “unknown” if the crash occurred in a school zone.***

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## PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PEDCTYPE

### **ELEMENT VALUES:**

***Crash Group attribute names are left justified, followed by the element value in parenthesis. Crash Type element values and attribute names are listed below the applicable Crash Group.***

#### Unusual Circumstances (100)

- 120 Dispute-Related
- 130 Pedestrian on Vehicle
- 140 Vehicle - Vehicle / Object
- 150 Motor Vehicle Loss of Control
- 160 Pedestrian Loss of Control
- 190 Other Unusual Circumstances
- 220 Driverless Vehicle
- 230 Disabled Vehicle-Related
- 240 Emergency Vehicle-Related
- 250 Play Vehicle-Related

#### Backing Vehicle (200)

- 211 Backing Vehicle - ***Non-Trafficway*** - Driveway
- 212 Backing Vehicle - Driveway ***Access***
- 213 Backing Vehicle - ***Trafficway***
- 214 Backing Vehicle - ***Non-Trafficway*** - Parking Lot
- 219 Backing Vehicle - Other / Unknown

#### Working or Playing in Roadway (310)

- 311 Working in Roadway
- 312 Playing in Roadway

#### Bus-Related (340)

- 341 ***Transit*** Bus-Related
- 342 School Bus ***Stop***-Related

#### Unique Midblock (350)

- 320 Entering / Exiting Parked ***or Stopped*** Vehicle
- 330 Mailbox-Related
- 360 Ice Cream / Vendor Truck-Related

#### Walking / ***Running*** Along Roadway (400)

- 410 Walking / ***Running*** Along Roadway With Traffic - From Behind
- 420 Walking / ***Running*** Along Roadway With Traffic - From Front
- 430 Walking / ***Running*** Along Roadway Against Traffic - From Behind

NM9  
PB30

- 440 Walking / **Running** Along Roadway Against Traffic - From Front
- 459 Walking / **Running** Along Roadway - Direction / Position Unknown

**Driveway Access / Driveway Access Related (460)**

- 461 Motorist Entering Driveway
- 465 Motorist Exiting Driveway
- 469 Driveway **Access** - Other/Unknown

Waiting to Cross (500)

- 510 Waiting to Cross - Vehicle Turning
- 520 Waiting to Cross - Vehicle Not Turning
- 590 Waiting to Cross - Vehicle Action Unknown

Pedestrian in Roadway - Circumstances Unknown (600)

- 610 Standing in Roadway
- 620 Walking in Roadway
- 313 Lying in Roadway

Multiple Threat / Trapped (720)

- 710 Multiple Threat
- 730 Trapped

Dash / Dart-Out (740)

- 741 Dash
- 742 Dart-Out

Crossing Roadway - Vehicle Not Turning (750)

- 760 Pedestrian Failed to Yield
- 770 Motorist Failed to Yield

Crossing Roadway - Vehicle Turning (790)

- 781** Motorist Left Turn - Parallel Paths
- 782** Motorist Left Turn - Perpendicular Paths
- 791 Motorist Right Turn - Parallel Paths
- 792 Motorist Right Turn on Red - Parallel Paths
- 795 Motorist Right Turn - Perpendicular Paths
- 794 Motorist Right Turn on Red - Perpendicular Paths
- 799 Motorist Turn / Merge - Other / Unknown

**Non-Trafficway (800)**

- 830 **Non-Trafficway** - Parking Lot
- 890 **Non-Trafficway** - Other / Unknown

Crossing Expressway (910)

- 910 Crossing an Expressway

Other / Unknown - Insufficient Details (990)

- 900 Other - Unknown Location
- 680 **Not At** Intersection - Other / Unknown
- 690 **At** Intersection - Other / Unknown

**Remarks:**

**100 (Unusual Circumstances)** is used when the crash involved a disabled vehicle, emergency vehicle, vehicle in pursuit, play vehicle, driverless vehicle or collision with a vehicle which was in a prior vehicle-into-vehicle impact; the pedestrian/vehicle impact was dispute-

related; the pedestrian was ***leaning against or pushing*** a vehicle; the pedestrian lost control; the vehicle lost control or the pedestrian was ***involved in a collision*** as a result of other unusual circumstances (e.g., the pedestrian collided with an object set in motion by an in transport motor vehicle). ***If the crash involves any unusual crash circumstance types 120, 130, 140, 150, or 190, select the first one that applies. If this crash involves any of the unusual vehicle types or vehicle actions (e.g., Group 200, Type 220, 230, 240 or 250) select the first one that applies in this order: 240 (Emergency Vehicle-Related), 230 (Disabled Vehicle-Related), 220 (Driverless Vehicle), Group 200 (Backing Vehicle), 250 (Play Vehicle).***

**120 (Dispute-Related)** is used when the pedestrian was ***involved in a collision with a vehicle during a domestic altercation or other dispute. This would only be used if the contact with the pedestrian was unintentional (i.e., not “deliberate intent”). The pedestrian does not need to be a party to the dispute.***

**130 (Pedestrian on Vehicle)** is used when the ***pedestrian was sitting on, leaning against, or clinging to*** a vehicle which began to move or was moving. If the pedestrian was pushing a disabled vehicle, see Crash Type 230 (Disabled Vehicle-Related). ***[Note: In FARS/GES this excludes persons on or clinging to the vehicle that would be classified as occupants.]***

**140 (Vehicle - Vehicle / Object)** is used when the pedestrian was involved in the crash as a ***result of a prior vehicle-into-vehicle or vehicle-into-object crash.***

**150 (Motor Vehicle Loss of Control)** is used when the ***pedestrian was involved in a collision with a vehicle which had a prior loss of control due to mechanical failure, surface conditions, driver medical issue, driver blackout or unconsciousness, alcohol or drug impairment, or falling asleep. Do not independently evaluate test results for this determination. The case materials/PAR must indicate that the operator’s impairment caused the loss of control and not just that alcohol or drugs were listed among the contributing factors in the crash.***

**160 (Pedestrian Loss of Control)** is used when the ***pedestrian stumbled, fell or rolled into path of a vehicle due to surface conditions, medical issue, blackout or unconsciousness, alcohol or drug impairment, falling asleep or other mishap.***

**190 (Other Unusual Circumstances)** is used when the crash involved other unusual circumstances, such as ***the pedestrian being struck by falling cargo, a wheel which came off a vehicle because of mechanical failure, or tread which separated from a tire.***

**220 (Driverless Vehicle)** is used when the pedestrian was struck by a vehicle that was moving without a driver at the controls or that was set in motion by the actions of a child.

**230 (Disabled Vehicle-Related)** is used when the pedestrian *was involved in a collision with a vehicle while near, next to, or pushing a disabled vehicle (including a vehicle that had been in a previous crash). Note: Crashes involving pedestrians standing near tow trucks responding to the disabled vehicle are also included in this crash type.*

**240 (Emergency Vehicle-Related)** is used when the pedestrian *was involved in a collision* with an active/*moving* emergency vehicle or with a vehicle being pursued.

**250 (Play Vehicle-Related)** is used when the pedestrian *was involved in a collision with a* vehicle while riding a play vehicle that was not a bicycle (e.g., skates, scooter, wagon, sled, etc.).

**200 (Backing Vehicle)** is used when the pedestrian *was involved in a collision with a vehicle that was backing up with a driver at the controls at any type of location.*

**211 (Backing Vehicle - Non-Trafficway - Driveway)** is used when the pedestrian was in a driveway (*outside the trafficway*) and *involved in a collision with a* vehicle that was backing with a driver at the controls.

**212 (Backing Vehicle - Driveway Access)** is used when the pedestrian was *within the trafficway on a sidewalk, shared-use path or driveway access* and *was involved in a collision with a vehicle* that was backing with a driver at the controls. *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.*

**213 (Backing Vehicle - Trafficway)** is used when the pedestrian was *involved in a collision with a vehicle that was backing with a driver at the controls. This would typically occur in a travel lane, parking lane, or shoulder but would exclude the driveway access.*

**214 (Backing Vehicle - Non-Trafficway - Parking Lot)** is used when the pedestrian was in a parking lot *space/stall or aisle* and *was involved in a collision with a* vehicle that was backing with a driver at the controls.

**219 (Backing Vehicle - Other / Unknown)** is used when the pedestrian was in an other or unknown location and involved in a collision with a vehicle that was backing with a driver at the controls.

**310 (Working or Playing in Roadway)** is used when the pedestrian was working or playing in the roadway.

**311 (Working in Roadway)** is used when the pedestrian is working in the roadway when *involved in a collision with a* vehicle. *This includes work activities associated with the construction and maintenance for the trafficway, utility work within the roadway, enforcement work (e.g., directing traffic), or other activities*

*that require the pedestrian to be present in the roadway (e.g., refuse worker). It does not include pedestrians (such as a package/mail delivery worker) who are entering/exiting a vehicle in the roadway or crossing the roadway.*

**312 (Playing in Roadway)** is used when the pedestrian is playing in the roadway when *involved in a collision with a vehicle. To use this attribute, the pedestrian should be playing in the roadway prior to vehicle's appearance. This does not include a pedestrian on a play vehicle [see 250 (Play Vehicle-Related)] and does not include a pedestrian that enters the roadway into the path of the vehicle (e.g., to retrieve a ball). See 741 (Dash) and 742 (Dart-Out).*

**340 (Bus-Related)** is used when the pedestrian was *involved in a collision with a vehicle* while crossing/walking to a bus or bus stop or while waiting at a bus stop. *The pedestrian does not have to intend to be a passenger on the bus or previously been a passenger on the bus.*

**341 (Transit Bus-Related)** is used when the pedestrian is crossing in front of a *transit bus (city bus)* stopped at a marked bus stop. *The person can be involved in a collision with the bus (contact) or another vehicle that did not see the person as a result of the bus.*

**342 (School Bus Stop-Related)** is used when the pedestrian is going to or from or waiting at a school bus stop. *The pedestrian does not have to be a student and a school bus does not have to be present.*

**350 (Unique Midblock)** is used when the crash was associated with a vendor truck, mailbox, or other roadside pedestrian 'destination' that was not a bus, or the pedestrian was *involved in a collision with a vehicle* while entering or exiting a parked vehicle.

**320 (Entering / Exiting Parked or Stopped Vehicle)** is used when the 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.* Note: *This does not include crashes involving a disabled vehicle [see 230 (Disabled Vehicle-Related)] or 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.*

**330 (Mailbox-Related)** is used when the pedestrian is going to or from or standing at a mailbox or newspaper box.

**360 (Ice-Cream / Vendor Truck-Related)** is used when the pedestrian is going to or from an ice-cream truck or other type of vehicle vending from the curb or roadside.

**400 (Walking / Running Along Roadway)** *is used when the pedestrian was walking or running in or adjacent to the roadway (travel lane) within the trafficway boundaries. This also includes situations where the person's action/intent was walking or running 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, or median but excludes a person in a driveway access related crash [See 460 (Driveway Access/Driveway Access Related)].*

**410 (Walking / Running Along Roadway With Traffic - From Behind)** is used when the pedestrian was *walking/running, facing in the same direction as the flow of traffic and was involved in a collision where the vehicle was coming from behind the pedestrian.*

**420 (Walking / Running Along Roadway With Traffic - From Front)** is used when the pedestrian was *walking/running, facing in the same direction as the flow of traffic and was involved in a collision where the vehicle was coming from the front of the pedestrian.*

**430 (Walking / Running Along Roadway Against Traffic - From Behind)** is used when the pedestrian was *walking/running, facing in the opposite direction as the flow of traffic and was involved in a collision where the vehicle was coming from behind the pedestrian.*

**440 (Walking / Running Along Roadway Against Traffic - From Front)** is used when the pedestrian was *walking/running, facing in the opposite direction as the flow of traffic and was involved in a collision where the vehicle was coming from the front of the pedestrian.*

**459 (Walking / Running Along Roadway - Direction / Position Unknown)** is used when the pedestrian was *walking/running, but there is insufficient information to determine either the position or direction of the pedestrian at the time of the crash.*

**460 (Driveway Access / Driveway Access Related)** is used when the pedestrian was crossing *or in a driveway access. 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. This also applies when the pedestrian is crossing or standing at the edge of the travel lane in front of the driveway access or is next to the driveway access when in a collision with a vehicle either entering or exiting the driveway.*

**461 (Motorist Entering Driveway)** is used when the motor vehicle was *turning into a driveway and collided with the pedestrian.*

**465 (Motorist Exiting Driveway)** is used when the motor vehicle was *exiting a driveway and collided with the pedestrian.*

**469 (Driveway Access - Other / Unknown)** is used when the pedestrian *was known to be in or near a driveway access when involved in a collision with a vehicle but it cannot be determined if the vehicle was entering or exiting the driveway.*

**500 (Waiting to Cross)** is used when the pedestrian was standing on the curb or near the roadway edge waiting to cross the roadway when *involved in a collision with a vehicle. If the pedestrian began to cross the roadway, stopped, and then was involved in a collision with a vehicle, see Crash Groups 720 (Multiple Threat/Trapped), 740 (Dash/Dart-Out ),750 (Crossing Roadway - Vehicle Not Turning ), 790 (Crossing Roadway - Vehicle Turning).*

**510 (Waiting to Cross - Vehicle Turning)** is used when the pedestrian *was standing near the curb or roadway edge and waiting to cross the roadway when involved in a collision with a turning vehicle.*

**520 (Waiting to Cross - Vehicle Not Turning)** is used when the pedestrian *was standing near the curb or roadway edge and waiting to cross the roadway when involved in a collision with a vehicle that was not turning.*

**590 (Waiting to Cross - Vehicle Action Unknown)** is used when the pedestrian *was standing near the curb or roadway edge and waiting to cross the roadway when involved in a collision with a vehicle, but it could not be determined if the vehicle was turning or not.*

**600 (Pedestrian in Roadway - Circumstances Unknown)** is used when the pedestrian was standing, walking, or lying in the road right-of-way at an intersection or midblock location but the circumstances do not otherwise fit any previously described or are unknown.

**610 (Standing in Roadway)** is used when the pedestrian *was standing in the roadway prior to the collision with the vehicle, but the crash cannot be further classified.*

**620 (Walking in Roadway)** is used when the pedestrian *was walking in the roadway prior to the collision with the vehicle, but the crash cannot be further classified.*

**313 (Lying in Roadway)** is used when the pedestrian is lying in the roadway *when involved with a collision with a motor vehicle. This includes someone sitting, getting up, asleep/unconscious, kneeling, etc.*

**720 (Multiple Threat / Trapped)** is used when the pedestrian entered the roadway in front of standing or slowing traffic, *the traffic started moving then the pedestrian* was then involved *in a collision with a vehicle traveling in the same direction as the stopped traffic (multiple threat).* Note: Multiple threats may occur at non-signalized locations. *This also applies when the pedestrian entered the roadway on a green signal and was trapped when the signal changed (trapped).*

**710 (Multiple Threat)** is used when the pedestrian *entered the traffic lane in front of stopped or slowing traffic and was involved in a collision with a vehicle traveling*

***in the same direction as the stopped or slowing traffic. If there is a traffic signal present and the light changes while the person is crossing, see 730 (Trapped).***

**730 (Trapped)** is used when the pedestrian was ***involved in a collision with a vehicle*** while crossing at a signalized intersection or signalized midblock crossing when the light changed and traffic started moving.

**740 (Dash / Dart-Out)** is used when the pedestrian either ran into the roadway in front of a motorist whose view of the pedestrian was not obstructed or walked or ran into the road and was ***involved in a collision with a vehicle where the driver's view of the pedestrian was blocked until an instant before impact.***

**741 (Dash)** is used when the ***pedestrian ran into the roadway and was involved in a collision with a vehicle and there is no mention in the case materials/PAR that the driver's view of the pedestrian was obstructed. The case materials/PAR should state that the pedestrian ran.***

**742 (Dart-Out)** is used when the pedestrian walked or ran ***into the roadway and was involved in a collision with a vehicle where the driver's view of the pedestrian 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).***

**750 (Crossing Roadway - Vehicle Not Turning)** is used when the pedestrian crossing the roadway (not an expressway) ***and involved in a collision with*** a vehicle that was traveling straight through.

#### **At Intersection**

**760 (Pedestrian Failed to Yield)** is used when the pedestrian ***was involved in a collision with a vehicle while crossing the roadway (not an expressway). The involved motorist had the right-of-way and was traveling or intending to travel straight through. This code should not be used if any of the following apply: 710 (Multiple Threat), 730 (Trapped), 741 (Dash), and 742 (Dart-Out). If it is NOT apparent that either party had the right-of-way, select "Other/Unknown."***

**770 (Motorist Failed to Yield)** is used when the ***pedestrian had the right-of-way and was involved in a collision with a vehicle while crossing the roadway (not an expressway) by a vehicle that was traveling or intending to travel straight through. This code should not be used if any of the following apply: 710 (Multiple Threat), 730 (Trapped), 741 (Dash), and 742 (Dart-Out). If it is NOT apparent that either party had the right-of-way, select "Other/Unknown."***

#### **Not At Intersection**

**760 (Pedestrian Failed to Yield)** is used when the pedestrian was involved in a collision with a vehicle while crossing the roadway (not an expressway). The involved

vehicle was traveling or intending to travel straight through and the officer identified the pedestrian failed to yield.

**770 (Motorist Failed to Yield)** is used when the pedestrian was involved in a collision with a vehicle while crossing the roadway (not an expressway). The vehicle was traveling or intending to travel straight through and the officer identified the motorist failed to yield.

**790 (Crossing Roadway - Vehicle Turning)** is used when the pedestrian was crossing a non-expressway road **and involved in a collision with** a vehicle that was turning or about to turn.

**781 (Motorist Left Turn - Parallel Paths)** is used when the motorist was initially traveling on a parallel path **with the pedestrian. The motorist made a left turn before the collision with the pedestrian.**

**782 (Motorist Left Turn - Perpendicular Paths)** is used when the motorist was initially traveling on a crossing path **with the pedestrian. The motorist made a left turn before the collision with the pedestrian.**

**791 (Motorist Right Turn - Parallel Paths)** is used when the motorist was initially traveling on a parallel path **with the pedestrian. The motorist made a right turn before the collision with the pedestrian.**

**792 (Motorist Right Turn on Red - Parallel Paths)** is used when the motorist was initially traveling on a parallel path **with the pedestrian. The motorist made a right turn on red before the collision with the pedestrian.**

**795 (Motorist Right Turn - Perpendicular Paths)** is used when the motorist was initially traveling on a crossing path **with the pedestrian. The motorist made a right turn before the collision with the pedestrian.**

**794 (Motorist Right Turn on Red - Perpendicular Paths)** is used when the motorist was initially traveling on a crossing path **with the pedestrian. The motorist made a right turn on red before the collision with the pedestrian.**

**799 (Motorist Turn / Merge - Other / Unknown)** is used when either the approach paths or turn direction are unknown and do not fit with any of the prescribed circumstances.

**800 (Non-Trafficway)** is used when the pedestrian was in a parking lot **space or aisle** or **in another or unknown non-trafficway area (e.g., driveway, non-right-of-way sidewalk or shared-use path, yard, open area, etc.), when involved in a collision with a vehicle which was** not backing.

**830 (Non-Trafficway - Parking Lot)** is used when the pedestrian in a parking lot **space or aisle was involved in a collision with a vehicle.**

**890 (Non-Trafficway - Other / Unknown)** is used when *the pedestrian was in an other non-trafficway area (e.g., driveway, non-right-of-way sidewalk or shared-use path, yard, open area, etc.) and involved in a collision with a vehicle or there were other or unknown circumstances.*

**910 (Crossing Expressway)** for definition, see Crash Type **910 (Crossing an Expressway)** below.

**910 (Crossing an Expressway)** is used when the *pedestrian was attempting to cross an expressway or expressway ramp when involved with collision with a motor vehicle. An expressway is a major thoroughfare without intersecting cross streets, having specific entrance and exit ramps. It includes superhighways, interstates, freeways, turnpikes, and parkways. Entrance and exit ramps are considered part of an expressway. The pedestrian does not have to be in a travel lane of the expressway or expressway ramp. The case materials/PAR need to indicate that the pedestrian was attempting to cross not just walking along or in the expressway.*

**990 (Other / Unknown - Insufficient Details)** is used when the circumstances do not clearly fit any of the situations described or are unknown.

**900 (Other - Unknown Location)** is used when *the pedestrian is involved in a collision with a vehicle and the crash situation is not covered by any of the types listed or insufficient information is available to specify the crash type.*

**680 (Not At intersection Other / Unknown)** is used when the *crash occurred at a Not At Intersection location, but the actions of the pedestrian prior to the collision with the vehicle cannot be determined.*

**690 (At Intersection - Other / Unknown)** is used when the *pedestrian/vehicle collision occurred at an intersection, but the actions of the pedestrian prior to the collision cannot be determined or it cannot be determined who failed to yield.*

**Consistency Checks:**

	IF	THEN
(0PB1)	<b>PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741,</b>	<b>at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 11.</b>
(FP9F)	PERSON TYPE equals 05, 06, 07, 08 and the PEDESTRIAN/BIKE - CRASH TYPE equals blank, case status is flawed.	
(PB00)	<b>PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN</b> equals 110-910,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.

IF	THEN
(PB03) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 211, 212, 460, 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).
(PB04) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 211, 212, <b>461</b> , 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).
(PB05) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 311, 312 or 313,	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) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 730,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
(PB12) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 510, 520 or 590,	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) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals <b>910</b> ,	<b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 03.
(PB17) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 211-214 or 219,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13 or 97. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
(PB18) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals <b>742</b> ,	at least one <b>NON-MOTORIST CONTRIBUTING CIRCUMSTANCES</b> must equal 01.
(PB19) <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 08,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> must not equal 510, 520, 590, 830 or 890.
(PB20) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 510, 520 or 590,	at least <b>one NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 02
(PB22) SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 342.

	IF	THEN
(PB23)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 - <b>CRASH TYPE - PEDESTRIAN</b> 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 - <b>CRASH TYPE - PEDESTRIAN</b> should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795 or 799.
(PB27)	<b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> equals 05, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 410 or 420.
(PB28)	<b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> equals 06, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 430 or 440.
(PB29)	<b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 04, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 410, 420, 430, 440 or 459
(PB30)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 220,	at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB32)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(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 - <b>CRASH TYPE - PEDESTRIAN</b> must not equal 320, 330, 360, 680, 830, 890, 900, or 910.
(PB36)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 250,	PERSON TYPE must equal 08.
(PB37)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 311, 312 or 313,	at least one <b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> must equal 08 or 10.

IF	THEN
(PB38) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 410 or 420,	at least one <b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> must equal 05.
(PB39) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 430 or 440,	at least one <b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> must equal 06.
(PB44) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 240,	EMERGENCY MOTOR VEHICLE USE should equal 2-6 for at least one vehicle.
(PB45) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 781 or 782,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11 or 17 for the vehicle number identified in this person's 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 460, 465, 510, 781, 782, 791, 792, 794, 795 or 799.
(PB56) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB59) <b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> equals 16, and PERSON TYPE equals 05 or 08,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 - <b>CRASH TYPE - PEDESTRIAN</b> should equal 220.

**IF**

**THEN**

- |        |   |  |
|--------|---|--|
| (PB61) | PEDESTRIAN/BIKE TYPING -<br><b>CRASH TYPE - PEDESTRIAN</b> equals<br>220, | DRIVER PRESENCE should equal 0 for<br>the motor vehicle striking the non-<br>motorist. |
| (PB62) | PEDESTRIAN/BIKE TYPING -<br><b>CRASH TYPE - PEDESTRIAN</b> equals<br>220, | at least one <b>NON-MOTORIST ACTION/<br/>CIRCUMSTANCES</b> must equal 12.              |
| (PB63) | PEDESTRIAN/BIKE TYPING -<br><b>CRASH TYPE - PEDESTRIAN</b> equals<br>230, | at least one RELATED FACTOR -<br>CRASH LEVEL should equal 19 or 23.                    |

## PEDESTRIAN/BIKE TYPING CRASH LOCATION - PEDESTRIAN

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PEDLOC

**ELEMENT VALUES:**

- 1 **At** Intersection
- 2 Intersection-Related
- 3 **Not At** Intersection
- 4 Non-**Trafficway** Location
- 9 Unknown / Insufficient Information

**Remarks:**

**1 (At Intersection)** is used when a *person is on a roadway (travel lane) either (1) in the intersection, (2) in an the area between a crosswalk and the perimeter of the intersection, or (3) in a crosswalk (whether marked or unmarked) adjacent to an intersection. The crossing or connection of a roadway and a driveway access is not an intersection and should be coded as 2 (Intersection-Related) or 3 (Not At Intersection).*

**2 (Intersection-Related)** is used when *a person is within the trafficway 50 feet out from the perimeter of an “At intersection” area including the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.) OR the crash is related to the flow of traffic through an intersection (e.g., the result of queuing traffic). Intersection-related area exclusions: (1) intersection, (2) crosswalk, (3) any area between the crosswalk and an intersection.*

**3 (Not At Intersection)** is used when a *person is within the trafficway more than 50 feet out from the perimeter of an “At Intersection” area AND the crash is not identified as related to the movement of the traffic units through an intersection. This includes the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.). This attribute is the default when the case materials/PAR give no indication that the crash is within 50 feet of an intersection.*

**4 (Non-Trafficway Location)** is used when *a person is off the trafficway, including parking lot spaces and aisles, driveways (beyond the driveway access), private roads, yards, and other open areas. Note: Crashes occurring on paved shoulders, sidewalks (within the trafficway) or driveway crossings are considered to be “trafficway” crashes and should not be placed in the 4 (Non-Trafficway Location).*

**9 (Unknown / Insufficient Information)** is used when there is insufficient information to determine where the *person was located*.

**Consistency Checks:**

	IF	THEN
(PB35)	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 - <b>CRASH LOCATION - PEDESTRIAN</b> must equal 1.
(PB66)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH</b> must equal 01, 02, 03, 09, or 22.
(PB67)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH</b> must equal 10, 11, 13, 14, 16, 20-25, 28, 98, 99.
(PB68)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH</b> must equal 10, 11, 13, 14, 16, 20-24, 28, 98, 99.
(PB69)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH</b> must equal 24, 25, 98, 99.
(PB70)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH</b> must equal 16, 22, 24, 98 or 99.
(PB91)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION</b> must equal 1, 2 or 9.
(PB92)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION</b> must equal 3, 4, 5, 6, 7, 8 or 9.
(PB93)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION</b> must equal 2, 3, 4, 5, 6, or 9.
(PB94)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION</b> must equal 7, 8 or 9.
(PB95)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION</b> must equal 2, 5 or 9.

## PEDESTRIAN/BIKE TYPING - PEDESTRIAN POSITION

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PEDPOS

### **ELEMENT VALUES:**

- 1 Intersection **Area**
- 2 Crosswalk Area
- 3 Travel Lane
- 4 Paved Shoulder / **Bicycle** Lane / Parking Lane
- 5 Sidewalk / Shared-Use Path / Driveway **Access**
- 6 Unpaved Right-of-Way
- 7 **Non-Trafficway** - Driveway
- 8 Non-**Trafficway** - Parking Lot / Other
- 9 Other / Unknown

### **Remarks:**

**1 (Intersection Area)** is used when *the person is either in an intersection (the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways) or in the area between the crosswalk, marked or unmarked and the perimeter of the intersection. If there are no sidewalks/crosswalks, the person must be in the intersection to choose this attribute. For a pedestrian or person on a personal conveyance in a marked bike lane within an intersection, use 1 (Intersection Area).*

**2 (Crosswalk Area)** is used when the person is:

- *Within a marked crosswalk.*
- *On an intersection leg in an area where there is a sidewalk on at least one side of that leg, but no crosswalk is identified in the case materials. These are unmarked crosswalk areas. For midblock locations, the crosswalk must be marked.*

*This attribute includes crosswalk areas that pass through a median, crossing, or traffic island.*

**3 (Travel Lane)** is used when *the person* is on a roadway **and not in the intersection area or crosswalk area.**

**4 (Paved Shoulder / Bicycle Lane / Parking Lane)** is used when the *person is on the paved shoulder, bicycle lane, or parking lane parts of a trafficway. A bicycle lane is a bikeway adjacent to travel lanes which has been designated for preferential or exclusive use by pedalcyclists through striping, signage, or pavement markings. This attribute*

*excludes pedestrians and persons on a personal conveyance in a bicycle lane in an intersection (i.e., use 1 (Intersection Area)). For shoulders, if it is unknown if the shoulder was paved or unpaved, then default to 9 (Other / Unknown).*

**5 (Sidewalk / Shared-Use Path / Driveway Access)** is used when *person is within the trafficway on a sidewalk, shared-use path, or driveway access. 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.*

**6 (Unpaved Right-of-Way)** is used when the *person is in an area within the trafficway where there is no improved surface (e.g., no pavement). Examples include grass medians, unpaved shoulders, and roadside locations like the space between the curb and the sidewalk. See 9 (Other / Unknown) for paved medians. If it is unknown if the location was paved or unpaved, then default to 9 (Other / Unknown).*

**7 (Non-Trafficway - Driveway)** is used when *the person is on the part of the driveway outside the trafficway. If the person is in a driveway access, use attribute 5 (Sidewalk / Shared-Use Path / Driveway Access).*

**8 (Non- Trafficway - Parking Lot / Other)** is used when the *person* is on other non-*trafficway* areas (parking lot *spaces/stalls and aisles*, non-right-of-way sidewalk or *shared-use path*, yard, open areas, etc.).

**9 (Other / Unknown)** *is used when the person is located within the trafficway in an area of an improved surface not applicable to previous attributes (e.g., a paved gore, paved separator/median, concrete traffic island.). This attribute also applies if the location of the person is not reported or unknown, If it is unknown if the location was paved or unpaved, then default to this attribute. For Non-Trafficway Location, this attribute is used when the person's position cannot be classified.*

**Consistency Checks:**

	IF	THEN
(PB76)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03.
(PB77)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02 or 10.
(PB78)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 11, 13.
(PB79)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, 20, 98 or 99.
(PB80)	PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 5,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 21, 23, 24, 98 or 99.

<b>IF</b>	<b>THEN</b>
<b>(PB81) PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 6,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98 or 99.</b>
<b>(PB82) PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 7 or 8,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.</b>
<b>(PB83) PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 9,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 09, 20, 22, 28, 98 or 99.</b>
<b>(PB91) PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 1, 2 or 9.</b>
<b>(PB92) PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 3, 4, 5, 6, 7, 8 or 9.</b>
<b>(PB93) PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 3, 4, 5, 6, or 9.</b>
<b>(PB94) PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 7, 8 or 9.</b>
<b>(PB95) PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9,</b>	<b>PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 5 or 9.</b>

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## PEDESTRIAN/BIKE TYPING - PEDESTRIAN INITIAL DIRECTION OF TRAVEL

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PEDDIR

### **ELEMENT VALUES:**

What was the Pedestrian's Initial Direction of Travel?

- 1 ***Northbound***
- 2 ***Eastbound***
- 3 ***Southbound***
- 4 ***Westbound***
- 9 Unknown ***Initial Direction of Travel***

### **Remarks:**

This data element is derived by the PBCAT application from PB34 - Motorist Direction and PB37 - Pedestrian Scenario. For example, if PB34 - Motorist Direction is coded **westbound** and PB37 - Pedestrian Scenario, is coded **11a (pedestrian within crosswalk area, approached from same direction as motorist)**, then the PBCAT application derives PB33- Pedestrian Initial Direction of Travel, as **westbound**, the same direction as the motorist.

***This data element is not applicable when PB31 - Crash Location - Pedestrian equals 3 (Not At Intersection) or 4 (Non-Trafficway Location).***

***9 (Unknown Initial Direction of Travel) is used when the pedestrian is at or near an intersection (PB31 - Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)) and the pedestrian's initial direction of travel is unknown.***

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## **PEDESTRIAN/BIKE TYPING - MOTORIST INITIAL DIRECTION OF TRAVEL**

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.MOTDIR

**ELEMENT VALUES:**

What was the Motorist's Initial Direction of Travel?

- 1 ***Northbound***
- 2 ***Eastbound***
- 3 ***Southbound***
- 4 ***Westbound***
- 9 Unknown ***Initial Direction of Travel***

**Remarks:**

***This data element is not applicable when PB31 - Crash Location - Pedestrian equals 3 (Not At Intersection) or 4 (Non-Trafficway Location).***

***9 (Unknown Initial Direction of Travel) is used when the pedestrian is at or near an intersection (PB31 - Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)) and the motorist's initial direction of travel is unknown.***

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## PEDESTRIAN/BIKE TYPING - MOTORIST MANEUVER

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.MOTMAN

### **ELEMENT VALUES:**

Select the maneuver being made by the motorist at the time of the collision.

- 1 Left Turn
- 2 Right Turn
- 3 Straight Through
- 9 Unknown ***Motorist Maneuver***

### **Remarks:**

***This data element is not applicable when PB31 - Crash Location - Pedestrian equals 3 (Not At Intersection) or 4 (Non-Trafficway Location).***

***9 (Unknown Motorist Maneuver) is used when the pedestrian is at or near an intersection (PB31 - Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)) and the motorist's maneuver is unknown.***

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## **PEDESTRIAN/BIKE TYPING** **INTERSECTION LEG**

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PEDLEG

**ELEMENT VALUES:**

- 1 Nearside
- 2 Farside
- 9 Unknown

**Remarks:**

Requires the user to select the correct leg of the intersection where the crash occurred. The choices, regardless of the motorist maneuver, will always be “Nearside” and “Farside.”

***This data element is not applicable when PB31 - Crash Location - Pedestrian equals 3 (Not At Intersection) or 4 (Non-Trafficway Location).***

**1 (Nearside)** indicates that the collision occurred as the motorist was approaching the intersection.

**2 (Farside)** indicates that the collision occurred as the motorist was departing the intersection.

**9 (Unknown)** is used when the pedestrian is at or near an intersection (PB31 - Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)) and the leg of the intersection is unknown.

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## **PEDESTRIAN/BIKE TYPING** **PEDESTRIAN SCENARIO**

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.PEDSNR

**ELEMENT VALUES:**

**Motorist traveling straight through - Crash Occurred on Near (Approach) Side of Intersection**

- 1a Pedestrian within crosswalk area, traveled from motorist's left.
- 1b Pedestrian within crosswalk area, traveled from motorist's right.
- 1c Pedestrian within crosswalk area, approach direction unknown.
- 2a Pedestrian outside crosswalk area, traveled from motorist's left.
- 2b Pedestrian outside crosswalk area, traveled from motorist's right.
- 2c Pedestrian outside crosswalk area, approach direction unknown.

**Motorist traveling straight through - Crash Occurred on Far Side of Intersection**

- 3a Pedestrian within crosswalk area, traveled from motorist's left.
- 3b Pedestrian within crosswalk area, traveled from motorist's right.
- 3c Pedestrian within crosswalk area, approach direction unknown.
- 4a Pedestrian outside crosswalk area, traveled from motorist's left.
- 4b Pedestrian outside crosswalk area, traveled from motorist's right.
- 4c Pedestrian outside crosswalk area, approach direction unknown.

**Motorist turning right - Crash Occurred on Near (Approach) Side of Intersection**

- 5a Pedestrian within crosswalk area, traveled from motorist's left.
- 5b Pedestrian within crosswalk area, traveled from motorist's right.
- 5c Pedestrian within crosswalk area, approach direction unknown.
- 6a Pedestrian outside crosswalk area, traveled from motorist's left.
- 6b Pedestrian outside crosswalk area, traveled from motorist's right.
- 6c Pedestrian outside crosswalk area, approach direction unknown.

**Motorist turning right - Crash Occurred on Far Side of Intersection**

- 7a Pedestrian within crosswalk area, approach direction same as motorist's.
- 7b Pedestrian within crosswalk area, approach direction opposite motorist's.
- 7c Pedestrian within crosswalk area, approach direction unknown.
- 8a Pedestrian outside crosswalk area, approach direction same as motorist's.
- 8b Pedestrian outside crosswalk area, approach direction opposite motorist's.
- 8c Pedestrian outside crosswalk area, approach direction unknown.

**Motorist turning left - Crash Occurred on Near (Approach) Side of Intersection**

- 9a Pedestrian within crosswalk area, traveled from motorist's left.
- 9b Pedestrian within crosswalk area, traveled from motorist's right.
- 9c Pedestrian within crosswalk area, approach direction unknown.
- 10a Pedestrian outside crosswalk area, traveled from motorist's left.
- 10b Pedestrian outside crosswalk area, traveled from motorist's right.
- 10c Pedestrian outside crosswalk area, approach direction unknown.

**Motorist turning left - Crash Occurred on Far Side of Intersection**

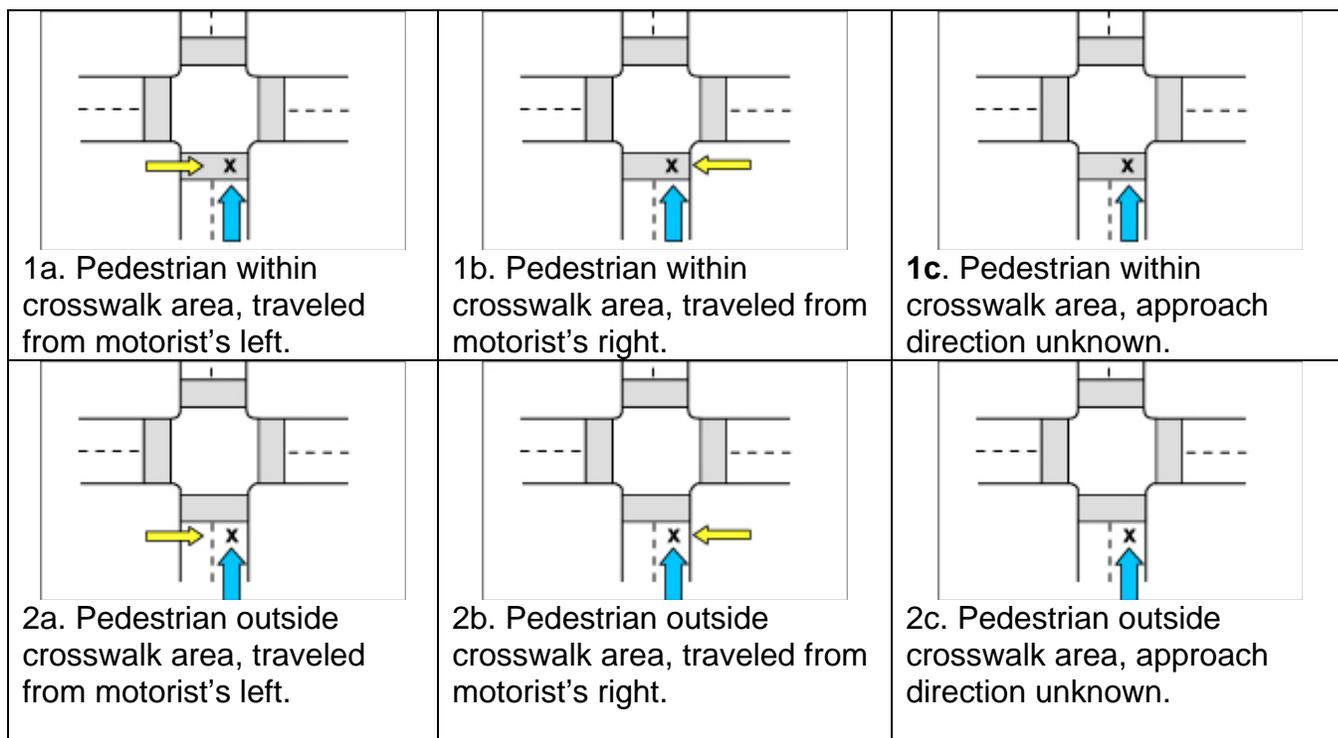
- 11a Pedestrian within crosswalk area, approach direction same as motorist's.
- 11b Pedestrian within crosswalk area, approach direction opposite motorist's.
- 11c Pedestrian within crosswalk area, approach direction unknown.
- 12a Pedestrian outside crosswalk area, approach direction same as motorist's.
- 12b Pedestrian outside crosswalk area, approach direction opposite motorist's.
- 12c Pedestrian outside crosswalk area, approach direction unknown.

**Remarks:**

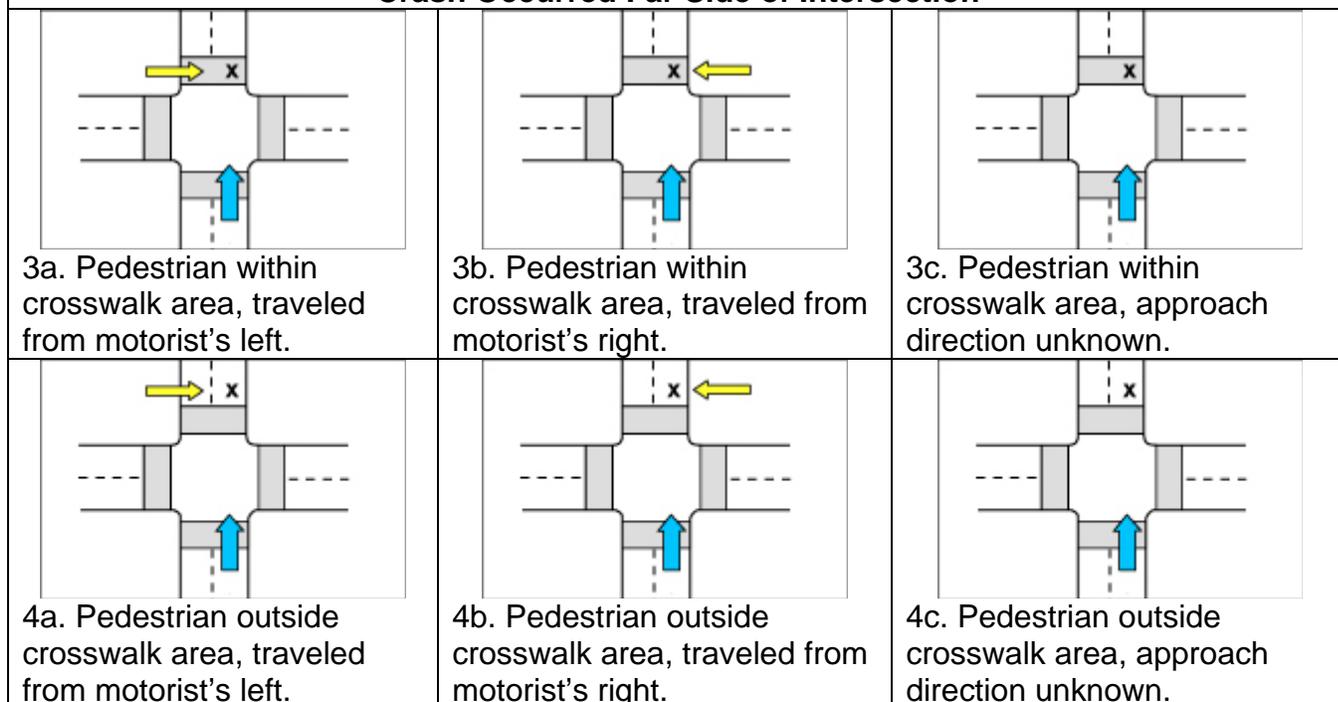
***This data element is not applicable when PB31 - Crash Location - Pedestrian equals 3 (Not At Intersection) or 4 (Non-Trafficway Location).***

**(See Scenario Diagram on following pages)**

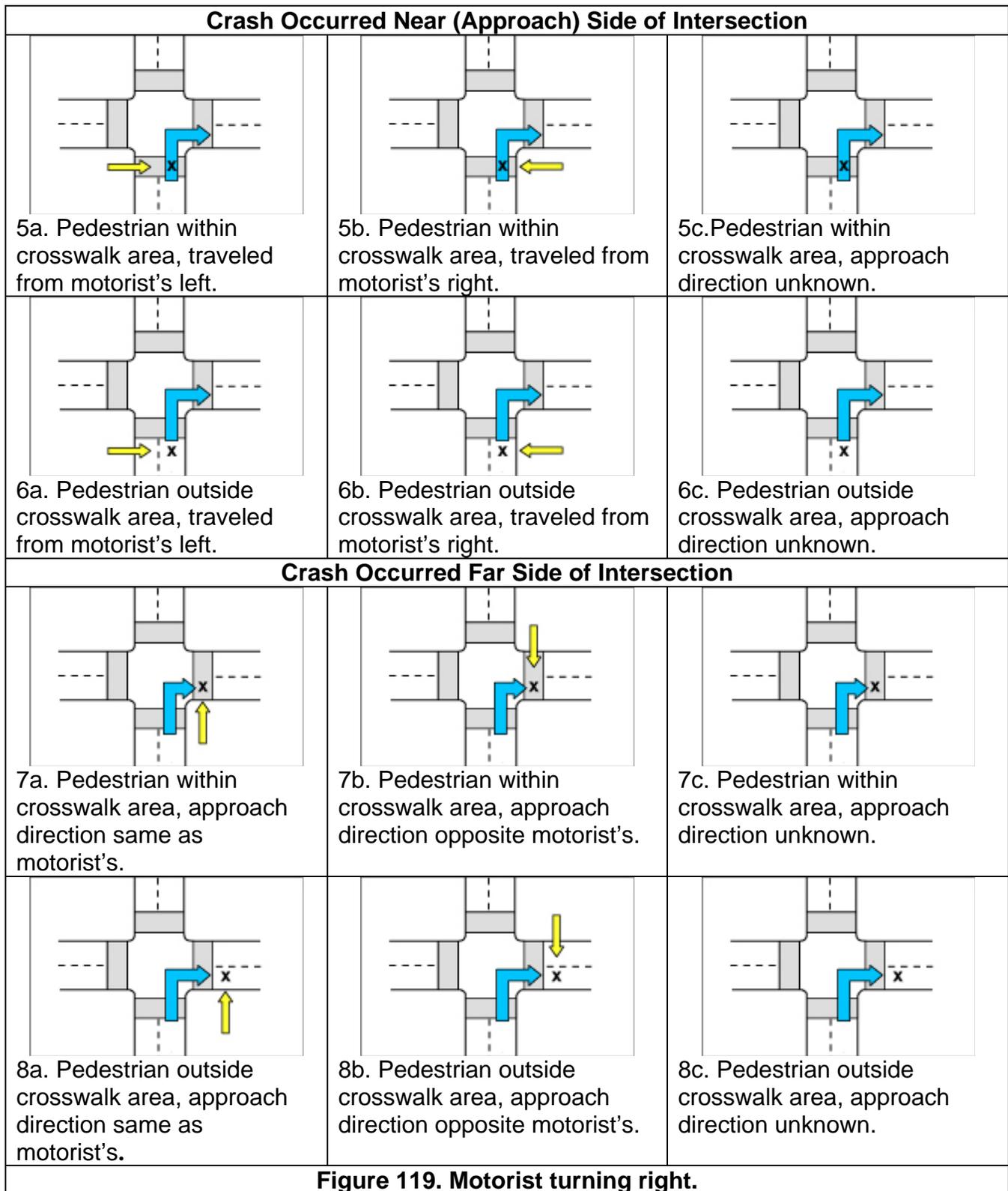
**Crash Occurred Near (Approach) Side of Intersection**

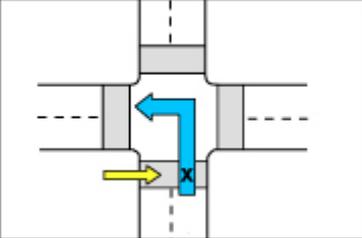
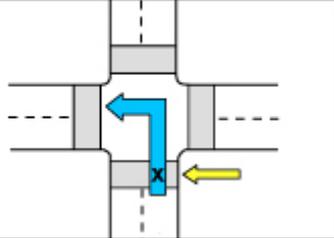
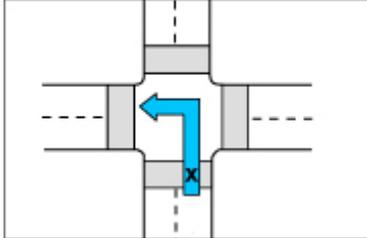
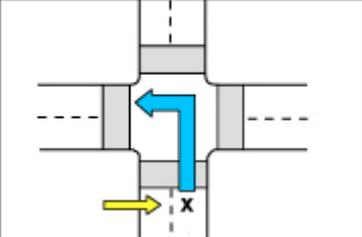
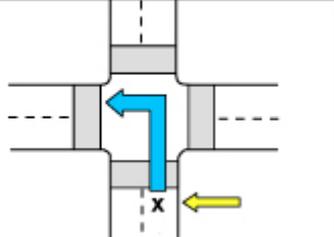
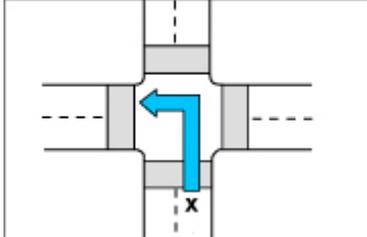
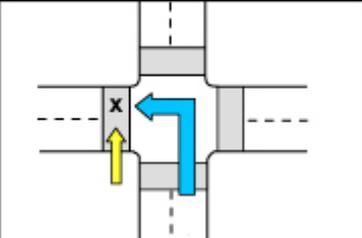
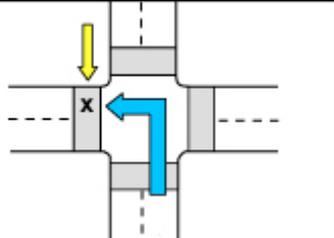
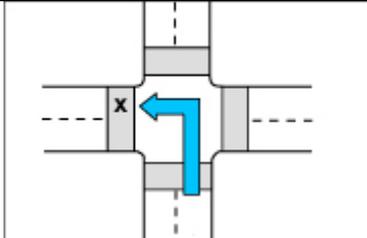
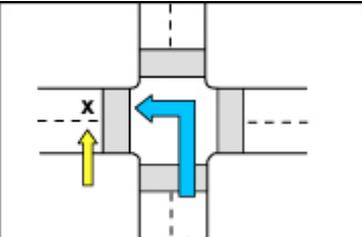
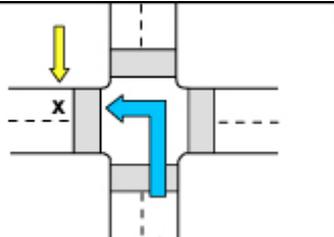
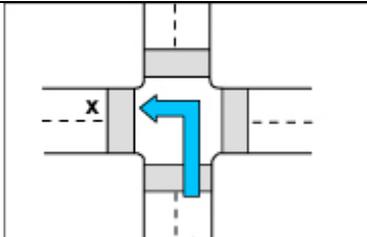


**Crash Occurred Far Side of Intersection**



**Figure 118. Motorist traveling straight through.**



<b>Crash Occurred Near (Approach) Side of Intersection</b>		
 <p>9a. Pedestrian within crosswalk area, traveled from motorist's left.</p>	 <p>9b. Pedestrian within crosswalk area, traveled from motorist's right.</p>	 <p>9c. Pedestrian within crosswalk area, approach direction unknown.</p>
 <p>10a. Pedestrian outside crosswalk area, traveled from motorist's left.</p>	 <p>10b. Pedestrian outside crosswalk area, traveled from motorist's right.</p>	 <p>10c. Pedestrian outside crosswalk area, approach direction unknown.</p>
<b>Crash Occurred Far Side of Intersection</b>		
 <p>11a. Pedestrian within crosswalk area, approach direction same as motorist's.</p>	 <p>11b. Pedestrian within crosswalk area, approach direction opposite motorist's.</p>	 <p>11c. Pedestrian within crosswalk area, approach direction unknown.</p>
 <p>12a. Pedestrian outside crosswalk area, approach direction same as motorist's.</p>	 <p>12b. Pedestrian outside crosswalk area, approach direction opposite motorist's.</p>	 <p>12c. Pedestrian outside crosswalk area, approach direction unknown.</p>

**Figure 120. Motorist turning left.**

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## **PEDESTRIAN/BIKE TYPING - CRASH TYPE - BICYCLE**

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.BIKECTYPE

**ELEMENT VALUES:**

***Crash Group attribute names are left justified, followed by the element value in parenthesis. Crash Type element values and attribute names are listed below the applicable Crash Group.***

### **Initial Approach Path - Crossing Paths or Parallel Paths**

**Loss of Control / Turning Error (110)**

***Loss of Control***

- 121     Bicyclist Lost Control - Mechanical Problems
- 122     Bicyclist Lost Control - Oversteering, Improper Braking, Speed
- 123     Bicyclist Lost Control - Alcohol / Drug Impairment
- 124     Bicyclist Lost Control - Surface Conditions
- 129     Bicyclist Lost Control - Other / Unknown
- 131     Motorist Lost Control - Mechanical Problems
- 132     Motorist Lost Control - Oversteering, Improper Braking, Speed
- 133     Motorist Lost Control - Alcohol / Drug Impairment
- 134     Motorist Lost Control - Surface Conditions
- 139     Motorist Lost Control - Other / Unknown

### **Initial Approach Path - Crossing Paths**

**Loss of Control / Turning Error (110)**

***Turning Error***

- 111     Motorist Turning Error - Left Turn
- 112     Motorist Turning Error - Right Turn
- 113     Motorist Turning Error - Other
- 114     Bicyclist Turning Error - Left Turn
- 115     Bicyclist Turning Error - Right Turn
- 116     Bicyclist Turning Error - Other

### ***Drive / Ride - Out / Through***

**Motorist Failed to Yield - Sign-Controlled Intersection (140)**

- 141     Motorist Drive-Out - Sign-Controlled Intersection
- 143     Motorist Drive-Through - Sign-Controlled Intersection

Bicyclist Failed to Yield - Sign-Controlled Intersection (145)

- 142 Bicyclist Ride-Out - Sign-Controlled Intersection
- 144 Bicyclist Ride-Through - Sign-Controlled Intersection
- 147 Multiple Threat - Sign-Controlled Intersection

Motorist Failed to Yield - Signalized Intersection (150)

- 151 Motorist Drive-Out - Right Turn on Red
- 152 Motorist Drive-Out - Signalized Intersection
- 154 Motorist Drive-Through - Signalized Intersection

Bicyclist Failed to Yield - Signalized Intersection (158)

- 153 Bicyclist Ride-Out - Signalized Intersection
- 155 Bicyclist Ride-Through - Signalized Intersection

***Bicyclist Failed to Clear***

- 156 Bicyclist Failed to Clear - Trapped
- 157 Bicyclist Failed to Clear - Multiple Threat
- 159 Bicyclist Failed to Clear - Unknown

Crossing Paths - Other Circumstances (190)

- 148 Sign-Controlled Intersection - Other/Unknown
- 158 Signalized Intersection - Other/Unknown
- 160 Crossing Paths - Uncontrolled Intersection
- 180 Crossing Paths - Intersection - Other/Unknown
- 380 Crossing Paths - Midblock - Other/Unknown

***Initial Approach Path - Parallel Paths***

***Motorist Turned or Merged***

Motorist Left Turn / Merge (210)

- 211 Motorist Left Turn - Same Direction
- 212 Motorist Left Turn - Opposite Direction

Motorist Right Turn / Merge (215)

- 213 Motorist Right Turn - Same Direction
- 217 Motorist Right Turn on Red - Same Direction
- 214 Motorist Right Turn - Opposite Direction
- 218 Motorist Right Turn on Red - Opposite Direction

Parking / Bus-Related (219)

- 215 Motorist Drive-In/Out - Parking
- 216 Bus/Delivery Vehicle Pullover

### ***Bicyclist Turned or Merged***

#### Bicyclist Left Turn/Merge (220)

- 221 Bicyclist Left Turn - Same Direction
- 222 Bicyclist Left Turn - Opposite Direction

#### Bicyclist Right Turn / Merge (225)

- 223 Bicyclist Right Turn - Same Direction
- 224 Bicyclist Right Turn - Opposite Direction

### ***Overtaking/Passing Circumstances***

#### Motorist Overtaking Bicyclist (230)

- 231 Motorist Overtaking - Undetected Bicyclist
- 232 Motorist Overtaking - Misjudged Space
- 235 Motorist Overtaking - Bicyclist Swerved
- 239 Motorist Overtaking - Other / Unknown

#### Bicyclist Overtaking Motorist (240)

- 241 Bicyclist Overtaking - Passing on Right
- 242 Bicyclist Overtaking - Passing on Left
- 243 Bicyclist Overtaking - Parked Vehicle
- 244 Bicyclist Overtaking - Extended Door
- 249 Bicyclist Overtaking - Other / Unknown

### ***One Party on the Wrong-Way / Wrong-Side***

#### ***Wrong-Way / Wrong-Side*** (258)

- 250 ***Wrong-Way / Wrong-Side*** - Bicyclist
- 255 ***Wrong-Way / Wrong-Side*** - Motorist
- 259 ***Wrong-Way / Wrong-Side*** - Unknown

#### Parallel Paths - Other Circumstances (290)

- 219 Motorist Turn/Merge - Other / Unknown
- 280 Parallel Paths - Other / Unknown
- 225 Bicyclist Ride-Out - Parallel Path

### ***Initial Approach Path - Crossing Paths***

#### ***Bicyclist Ride-Out***

##### Bicyclist Failed to Yield - Midblock (310)

- 311 Bicyclist Ride-Out - Residential Driveway
- 312 Bicyclist Ride-Out - Commercial ***Driveway***
- 313 *Bicyclist Ride-Out – Driveway, Unknown Type***
- 318 Bicyclist Ride-Out - Other Midblock
- 319 Bicyclist Ride-Out - Midblock - Unknown

357 Multiple Threat - Midblock

**Motorist Drive-Out**

Motorist Failed to Yield - Midblock (320)

- 321 Motorist Drive-Out - Residential Driveway
- 322 Motorist Drive-Out - Commercial **Driveway**
- 323 Motorist Drive-Out - Driveway, Unknown Type**
- 328 Motorist Drive-Out - Other Midblock
- 329 Motorist Drive-Out - Midblock – Unknown

**Unusual / Specific Circumstances**

Backing Vehicle (600)

**610 Backing Vehicle**

Other / Unusual Circumstances (850)

- 700 Play Vehicle-Related
- 800 Unusual Circumstances

Non-**Trafficway** (910)

910 Non-**Trafficway**

Other / Unknown - Insufficient Details (990)

- 970 Unknown Approach Paths
- 980 Unknown Location

**Remarks:**

Crash Type selection depends upon the Initial Approach Path

***Initial Approach Path - Crossing Paths is used when the bicyclist and motorist were traveling on intersecting paths prior to their impact. This should be evaluated based on the parties' movements prior to any avoidance actions that may occur or any turns that caused the impact between the two parties.***

***Initial Approach Paths - Parallel Paths is used when the bicyclist and motorist were traveling in the same or opposite directions prior to their impact. This should be evaluated based on the parties' movements prior to any avoidance actions that may occur or any turns that caused the impact between the two parties***

***If the Approach Path is unknown see Crash Type 970 (Unknown Approach Paths).***

**Initial Approach Path - Crossing Paths or Parallel Paths**

**110 Loss of Control / Turning Error**

**(Loss of Control) is used to identify situations where the critical factor leading to the collision involved control loss by the motorist or the bicyclist. Control loss can be related to mechanical failure, environmentally induced vehicle instability, driver medical issues, unconsciousness, falling asleep, or alcohol/drug impairment. The loss of control must have occurred prior to the driver doing any avoidance maneuver. For operators steering out of their lane and into the path of the other operator while executing a turn, see "Turning Error".**

**121 (Bicyclist Lost Control - Mechanical Problems)** is used when the bicyclist lost control due to mechanical problems / *part failure (e.g., flat tire, brake failure, broken chain, etc.)*.

**122 (Bicyclist Lost Control - Oversteering, Improper Braking, Speed)** is used when the bicyclist lost control due to oversteering, improper braking, or speed too fast for conditions. ***Care should be used to differentiate oversteering from overcorrecting, which indicates an avoidance maneuver was made.***

**123 (Bicyclist Lost Control - Alcohol/Drug Impairment)** *is used when the case materials/PAR indicate that the bicyclist lost control as a result of alcohol or drug impairment. Do not independently evaluate test results for this determination. The case materials/PAR must indicate that the operator's impairment caused the loss of control and not just that alcohol or drugs were listed among the contributing factors in the crash.*

**124 (Bicyclist Lost Control - Surface Conditions)** is used when the bicyclist lost control due to surface conditions (sand, debris, potholes, ice, etc.).

**129 (Bicyclist Lost Control - Other/Unknown)** is used when the bicyclist lost control due to other or unknown circumstances. ***For example, a prior collision with moving or stationary object(s), falling asleep, driver illness such as heart attacks, diabetic comas, unconsciousness or blackout, etc. This would exclude prior contact with a parked vehicle. See 243 (Bicyclist Overtaking - Parked Vehicle) and 244 (Bicyclist Overtaking - Extended Door).***

**131 (Motorist Lost Control - Mechanical Problems)** is used when the motorist lost control due to mechanical problems (*e.g., blowout, stalled engine, wheel falls off, etc.*).

**132 (Motorist Lost Control - Oversteering, Improper Braking, Speed)** is used when the motorist lost control due to oversteering, improper braking, or speed too fast for conditions. ***Care should be used to differentiate oversteering from overcorrecting, which indicates an avoidance maneuver was made.***

**133 (Motorist Lost Control - Alcohol/Drug Impairment)** is used when the **case materials/PAR indicate that the** motorist lost control **as a result of** alcohol or drug impairment. **Do not independently evaluate test results for this determination. The case materials/PAR must indicate that the operator's impairment caused the loss of control and not just that alcohol or drugs were listed among the contributing factors in the crash.**

**134 (Motorist Lost Control - Surface Conditions)** is used when the motorist lost control due to surface conditions (sand, debris, potholes, ice, etc.).

**139 (Motorist Lost Control - Other/Unknown)** is used when the motorist lost control due to other or unknown circumstances. **For example, a prior collision with moving or stationary object(s), falling asleep, driver illness such as heart attacks, diabetic comas, unconsciousness or blackout, etc.**

#### **Initial Approach Path - Crossing Paths**

**(Turning Error)** is used **to identify situations where the critical factor leading to the collision involved** either the motorist or the bicyclist **executing an improper left or right turn at an intersection or to/from a driveway. These are situations where one operator travels out of their lane during the turn and into the path of the other operator. This excludes situations where the movement into the path of the other operator was caused by a loss of control (e.g., sliding on ice when turning).**

**111 (Motorist Turning Error - Left Turn)** is used when the motorist made a left turn **at an intersection or a commercial driveway**, cut the corner and entered the opposing traffic lane **(travel lane, bike lane, paved shoulder, parking lane) occupied by the bicyclist.**

**112 (Motorist Turning Error - Right Turn)** is used when the motorist made a right turn **at an intersection or a commercial driveway**, swung too wide and entered the opposing traffic lane **(travel lane, bike lane, paved shoulder, parking lane) occupied by the bicyclist.**

**113 (Motorist Turning Error - Other)** is used when the motorist made a turning error which led them into the path of **a bicyclist who was not in the opposing traffic lane (e.g., on the sidewalk). Also use this attribute for circumstances when the motorist turned into a residential driveway striking the bicyclist on the driveway access or when the motorist made a turning error subsequent to exiting from a residential driveway access.**

**114 (Bicyclist Turning Error - Left Turn)** is used when the bicyclist made a left turn **at an intersection or a commercial driveway**, cut the corner and entered the opposing traffic lane **(travel lane, bike lane, paved shoulder, parking lane) occupied by the motorist.**

**115 (Bicyclist Turning Error - Right Turn)** is used when the bicyclist made a right turn *at an intersection or a commercial driveway*, swung too wide and entered the opposing traffic lane (*travel lane, bike lane, paved shoulder, parking lane*) *occupied by the motorist*.

**116 (Bicyclist Turning Error - Other)** is used when the bicyclist *turned into a residential driveway striking the motorist or made a turning error subsequent to exiting from a residential driveway access*.

**(Drive/Ride - Out/Through)** *is used when the bicyclist and motorist are on crossing paths and identifies situations where the critical factor leading to the collision involves either the motorist or the bicyclist failing to yield the right-of-way while turning at or proceeding straight through an intersection.*

**140 (Motorist Failed to Yield - Sign-Controlled Intersection)** *is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the motorist did not properly yield right-of-way to the bicyclist at an intersection where the motorist was controlled by a sign (stop or yield) or flashing signal.* Note: Crashes at traffic circles or roundabouts with yield control are included here.

**141 (Motorist Drive-Out - Sign-Controlled Intersection)** *is used when the case materials/PAR indicate that the bicyclist had the right-of-way and the motorist was stopped at a sign (stop or yield) or flashing signal prior to proceeding and colliding with the bicyclist.*

**143 (Motorist Drive-Through - Sign-Controlled Intersection)** *is used when the case materials/PAR indicate that the bicyclist had the right-of-way and the motorist did not stop at a sign (stop or yield) or flashing light controlled intersection.*

**145 (Bicyclist Failed to Yield - Sign-Controlled Intersection)** *is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the bicyclist did not properly yield right-of-way to the motorist at an intersection where the bicyclist was controlled by a sign (stop or yield) or flashing signal.* Note: Crashes at traffic circles or roundabouts with yield control are included here.

**142 (Bicyclist Ride-Out - Sign-Controlled Intersection)** *is used when the case materials/PAR indicate that the motorist had the right-of-way and the bicyclist was stopped prior to proceeding and colliding with the motorist. Note: 147 (Multiple Threat - Sign-Controlled Intersection) takes precedence if both apply.*

**144 (Bicyclist Ride-Through - Sign-Controlled Intersection)** *is used when the case materials/PAR indicate that the motorist had the right-of-way and the bicyclist did not stop at a sign (stop or yield) or flashing light controlled intersection. Note: 147 (Multiple Threat - Sign-Controlled Intersection) takes precedence if both apply.*

**147 (Multiple Threat - Sign-Controlled Intersection)** *is used when the case materials/PAR indicate that the motorist had the right-of-way and the bicyclist entered a sign-controlled intersection in front of standing or slowing traffic and was **involved in a collision with** another vehicle whose view of the bicyclist was blocked. **This value takes precedence over 142 (Bicyclist Ride-Out - Sign-Controlled Intersection) and 144 (Bicyclist Ride-Through - Sign-Controlled Intersection).***

**150 (Motorist Failed to Yield - Signalized Intersection)** *is used when **PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related)** and the motorist either violated the signal or did not properly yield right-of-way to the bicyclist.*

**151 (Motorist Drive-Out - Right Turn on Red)** *is used when the case materials/PAR indicate that the bicyclist had the right-of-way and the motorist was stopped at a red signal prior to attempting to make a right turn on red resulting in a collision with the bicyclist.*

**152 (Motorist Drive-Out - Signalized Intersection)** *is used when the case materials/PAR indicate that the bicyclist had the right-of-way and the motorist was stopped at a red signal prior to proceeding into the intersection on red when going straight or making a turn, resulting in a collision with the bicyclist. This does not include situations where the motorist was making a right turn on red (RTOR). See 151 (Motorist Drive-Out - Right Turn on Red).*

**154 (Motorist Drive-Through - Signalized Intersection)** *is used when the case materials/PAR indicate that the bicyclist had the right-of-way and the motorist proceeded through the red light without stopping (runs the red light).*

**158 (Bicyclist Failed to Yield - Signalized Intersection)** *is used when **PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related)** and the bicyclist either violated the signal or did not properly yield right-of-way to the motorist.*

**153 (Bicyclist Ride-Out - Signalized Intersection)** *is used when the case materials/PAR indicate that the motorist had the right-of-way and the bicyclist was stopped at a red signal prior to entering the intersection on a red light, resulting in a collision with the motorist.*

**155 (Bicyclist Ride-Through - Signalized Intersection)** *is used when the case materials/PAR indicate that the motorist had the right-of-way and the bicyclist proceeded through the red light without stopping resulting in a collision with the motorist. The bicyclist could be turning or going straight through the intersection.*

**(Bicyclist Failed to Clear- Signalized Intersection)** *is used when the bicyclist entered the intersection on green, but did not clear the intersection before the signal changed for the cross-street traffic giving those operators the right-of-way.*

**156 (Bicyclist Failed to Clear - Trapped)** is used when the bicyclist entered the intersection on green, did not clear the intersection before the signal changed for the cross-street traffic *giving those operators the right-of-way*, and was *involved in a collision with* a vehicle whose view was not obstructed by standing or stopped traffic

**157 (Bicyclist Failed to Clear - Multiple Threat)** is used when the bicyclist entered the intersection on green, did not clear the intersection before the signal changed for the cross-street traffic *giving those operators the right-of-way*, and was *involved in a collision with* a motorist whose view of the bicyclist was obstructed by standing or stopped traffic.

**159 (Bicyclist Failed to Clear - Unknown)** is used when the bicyclist entered the intersection on green, failed to clear the intersection and was involved in a collision with a vehicle, but it is unknown whether the bicyclist was trapped in the intersection by a signal change or if there was a multiple threat situation or other circumstances surrounding the crash.

**190 (Crossing Paths - Other Circumstances)** is used when the bicyclist and motorist were on initial crossing paths, but the crash cannot be further classified.

**148 (Sign-Controlled Intersection - Other / Unknown)** is used when the crash occurred at a sign-controlled intersection but cannot be further classified.

**158 (Signalized Intersection - Other / Unknown)** is used when the crash occurred at a signal-controlled intersection but cannot be further classified.

**160 (Crossing Paths - Uncontrolled Intersection)** is used when the crash occurred at an intersection not controlled by signs or signals.

**180 (Crossing Paths - Intersection - Other / Unknown)** is used when the bicyclist and motorist were on initial crossing paths but the crash circumstances cannot be further classified.

**380 (Crossing Paths - Midblock - Other / Unknown)** is used when the crash involved a bicyclist and motorist on initial crossing paths at a midblock location but cannot be further classified.

**Initial Approach Paths - Parallel Paths**

**(Motorist Turned or Merged)** *is used when the motorist made a turn or merged into the path of a bicyclist.*

**210 (Motorist Left Turn / Merge)** is used when the motorist made a left turn or merge into the path of a bicyclist traveling in the same or opposite direction **as the motorist**.

**211 (Motorist Left Turn - Same Direction)** is used when the motorist turned left in front of a bicyclist going in the same direction **as the motorist**.

**212 (Motorist Left Turn - Opposite Direction)** is used when the motorist turned left in front of a bicyclist coming from the opposite direction **as the motorist**.

**215 (Motorist Right Turn / Merge)** is used when the motorist made a right turn or merge into the path of a bicyclist traveling in the same or opposite direction **as the motorist**.

**213 (Motorist Right Turn - Same Direction)** is used when the motorist turned right in front of a bicyclist going in the same direction **as the motorist**. **Excludes motorist right turn on red. See 217 (Motorist Right Turn on Red - Same Direction).**

**217 (Motorist Right Turn on Red - Same Direction)** is used when **the motorist turned right on red (RTOR) in front of a bicyclist traveling in the same direction as the motorist**.

**214 (Motorist Right Turn - Opposite Direction)** is used when the motorist turned right in front of a bicyclist **traveling in the opposite direction as the motorist**. **Excludes motorist right turn on red. See 218 (Motorist Right Turn on Red - Opposite Direction).** **For a bicyclist traveling in the wrong direction and the motorist makes a right turn into the path of the bicyclist, this crash type takes priority over 250 (Wrong Way / Wrong Side - Bicyclist) to capture the turning maneuver which made the situation critical.**

**218 (Motorist Right Turn on Red - Opposite Direction)** is used when **the motorist turned right on red (RTOR) in front of a bicyclist traveling in the opposite direction as the motorist**.

**219 (Parking / Bus-Related)** is used when the bicyclist was **involved in a collision with a vehicle** entering or exiting a parking space or by a bus or delivery vehicle pulling into or away from the curb **while in forward motion. If the motorist was “backing” see 600 (Backing Vehicle).**

**215 (Motorist Drive-In / Out - Parking)** is used when the **vehicle and bicyclist collided** while **the involved vehicle was moving forward in the process of** exiting or entering on-street parking. **If the motorist was “backing” see 610 (Backing Vehicle).**

**216 (Bus/Delivery Vehicle Pullover)** is used when the bicyclist was **involved in a collision with a bus or delivery vehicle pulling forward into or away from the curb. If the vehicle was “backing” see 610 (Backing Vehicle).**

***(Bicyclist Turned or Merged)*** is used when the bicyclist made a turn or merged into the path of a motorist.

**220 (Bicyclist Left Turn / Merge)** is used when the bicyclist made a left turn or merge into the path of a motor vehicle traveling in the same or opposite direction **as the bicyclist**. ***This excludes bicyclists that are traveling on a sidewalk or other parallel path prior to turning left into the path of a vehicle on the roadway. See Crash Type - Bicycle 225 (Bicyclist Ride-Out - Parallel Path).***

**221 (Bicyclist Left Turn - Same Direction)** is used when the bicyclist turned or merged left in front of a motorist going in the same direction **as the bicyclist**.

**222 (Bicyclist Left Turn - Opposite Direction)** is used when the bicyclist **turned or merged** left in front of a motorist traveling in the opposite direction **as the bicyclist**.

**225 (Bicyclist Right Turn / Merge)** is used when the bicyclist made a right turn or merge into the path of a motor vehicle traveling in the same or opposite direction **as the bicyclist**. ***This excludes bicyclists that are traveling on a sidewalk or other parallel path prior to turning right into the path of a vehicle on the roadway. See Crash Type - Bicycle 225 (Bicyclist Ride-Out - Parallel Path).***

**223 (Bicyclist Right Turn - Same Direction)** is used when the bicyclist turned or merged right in front of a motorist going in the same direction **as the bicyclist**.

**224 (Bicyclist Right Turn - Opposite Direction)** is used when the bicyclist turned or merged right in front of a motorist coming from the opposite direction **as the bicyclist**. ***For a bicyclist traveling in the wrong direction that makes a right turn into the path of the motorist, this crash type takes priority over 250 (Wrong Way / Wrong Side - Bicyclist) to capture the turning maneuver which made the situation critical.***

#### **(Overtaking/Passing Circumstances)**

**230 (Motorist Overtaking Bicyclist)** is used when the motorist **was traveling the same direction as the bicyclist and** overtaking the bicyclist **when they collided**. ***This includes both passing the bicyclist and approaching from behind at a faster speed. A motorist that passes on the left by entering the opposing traffic lane and strikes an oncoming bicyclist is coded under Crash Group - Bicyclist 258 (Wrong Way / Wrong Side).***

**231 (Motorist Overtaking - Undetected Bicyclist)** is used when the motorist was overtaking the bicyclist and ***the case materials/PAR indicate that the motorist did not see the bicyclist or there is indication that the motorist saw the bicyclist but the recognition was too late to avoid the collision. For example, the officer identifies that the driver was distracted or inattentive, the bicyclist was wearing dark clothing/not visible, or there was no roadway lighting and/or no lights/reflectors on the bicycle at night.***

**232 (Motorist Overtaking - Misjudged Space)** is used when the motorist was overtaking *the bicyclist and the case materials/PAR indicate that the motorist saw the bicyclist but misjudged the width or distance required to pass the bicyclist resulting in a collision between the two.*

**235 (Motorist Overtaking - Bicyclist Swerved)** is used when *the motorist was overtaking the bicyclist and the bicyclist swerved or moved suddenly* into the path of an overtaking vehicle. *(Note: Bicyclists that were clearly merging or turning to the left and were struck by a vehicle traveling in the same direction would be coded under 221 (Bicyclist Left Turn - Same Direction).*

**239 (Motorist Overtaking - Other / Unknown)** is used when the motorist was overtaking the bicyclist, but the specific circumstances surrounding the overtaking maneuver do not conform to the other situations described or are unknown. *If the bicyclist struck a parked vehicle and that impact resulted in a collision with a motor vehicle in-transport, use 243 (Bicyclist Overtaking - Parked Vehicle) or 244 (Bicyclist Overtaking - Extended Door).*

**240 (Bicyclist Overtaking Motorist)** is used when the bicyclist *was traveling the same direction as the motorist and* was overtaking the motorist *on the right or the left when they collided. Note: A bicyclist that passes on the left by entering the opposing traffic lane and strikes an oncoming vehicle is coded under Crash Group - Bicyclist 258 (Wrong Way / Wrong Side).*

**241 (Bicyclist Overtaking - Passing on Right)** is used when the bicyclist *was involved in a collision with* a motor vehicle in a travel lane while *attempting to pass it* on the right.

**242 (Bicyclist Overtaking - Passing on Left)** is used when the bicyclist *was involved in a collision with* a motor vehicle in a travel lane while *attempting to pass it* on the left.

**243 (Bicyclist Overtaking - Parked Vehicle)** is used when the bicyclist struck a parked vehicle *resulting in a collision with a motor vehicle in-transport.*

**244 (Bicyclist Overtaking - Extended Door)** is used when the bicyclist *was involved in a collision with* an extended door (open or opened into the path of the bicyclist) of a parked vehicle *resulting in a subsequent collision with a motor vehicle in-transport.*

**249 (Bicyclist Overtaking - Other / Unknown)** is used when the specific circumstances surrounding the overtaking maneuver of the bicyclist do not conform to any of the situations described or are unknown. *For example, the bicyclist passes or takes an avoidance maneuver around one vehicle going the same direction as the*

***bicyclist and strikes the rear of a another vehicle in the adjacent lane also going the same direction.***

**258 (Wrong-Way / Wrong-Side)** is used when the ***two parties collided head-on when either the bicyclist or motorist was going the wrong way on a one-way roadway, traveling in the wrong travel lane of a two-way roadway (e.g. passing), or entered the opposing travel lane as part of an avoidance maneuver or as a result of being distracted/inattentive (e.g., lane drift).***

**250 (Wrong Way / Wrong Side - Bicyclist)** is used when the bicyclist was traveling the wrong way ***on a one-way roadway or on the wrong side of a two-way roadway*** and collided ***with a motor vehicle.***

**255 (Wrong Way / Wrong Side - Motorist)** is used when the motorist was traveling the wrong way ***on a one-way roadway or on the wrong side of a two-way roadway*** and collided ***with a bicyclist.***

**259 (Wrong Way / Wrong Side - Unknown)** is used when ***it is known that either the bicyclist or the motorist was traveling the wrong way on a one-way roadway or on the wrong side of a two-way roadway, but it cannot be determined which one was going the wrong way or was on the wrong side.***

**290 (Parallel Paths - Other Circumstances)** is used when the bicyclist and motorist were on initial parallel paths, but the crash cannot be further classified.

**219 (Motorist Turn / Merge - Other / Unknown)** is used when the motorist's turning maneuver is other than those described or is unknown.

**280 (Parallel Paths - Other / Unknown)** is used when the crash involved a bicyclist and motorist ***initially traveling in the same or opposite direction*** but cannot be further classified.

**225 (Bicyclist Ride-Out - Parallel Path)** is used when the bicyclist, initially ***traveling in the same or opposite direction as the motorist in a location other than the roadway, shoulder, parking lane, or a bicycle lane (e.g., a sidewalk, shared-use path, or roadside)*** made a left or right turn and rode into the path of the motorist.

#### **Initial Approach Path - Crossing Paths**

**(Bicyclist Ride-Out)** is used to identify situations where the critical factor leading to the collision involved the bicyclist entering the roadway into the path of the motorist.

**310 (Bicyclist Failed to Yield - Midblock)** is used when ***PB31B-Crash Location-Bicycle is 3 (Not At Intersection)*** and the bicyclist rode into the street from a non-intersection location (including residential or commercial driveway or other midblock location) without yielding to the motorist.

**311 (Bicyclist Ride-Out - Residential Driveway)** is used when the bicyclist rode from a residential driveway **access** into the path of a motor vehicle **that was proceeding straight ahead on the roadway. If the collision resulted from the motor vehicle turning into the driveway access, see 113 (Motorist Turning Error - Other).**

**312 (Bicyclist Ride-Out - Commercial Driveway)** is used when the bicyclist rode **from a commercial driveway access** into the path of a motor vehicle **that was proceeding straight ahead on the roadway. If the collision resulted from the motor vehicle turning into the commercial driveway access, see 111 (Motorist Turning Error - Left Turn), 112 (Motorist Turning Error - Right Turn).**

**313 (Bicyclist Ride-Out – Driveway, Unknown Type)** is used when the bicyclist rode from a driveway access into the path of a motor vehicle but it cannot be identified if the driveway was residential or commercial.

**318 (Bicyclist Ride-Out - Other Midblock)** is used when the bicyclist rode **from a midblock area other than a driveway** into the path of a motor vehicle **when the two were initially on crossing paths. For example, a bicyclist rides down their driveway then cuts across the yard and into the roadway.**

**319 (Bicyclist Ride-Out - Midblock - Unknown)** is used when the bicyclist rode into the roadway and into the path of a motor vehicle from an unknown midblock location.

**357 (Multiple Threat - Midblock)** is used when the bicyclist entered the roadway in front of standing or slowing traffic at a midblock location and was involved in a collision with a vehicle where the driver was traveling in the same direction as the stopped traffic, and whose view of the bicyclist was blocked. This selection would take precedence over *Bicyclist Ride-Out*.

**(Motorist Drive - Out)** is used to identify situations where the critical factor leading to the collision involved the motorist entering the roadway or driveway access into the path of the bicyclist.

**320 (Motorist Failed to Yield - Midblock)** is used when **PB31B-Crash Location-Bicycle is 3 (Not At Intersection)** and the motorist drove across the sidewalk or into the street from a non-intersection location (including residential or commercial driveway or other midblock location) without yielding to the bicyclist.

**321 (Motorist Drive-Out - Residential Driveway)** is used when the motorist drove **from a residential driveway** into the path of a bicyclist **that was proceeding straight ahead on the roadway or driveway crossing. If the collision resulted from the bicyclist turning into the driveway access, see 116 (Bicyclist Turning Error - Other).**

**322 (Motorist Drive-Out - Commercial Driveway)** is used when the motorist drove *from a commercial driveway* into the path of a bicyclist *that was proceeding straight ahead on the roadway or driveway crossing*. *If the collision resulted from the bicyclist turning into the commercial driveway access, see 114 (Bicyclist Turning Error - Left Turn), 115 (Bicyclist Turning Error - Right Turn).*

**323 (Motorist Drive-Out - Driveway, Unknown Type)** is used when the motorist drove from a driveway into the path of a bicyclist but it cannot be identified if the driveway was residential or commercial.

**328 (Motorist Drive-Out - Other Midblock)** is used when the motorist drove *from a midblock area other than a driveway* into the path of a bicyclist *when the two were initially on crossing paths*. *For example, a motorist that drives from the roadside into the path of a bicyclist traveling on the road shoulder.*

**329 (Motorist Drive-Out - Midblock - Unknown)** is used when the motorist drove into the roadway or sidewalk/driveway crossing area and into the path of a bicyclist *in* an unknown midblock area.

#### Unusual /Specific Circumstances

**600 (Backing Vehicle)** is used when the motorist was backing *when the vehicle contacted the bicyclist*.

**610 (Backing Vehicle)** is used when the bicyclist was involved in a collision with a vehicle that was backing up with a driver at the controls at any type of location. *For example, use this attribute for a vehicle that backs up into a bicyclist in a driveway crossing, not 321 (Motorist Drive-Out - Residential Driveway). A driverless vehicle rolling backwards is captured by 800 (Unusual Circumstances).*

**850 (Other / Unusual Circumstances)** is used when the bicyclist was riding a child's vehicle such as a tricycle (not an adult tricycle), bicycle with training wheels, or "Big Wheel" type tricycle or there were other unusual circumstances such as being involved in a collision with an object set in motion or by an in-transport motor vehicle which was redirected into the bicyclist by a prior collision.

**700 (Play Vehicle-Related)** is used when the bicyclist was riding a child's vehicle such as a tricycle (not an adult tricycle), bicycle with training wheels, or "Big Wheel" type tricycle. *If the motor vehicle was backing up with a driver at the controls when the play vehicle was contacted, use 610 (Backing Vehicle).*

**800 (Unusual Circumstances)** is used when there were other unusual circumstances not defined *by the other attributes*. *This would include all set-in-motion situations such as; propelling an object, animal, or parked vehicle into the bicyclist. Also includes a vehicle to vehicle collision where an in-transport vehicle is re-directed*

*into the bicyclist. Crashes involving a bicyclist and a driverless motor vehicle in-transport are included here.*

**910 (Non-Trafficway)** for definition, see *Crash Type 910 (Non-Trafficway)* below.

**910 (Non-Trafficway)** is used when the bicyclist is in a parking lot space or aisle, driveway, non-right-of-way sidewalk or shared-use path, yard, open area, etc., (and involved in a collision with a vehicle which was not backing).

**990 (Other / Unknown - Insufficient Details)** is used when there is insufficient information to determine the location of the impact between bicyclist and the motorist or the initial approach paths of the bicyclist/motorist.

**970 (Unknown Approach Paths)** is used when there is insufficient information to determine the initial approach paths *of the bicyclist and motorist*.

**980 (Unknown Location)** is used when there is insufficient information to determine the location of the impact between the bicyclist and the motorist.

**Consistency Checks:**

	IF	THEN
(FP9F)	PERSON TYPE equals 05, 06, 07, 08 and the PEDESTRIAN/BIKE - CRASH TYPE equals blank, case status is flawed.	
(PB02)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 111-980,	at least one SEQUENCE OF EVENTS for the striking vehicle must equal 09.
(PB07)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> for a person involved in the first harmful event equals 311, 312, <b>313</b> , 321,322 or <b>323</b> ,	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 - <b>CRASH TYPE - BICYCLE</b> 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).
(PB09)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 141, 143, 151-158, 217 or 218,	TRAFFIC CONTROL DEVICE for the striking vehicle must not equal 00.
(PB10)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 151, 156, 157, 217 or 218,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04.

IF	THEN
(PB11) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 143 or 154,	TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04, <b>08</b> , 20, 21, 28 or 29
(PB16) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, <b>313</b> , 318, 319 or 357,	at least one <b>NON-MOTORIST CONTRIBUTING CIRCUMSTANCES</b> must equal 02.
(PB21) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 160,	TRAFFIC CONTROL DEVICE for the striking vehicle should equal 00.
(PB26) <b>NON-MOTORIST CONTRIBUTING CIRCUMSTANCES</b> equals 02, and PERSON TYPE equals 06 or 07,	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, <b>313</b> , 318, 319 or 357.
(PB31) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB33) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 156,	DRIVER'S VISION OBSCURED BY for the striking vehicle must not equal 06.
(PB40) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 600,	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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB41) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB42) PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 111, 211 or 212,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11 or 17 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.

	IF	THEN
(PB43)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 112, 151, 213, 214, 217 or 218,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(PB46)	PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 221-225,	PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 01 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
(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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,	at least one PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> should equal <b>610</b> .
(PBA0)	<b>PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,</b>	<b>PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.</b>
(PBA1)	<b>PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217 or 218, and VEHICLE NUMBER - VEHICLE LEVEL equals NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST,</b>	<b>PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.</b>

## PEDESTRIAN/BIKE TYPING - CRASH LOCATION - BICYCLE

**FORMAT:** Element Completed in MDE

**SAS NAME:** pdtype.BIKELOC

### **ELEMENT VALUES:**

- 1 **At** Intersection
- 2 Intersection-Related
- 3 **Not At** Intersection
- 4 Non-**Trafficway** Location
- 9 Unknown / Insufficient Information

### **Remarks:**

**1 (At Intersection)** is used when *a 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. The crossing or connection of a roadway and a driveway access is not an intersection and should be coded as 2 (Intersection-Related) or 3 (Not At Intersection). The intersection is the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways.*

**2 (Intersection-Related)** is used when *a person is within the trafficway 50 feet out from the perimeter of an "At Intersection" area including the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.) OR the crash is related to the flow of traffic through an intersection (e.g., the result of queuing traffic). Intersection-related area exclusions: 1) intersection, 2) crosswalk, 3) any area between the crosswalk and an intersection.*

**3 (Not At Intersection)** is used when *a person is within the trafficway more than 50 feet out from the perimeter of an "At Intersection" AND the crash is not identified as related to the movement of the traffic units through an intersection. This includes the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.). This attribute is the default when the case materials/PAR give no indication that the crash is within 50 feet of an intersection.*

**4 (Non-Trafficway Location)** is used when *a person is off the trafficway, including parking lot spaces and aisles, driveways (beyond the driveway access), private roads, yards, and other open areas. Note: Crashes occurring on paved shoulders, sidewalks*

*or driveway crossings are considered to be “trafficway” crashes and should not be placed in the 4 (Non-Trafficway Location).*

*9 (Unknown / Insufficient Information) ) is used when there is insufficient information to determine where the person was located. Selecting this attribute will type the crash as 980 (Unknown Location) and exit the wizard.*

**Consistency Checks:**

	<b>IF</b>	<b>THEN</b>
(PB71)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, 16 or 22.</b>
(PB72)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 2,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 25, 28, 98, 99.</b>
(PB73)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 10, 11, 13, 14, 16, 20, 21, 22, 23, 24, 28, 98, 99.</b>
(PB74)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.</b>
(PB75)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 9,</b>	<b>NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98 or 99.</b>
(PB96)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1,</b>	<b>PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 8 or 9.</b>
(PB97)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3,</b>	<b>PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 4, 8 or 9.</b>
(PB98)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4,</b>	<b>PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 4, 5, 6 or 9.</b>
(PB99)	<b>PEDESTRIAN/ BIKE TYPING - CRASH LOCATION-BICYCLE equals 9,</b>	<b>PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 9.</b>

## PEDESTRIAN/BIKE TYPING - BICYCLIST POSITION

**FORMAT:** Element Completed in MDE

**SAS NAME:** pbtype.BIKEPOS

### **ELEMENT VALUES:**

- 1 Travel Lane
- 2 **Bicycle Lane / Paved Shoulder / Parking Lane**
- 3 Sidewalk / Crosswalk / Driveway **Access**
- 4 **Shared-Use Path**
- 5 **Non-Trafficway - Driveway**
- 6 **Non-Trafficway - Parking Lot / Other**
- 8 Other
- 9 Unknown

### **Remarks:**

**1 (Travel Lane)** is used when *a person is on a roadway (travel lane) and not in a bicycle lane or crosswalk (marked/unmarked crosswalk or shared-use path crossing).*

**2 (Bicycle Lane / Paved Shoulder / Parking Lane)** is used when *a person is in a bicycle lane, on a paved shoulder, or parking lane parts of a trafficway. A bicycle lane is a bikeway adjacent to travel lanes which has been designated for preferential or exclusive use by pedalcyclists through striping, signage, or pavement markings. This attribute includes bicyclists in a bicycle lane in an intersection (i.e., do not use 1 (Travel Lane)). If you do not know if there is a marked bike lane through the intersection then default to 1 (Travel Lane). If it is unknown if the shoulder was paved or unpaved, then default to 8 (Other).*

**3 (Sidewalk / Crosswalk / Driveway Access)** is used when *a person is within the trafficway on a sidewalk, crosswalk (this includes shared-use path crossing), or driveway access. 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.*

**4 (Shared-Use Path)** is used when *a person is 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 3 (Sidewalk / Crosswalk / Driveway Access).*

**5 (Non-Trafficway - Driveway)** is used when the person is on the part of the driveway outside the trafficway. If the person is in a driveway access, use attribute 3 (Sidewalk/Crosswalk/Driveway Access).

**6 (Non-Trafficway - Parking Lot / Other)** is used when the person is in an other non-trafficway areas (parking lot spaces and aisles, non-right-of-way sidewalk or multi-use path, yard, open areas, etc.).

**8 (Other)** is used when the person is located within the trafficway in an area with an improved surface not applicable to previous attributes (e.g., a paved gore, paved separator, concrete traffic island) or when the person is in an area within the trafficway where there is no improved surface (e.g., no pavement). Examples include grass medians, unpaved shoulders, and roadside locations like the space between the curb and the sidewalk.

**9 (Unknown)** is used when the position of the person is not reported or unknown.

**Consistency Checks:**

	IF	THEN
(PB84)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 1,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03, 09, 11 or 13.
(PB85)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 2,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16 or 20.
(PB86)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 3,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 10, 21, 23, 98 or 99.
(PB87)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 4,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24.
(PB88)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 5 or 6,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.
(PB89)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 8,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98 or 99.
(PB90)	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 9,	NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22, 98 or 99.
(PB96)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1,	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 8 or 9.
(PB97)	PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3,	PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 4, 8 or 9.

IF

THEN

**(PB98) PEDESTRIAN/ BIKE TYPING -  
CRASH LOCATION - BICYCLE  
equals 4,**

**PEDESTRIAN/ BIKE TYPING -  
BICYCLIST POSITION must equal 4,  
5, 6 or 9.**

**(PB99) PEDESTRIAN/ BIKE TYPING -  
CRASH LOCATION-BICYCLE equals  
9,**

**PEDESTRIAN/ BIKE TYPING -  
BICYCLIST POSITION must equal 9.**

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## **PEDESTRIAN/BIKE TYPING - BICYCLIST DIRECTION**

**FORMAT:** Element Completed by MDE

**SAS NAME:** pbtype.BIKEDIR

### **ELEMENT VALUES:**

- 1 With Traffic
- 2 Facing Traffic
- 3 Not Applicable
- 9 Unknown

### **Remarks:**

**1 (With Traffic) is used when the bicyclist was traveling with the flow of traffic for the side of the trafficway the bicyclist occupied prior to the crash. Includes being in or adjacent to a travel lane (e.g., roadway, bike lane, shoulder, sidewalk, roadside).**

**2 (Facing Traffic) is used when the bicyclist was traveling against the flow of traffic for the side of the trafficway the bicyclist occupied prior to the crash. Includes being in or adjacent to a travel lane (e.g., roadway, bike lane, shoulder, sidewalk, roadside).**

**3 (Not Applicable) is used when the bicyclist was traveling on one of the following: exiting a driveway, in a parking lot, or other non-trafficway area.**

**9 (Unknown) is used when the bicyclist's direction is unknown.**

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## PEDESTRIAN/BIKE TYPING CRASH GROUP - PEDESTRIAN

**FORMAT:** Element Completed by MDE

**SAS NAME:** pbtype.PEDCGP

**ELEMENT VALUES:**

***Crash Group attribute names are left justified, with the element value prior to the attribute name. Crash Type element values and attribute names are listed below the applicable Crash Group with their applicable element value in parenthesis.***

- 100 Unusual Circumstances
  - Dispute-Related (120) \*
  - Pedestrian on Vehicle (130) \*
  - Vehicle - Vehicle / Object (140) \*
  - Motor Vehicle Loss of Control (150) \*
  - Pedestrian Loss of Control (160) \*
  - Other Unusual Circumstances (190) \*
  - Driverless Vehicle (220) \*
  - Disabled Vehicle-Related (230) \*
  - Emergency Vehicle-Related (240) \*
  - Play Vehicle-Related (250) \*
- 200 Backing Vehicle
  - Backing Vehicle - **Non-Trafficway** - Driveway (211) \*
  - Backing Vehicle - Driveway **Access** (212) \*
  - Backing Vehicle - **Trafficway** (213) \*
  - Backing Vehicle - **Non-Trafficway** - Parking Lot (214) \*
  - Backing Vehicle - Other/Unknown (219) \*
- 310 Working or Playing in Roadway
  - Working in Roadway (311) \*
  - Playing in Roadway (312) \*
- 340 Bus-Related
  - Transit** Bus-Related (341) \*
  - School Bus **Stop**-Related (342) \*
- 350 Unique Midblock
  - Entering / Exiting Parked **or Stopped** Vehicle (320) \*
  - Mailbox-Related (330) \*
  - Ice Cream / Vendor Truck-Related (360) \*
- 400 Walking / **Running** Along Roadway
  - Walking / **Running** Along Roadway With Traffic - From Behind (410) \*
  - Walking / **Running** Along Roadway With Traffic - From Front (420) \*
  - Walking / **Running** Along Roadway Against Traffic - From Behind (430) \*
  - Walking / **Running** Along Roadway Against Traffic - From Front (440) \*

- Walking / **Running** Along Roadway - Direction / Position Unknown (459)\*
- 460 Driveway **Access** / **Driveway Access Related**
  - Motorist Entering Driveway (**461**) \*
  - Motorist Exiting Driveway (465) \*
  - Driveway Access - Other / Unknown (469) \*
- 500 Waiting to Cross
  - Waiting to Cross - Vehicle Turning (510) \*
  - Waiting to Cross - Vehicle Not Turning (520) \*
  - Waiting to Cross - Vehicle Action Unknown (590) \*
- 600 Pedestrian in Roadway - Circumstances Unknown
  - Standing in Roadway (610) \*
  - Walking in Roadway (620) \*
  - Lying in Roadway (313) \*
- 720 Multiple Threat / Trapped
  - Multiple Threat (710) \*
  - Trapped (730) \*
- 740 Dash / Dart-Out
  - Dash (741) \*
  - Dart-Out (742) \*
- 750 Crossing Roadway - Vehicle Not Turning
  - Pedestrian Failed to Yield (760) \*
  - Motorist Failed to Yield (770) \*
- 790 Crossing Roadway - Vehicle Turning
  - Motorist Left Turn - Parallel Paths (781) \*
  - Motorist Left Turn - Perpendicular Paths (782) \*
  - Motorist Right Turn - Parallel Paths (791) \*
  - Motorist Red Turn on Red - Parallel Paths (792) \*
  - Motorist Right Turn - Perpendicular Paths (795) \*
  - Motorist Right Turn on Red - Perpendicular Paths (794) \*
  - Motorist Turn/Merge - Other/Unknown (799) \*
- 800 **Non-Trafficway**
  - Non-Trafficway** - Parking Lot (830) \*
  - Non-Trafficway** - Other / Unknown (890) \*
- 910 Crossing Expressway
  - Crossing an Expressway (910) \*
- 990 Other / Unknown - Insufficient Details
  - Other - Unknown Location (900) \*
  - Not At** Intersection - Other / Unknown (680) \*
  - At** Intersection - Other / Unknown (690) \*

**\*See manual element PB30 Crash Type - Pedestrian for individual attribute remarks**

**Remarks:**

**100 (Unusual Circumstances)** is used when the crash involved a disabled vehicle, emergency vehicle, vehicle in pursuit, play vehicle, driverless vehicle or collision with a vehicle

which was in a prior vehicle-into-vehicle impact; the pedestrian/vehicle impact was dispute-related; the pedestrian was **leaning against or pushing** a vehicle; the pedestrian lost control; the vehicle lost control or the pedestrian was **involved in a collision** as a result of other unusual circumstances (e.g., the pedestrian collided with an object set in motion by an in transport motor vehicle). **If this crash involves unusual circumstances, select the first one that applies** (lowest to highest number).

**200 (Backing Vehicle)** is used when the pedestrian **was involved in a collision with a vehicle that was backing up with a driver at the controls at any type of location.**

**310 (Working or Playing in Roadway)** is used when the pedestrian was working or playing in the roadway.

**340 (Bus-Related)** is used when the pedestrian was **involved in a collision with a vehicle** while crossing/walking to a bus or bus stop or while waiting at a bus stop. **The pedestrian does not have to intend to be a passenger on the bus or previously been a passenger on the bus.**

**350 (Unique Midblock)** is used when the crash was associated with a vendor truck, mailbox, or other roadside pedestrian 'destination' that was not a bus, or the pedestrian was involved in **a collision with a vehicle** while entering or exiting a parked vehicle.

**400 (Walking / Running Roadway)** is used when the pedestrian was **standing, walking or running in or adjacent to the roadway (travel lane) within the trafficway boundaries. This also includes situations where the person's action/intent was walking or running 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, or median but excludes a person in a driveway access related crash [See 460 (Driveway Access/Driveway Access Related)].**

**460 (Driveway Access / Driveway Access Related)** is used when the pedestrian was crossing or in a driveway **access. 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. This also applies when the pedestrian is crossing in front of the driveway access at the edge of the travel lane.**

**500 (Waiting to Cross)** is used when the pedestrian was standing on the curb or near the roadway edge waiting to cross the roadway when **involved in a collision with a vehicle. If the pedestrian began to cross the roadway, stopped, and then was involved in a collision with a vehicle, see Crash Groups 720 (Multiple Threat / Trapped) 740 (Dash / Dart-Out) 750 (Crossing Roadway - Vehicle Not Turning), 790 (Crossing Roadway - Vehicle Turning).**

**600 (Pedestrian in Roadway - Circumstances Unknown)** is used when the pedestrian was standing, walking, or lying in the road right-of-way at an intersection or midblock location but the circumstances do not otherwise fit any previously described or are unknown.

**720 (Multiple Threat / Trapped)** is used when the pedestrian entered the roadway in front of standing or slowing traffic, *the* traffic started moving *then the pedestrian* was then involved in a collision with a vehicle traveling in the same direction as the stopped traffic (*multiple threat*). Note: Multiple threats may occur at non-signalized locations. *This also applies when the pedestrian entered the roadway on a green signal and was trapped when the signal changed (trapped).*

**740 (Dash / Dart-Out)** is used when the pedestrian either ran into the roadway in front of a motorist whose view of the pedestrian was not obstructed or walked or ran into the road and was *involved in a collision with a vehicle where the driver's view of the pedestrian was blocked until an instant before impact.*

**750 (Crossing Roadway - Vehicle Not Turning)** is used when the pedestrian crossing the roadway (not an expressway) *and involved in a collision with* a vehicle that was traveling straight through.

**790 (Crossing Roadway - Vehicle Turning)** is used when the pedestrian was crossing a non-expressway road *and involved in a collision with* a vehicle that was turning or about to turn.

**800 (Non-Trafficway)** is used when the pedestrian was in a parking lot *space or aisle* or *in another or unknown non-trafficway area (e.g., driveway, non-right-of-way sidewalk or shared-use path, yard, open area, etc.), when involved in a collision with a vehicle which was* not backing.

**910 (Crossing Expressway)** *for definition, see Crash Type 910 (Crossing an Expressway) under Crash Type - Pedestrian (PB31).*

**990 (Other / Unknown - Insufficient Details)** is used when the circumstances do not clearly fit any of the situations described or are unknown.

## **PEDESTRIAN/BIKE TYPING** **CRASH GROUP - BICYCLIST**

**FORMAT:** Element Completed by MDE

**SAS NAME:** pbtype.BIKECGP

**ELEMENT VALUES:**

***Crash Group attribute names are left justified, with the element value prior to the attribute name. Crash Type element values and attribute names are listed below the applicable Crash Group with their applicable element value in parenthesis.***

### **Initial Approach Path - Crossing Paths\***

#### **110 Loss of Control / Turning Error**

##### **Loss of Control\***

- Bicyclist Lost Control - Mechanical Problems (121) \*
- Bicyclist Lost Control - Oversteering, Improper Braking, Speed (122) \*
- Bicyclist Lost Control - Alcohol/Drug Impairment (123) \*
- Bicyclist Lost Control - Surface Conditions (124) \*
- Bicyclist Lost Control - Other/Unknown (129) \*
- Motorist Lost Control - Mechanical Problems (131) \*
- Motorist Lost Control - Oversteering, Improper Braking, Speed (132) \*
- Motorist Lost Control - Alcohol/Drug Impairment (133) \*
- Motorist Lost Control - Surface Conditions (134) \*
- Motorist Lost Control - Other/Unknown (139) \*

### **Initial Approach Path - Crossing Paths\***

#### **110 Loss of Control / Turning Error**

##### **Turning Error\***

- Motorist Turning Error - Left Turn (111) \*
- Motorist Turning Error - Right Turn (112) \*
- Motorist Turning Error - Other (113) \*
- Bicyclist Turning Error - Left Turn (114) \*
- Bicyclist Turning Error - Right Turn (115) \*
- Bicyclist Turning Error - Other (116) \*

##### **Drive / Ride - Out / Through\***

- 140 Motorist Failed to Yield - Sign-Controlled Intersection
  - Motorist Drive-Out - Sign-Controlled Intersection (141) \*
  - Motorist Drive-Through - Sign-Controlled Intersection (143) \*

- 145 Bicyclist Failed to Yield - Sign-Controlled Intersection
  - Bicyclist Ride-Out - Sign-Controlled Intersection (142) \*
  - Bicyclist Ride-Through - Sign-Controlled Intersection (144) \*
  - Multiple Threat - Sign-Controlled Intersection (147) \*
  
- 150 Motorist Failed to Yield - Signalized Intersection
  - Motorist Drive-Out - Signalized Intersection (152) \*
  - Motorist Drive-Out - Right Turn on Red (151) \*
  - Motorist Drive-Through - Signalized Intersection (154) \*
  
- 158 Bicyclist Failed to Yield - Signalized Intersection
  - Bicyclist Ride-Out - Signalized Intersection (153) \*
  - Bicyclist Ride-Through - Signalized Intersection (155) \*

***Bicyclist Failed to Clear \****

- Bicyclist Failed to Clear - Trapped (156)\*
- Bicyclist Failed to Clear - Multiple Threat (157)\*
- Bicyclist Failed to Clear - Unknown (159)\*

***Drive / Ride - Out / Through\****

- 190 Crossing Paths - Other Circumstances
  - Sign-Controlled Intersection - Other/Unknown (148) \*
  - Signalized Intersection - Other/Unknown (158) \*
  - Crossing Paths - Intersection - Other/Unknown (180) \*
  - Crossing Paths - Uncontrolled Intersection (160) \*
  - Crossing Paths - Midblock - Other/Unknown (380) \*

***Initial Approach Path - Parallel Paths\****

***Motorist Turned or Merged \****

- 210 Motorist Left Turn / Merge
  - Motorist Left Turn - Same Direction (211) \*
  - Motorist Left Turn - Opposite Direction (212) \*
  
- 215 Motorist Right Turn / Merge
  - Motorist Right Turn - Same Direction (213) \*
  - Motorist Right Turn on Red - Same Direction (217) \*
  - Motorist Right Turn - Opposite Direction (214) \*
  - Motorist Right Turn on Red - Opposite Direction (218) \*
  
- 219 Parking / Bus-Related
  - Motorist Drive-In/Out Parking (215) \*
  - Bus/Delivery Vehicle Pullover (216) \*

***Bicyclist Turn or Merged\****

- 220 Bicyclist Left Turn / Merge
  - Bicyclist Left Turn - Same Direction (221) \*
  - Bicyclist Right Turn - Opposite Direction (222) \*
  
- 225 Bicyclist Right Turn / Merge
  - Bicyclist Right Turn - Same Direction (223) \*
  - Bicyclist Right Turn - Opposite Direction (224) \*

***Overtaking/Passing Circumstances***

- 230 Motorist Overtaking Bicyclist
  - Motorist Overtaking - Undetected Bicyclist (231) \*
  - Motorist Overtaking - Misjudged Space (232) \*
  - Motorist Overtaking - Bicyclist Swerved (235) \*
  - Motorist Overtaking - Other Unknown (239) \*
  
- 240 Bicyclist Overtaking Motorist
  - Bicyclist Overtaking - Passing on Right (241) \*
  - Bicyclist Overtaking - Passing on Left (242) \*
  - Bicyclist Overtaking - Parked Vehicle (243) \*
  - Bicyclist Overtaking - Extended Door (244) \*
  - Bicyclist Overtaking - Other/Unknown (249) \*

***One Party on the Wrong-Way / Wrong-Side\****

- 258 ***Wrong-Way / Wrong-Side***
  - Wrong Way / Wrong Side*** - Bicyclist (250) \*
  - Wrong Way / Wrong Side*** - Motorist (255) \*
  - Wrong Way / Wrong Side*** - Unknown (259) \*
  
- 290 Parallel Paths - Other Circumstances
  - Motorist Turn/Merge - Other/Unknown (219) \*
  - Parallel Paths - Other/Unknown (280) \*
  - Bicyclist Ride-Out - Parallel Path (225)\*

***Initial Approach Path - Crossing Paths\****

***Bicyclist Ride-Out\****

- 310 Bicyclist Failed to Yield - Midblock
  - Bicyclist Ride-Out - Residential Driveway (311) \*
  - Bicyclist Ride-Out - Commercial Driveway (312) \*
  - Bicyclist Ride-Out – Driveway, Unknown Type (313) \****
  - Bicyclist Ride-Out - Other Midblock (318) \*
  - Bicyclist Ride-Out - Midblock - Unknown (319) \*
  - Multiple Threat - Midblock (357) \*

**Motorist Ride-Out\***

- 320 Motorist Failed to Yield - Midblock
  - Motorist Drive-Out\***
  - Motorist Drive-Out - Residential Driveway (321) \*
  - Motorist Drive-Out - Commercial Driveway (322) \*
  - Motorist Drive-Out – Driveway, Unknown Type (323) \***
  - Motorist Drive-Out - Other Midblock (328) \*
  - Motorist Drive-Out - Midblock - Unknown (329) \*

**Unusual / Specific Circumstances**

- 600 Backing Vehicle
  - Backing Vehicle (**610**) \*
- 850 Other / Unusual Circumstances
  - Play Vehicle-Related (700) \*
  - Unusual Circumstances (800) \*
- 910 Non-**Trafficway**
  - Non-Trafficway (910)\*
- 990 Other / Unknown - Insufficient Details
  - Unknown Approach Paths (970) \*
  - Unknown Location (980) \*

**\*See manual element PB30B Crash Type - Bicycle for individual attribute remarks**

**Remarks:**

**110 (Loss of Control) is used to identify situations where the critical factor leading to the collision involved control loss by the motorist or the bicyclist. Control loss can be related to mechanical failure, environmentally induced vehicle instability, driver medical issues, unconsciousness, falling asleep, or alcohol/drug impairment. The loss of control must have occurred prior to the driver doing any avoidance maneuver. For operators steering out of their lane and into the path of the other operator while executing a turn, see "Turning Error".**

**110 (Turning Error) is used to identify situations where the critical factor leading to the collision involved either the motorist or the bicyclist executing an improper left or right turn at an intersection or to/from a driveway. These are situations where one operator travels out of their lane during the turn and into the path of the other operator. This excludes situations where the movement into the path of the other operator was caused by a loss of control (e.g., sliding on ice when turning).**

**140 (Motorist Failed to Yield - Sign-Controlled Intersection) is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the motorist did not properly yield right-of-way to the bicyclist at an intersection where the motorist was**

**controlled by a sign (stop or yield) or flashing signal.** Note: Crashes at traffic circles or roundabouts with yield control are included here.

**145 (Bicyclist Failed to Yield - Sign-Controlled Intersection)** *is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the bicyclist did not properly yield right-of-way to the motorist at an intersection where the bicyclist was controlled by a sign (stop or yield) or flashing signal.* Note: Crashes at traffic circles or roundabouts with yield control are included here.

**150 (Motorist Failed to Yield - Signalized Intersection)** *is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the motorist either violated the signal or did not properly yield right-of-way to the bicyclist.*

**158 (Bicyclist Failed to Yield - Signalized Intersection)** *is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the bicyclist either violated the signal or did not properly yield right-of-way to the motorist.*

**190 (Crossing Paths - Other Circumstances)** is used when the bicyclist and motorist were on initial crossing paths, but the crash cannot be further classified.

**210 (Motorist Left Turn / Merge)** is used when the motorist made a left turn or merge into the path of a bicyclist traveling in the same or opposite direction **as the motorist.**

**215 (Motorist Right Turn / Merge)** is used when the motorist made a right turn or merge into the path of a bicyclist traveling in the same or opposite direction **as the motorist.**

**219 (Parking / Bus-Related)** is used when the bicyclist was **involved in a collision with a vehicle** entering or exiting a parking space or by a bus or delivery vehicle pulling into or away from the curb **while in forward motion. If the motorist was "backing" see 600 (Backing Vehicle).**

**220 (Bicyclist Left Turn / Merge)** is used when the bicyclist made a left turn or merge into the path of a motor vehicle traveling in the same or opposite direction **as the bicyclist. This excludes bicyclists that are traveling on a sidewalk or other parallel path prior to turning left into the path of a vehicle on the roadway. See Crash Type - Bicycle 225 (Bicyclist Ride-Out - Parallel Path).**

**225 (Bicyclist Right Turn / Merge)** is used when the bicyclist made a right turn or merge into the path of a motor vehicle traveling in the same or opposite direction **as the bicyclist. This excludes bicyclists that are traveling on a sidewalk or other parallel path prior to turning right into the path of a vehicle on the roadway. See Crash Type - Bicycle 225 (Bicyclist Ride-Out - Parallel Path).**

**230 (Motorist Overtaking Bicyclist)** is used when the motorist **was traveling the same direction as the bicyclist and** overtaking the bicyclist **when they collided. This includes both passing the bicyclist and approaching from behind at a faster speed. A motorist**

*that passes on the left by entering the opposing traffic lane and strikes an oncoming bicyclist is coded under Crash Group - Bicyclist 258 (Wrong Way/Wrong Side).*

**240 (Bicyclist Overtaking Motorist)** is used when the bicyclist *was traveling the same direction as the motorist and* was overtaking the motorist *on the right or left when they collided. Note: A bicyclist that passes on the left by entering the opposing traffic lane and strikes an oncoming vehicle is coded under Crash Group - Bicyclist 258 (Wrong Way/Wrong Side).*

**258 (Wrong-Way / Wrong-Side)** is used when the *two parties collided head-on when either the bicyclist or motorist was going the wrong way on a one-way roadway, traveling in the wrong travel lane of a two-way roadway (e.g. passing), or entered the opposing travel lane as part of an avoidance maneuver or as a result of being distracted/inattentive (e.g., lane drift).*

**290 (Parallel Paths - Other Circumstances)** is used when the bicyclist and motorist were on initial parallel paths, but the crash cannot be further classified.

**310 (Bicyclist Failed to Yield - Midblock)** is used when *PB31B-Crash Location-Bicycle is 3 (Not At Intersection) and* the bicyclist rode into the street from a non-intersection location (including residential or commercial driveway or other midblock location) without yielding to the motorist.

**320 (Motorist Failed to Yield - Midblock)** is used when *PB31B-Crash Location-Bicycle is 3 (Not At Intersection) and* the motorist drove across the sidewalk or into the street from a non-intersection location (including residential or commercial driveway or other midblock location) without yielding to the bicyclist.

**600 (Backing Vehicle)** is used when the motorist was backing *when the vehicle contacted the bicyclist.*

**850 (Other / Unusual Circumstances)** *is used when the bicyclist was riding a child's vehicle such as a tricycle (not an adult tricycle), bicycle with training wheels, or "Big Wheel" type tricycle or there were other unusual circumstances such as being involved in a collision with an object set in motion or by an in-transport motor vehicle which was redirected into the bicyclist by a prior collision.*

**910 (Non-Trafficway)** *for definition, see Crash Type 910 (Non-Trafficway) under Crash Type - Bicycle (PB31B).*

**990 (Other / Unknown - Insufficient Details)** *is used when there is insufficient information to determine the location of the impact between bicyclist and the motorist or the initial approach paths of the bicyclist/motorist.*

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# APPENDIX

## 2014 CONSISTENCY CHECKS

The following pages contain Consistency Checks,  
Intraconsistency Checks and Special  
Processing Rules.  
It is arranged in alpha/numeric order.

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ERROR CODE	ERROR TEST
0PB1	<i>If PEDESTRIAN/BIKE TYPING - CRASH TYPE - PEDESTRIAN equals 741, then at least one NON-MOTORIST CONTRIBUTING CIRCUMSTANCES must equal 11.</i>
1PK2	<i>If NON-MOTORIST LOCATION AT TIME OF CRASH equals 21, then SIDEWALK PRESENT must equal 1.</i>
1PK3	<i>If NON-MOTORIST LOCATION AT TIME OF CRASH equals 01 or 10, then MARKED CROSSWALK PRESENT must equal 1.</i>
FP9F	PERSON TYPE equals 05, 06, 07, 08 and the PEDESTRIAN/CRASH TYPE equals blank, case status is flawed.
PB00	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 110-910, then at least one SEQUENCE OF EVENTS for the striking vehicle must equal 08 or 15.
PB02	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 111-980, then at least one SEQUENCE OF EVENTS for the striking vehicle must equal 09.
PB04	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 211, 212, <b>461</b> , 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 - <b>CRASH TYPE - PEDESTRIAN</b> 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 - <b>CRASH TYPE - PEDESTRIAN</b> equals 730, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-03.
PB07	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> for a person involved in the first harmful event equals 311, 312, <b>313</b> , 321, 322 or <b>323</b> , 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).

ERROR CODE	ERROR TEST
PB08	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 - <b>CRASH TYPE - BICYCLE</b> 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 - <b>CRASH TYPE - BICYCLE</b> equals 151, 156, 157, 217 or 218, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04.
PB11	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 143 or 154, then TRAFFIC CONTROL DEVICE for the striking vehicle must equal 01-04, <b>08</b> , 20, 21, 28 or 29.
PB12	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 - <b>CRASH TYPE - PEDESTRIAN</b> equals 910, then <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 03.
PB16	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, <b>313</b> , 318, 319 or 357, then at least one <b>NON-MOTORIST CONTRIBUTING CIRCUMSTANCES</b> must equal 02.
PB17	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> for a person involved in the first harmful event equals 211-214 or 219, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 08, 09, 13 or 97. Note: this edit is restricted to vehicles which are involved in only one event with pedestrian(s).
PB18	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals <b>742</b> , then at least one <b>NON-MOTORIST CONTRIBUTING CIRCUMSTANCES</b> must equal 01.

ERROR CODE	ERROR TEST
PB19	If <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 08, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> must not equal 510, 520, 590, 830 or 890.
PB20	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 510, 520 or 590, then at least one <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 02.
PB21	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 160, then TRAFFIC CONTROL DEVICE for the striking vehicle should equal 00.
PB22	If SCHOOL BUS RELATED equals 1, and PERSON TYPE equals 05 or 08, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 342.
PB23	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 342, and PERSON TYPE 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 - <b>CRASH TYPE - PEDESTRIAN</b> 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 - <b>CRASH TYPE - PEDESTRIAN</b> should equal 690, 710, 730, 741, 742, 760, 770, 781, 782, 791, 792, 794, 795 or 799.
PB26	If <b>NON-MOTORIST CONTRIBUTING CIRCUMSTANCES</b> equals 02, and PERSON TYPE equals 06 or 07, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> should equal 142, 144, 147, 153, 155, 156, 157, 159, 311, 312, <b>313</b> , 318, 319 or 357.
PB27	If <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 05, and PERSON TYPE equals 05 or 08, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 410 or 420.

ERROR CODE	ERROR TEST
PB28	If <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 06, and PERSON TYPE equals 05 or 08, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 430 or 440.
PB29	If <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 04, and PERSON TYPE equals 05 or 08, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 410, 420, 430, 440 or 459.
PB30	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 220, then at least one DRIVER PRESENCE must equal 0 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB31	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB32	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB33	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 <b>01</b> , and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02, then PEDESTRIAN/ BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 <b>01</b> , and FIRST HARMFUL EVENT equals 08, and RELATION TO JUNCTION (b) equals 02, then PEDESTRIAN/ BIKE TYPING - <b>CRASH LOCATION - PEDESTRIAN</b> must equal <b>1</b> .

ERROR CODE	ERROR TEST
PB36	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 250, then PERSON TYPE must equal 08.
PB37	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 311, 312 or 313, then at least one <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 08 or 10.
PB38	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 410 or 420, then at least one <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 05.
PB39	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 430 or 440, then at least one <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> must equal 06.
PB40	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals <b>610</b> , 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB41	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB42	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 111, 211 or 212, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 11 or 17 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB43	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> equals 112, 151, 213, 214, 217 or 218, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) must equal 10 or 17 for the vehicle number identified in this person's NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB44	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 240, then EMERGENCY MOTOR VEHICLE USE should equal <b>2-6</b> for at least one vehicle.

ERROR CODE	ERROR TEST
PB45	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB46	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> 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 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 460, 465, 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then at least one PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - BICYCLE</b> should equal <b>610</b> .
PB56	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> 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 NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST.
PB59	If <b>NON-MOTORIST ACTION/CIRCUMSTANCES</b> equals 16, and PERSON TYPE equals 05 or 08, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 459.

ERROR CODE	ERROR TEST
PB60	If PERSON TYPE equals 05 or 08, and DRIVER PRESENCE equals 0 for the motor vehicle which strikes the non-motorist, then PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> should equal 220.
PB61	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 220, then DRIVER PRESENCE should equal 0 for the motor vehicle striking the non-motorist.
PB62	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 220, then at least one <b>NON-MOTORIST ACTION/ CIRCUMSTANCES</b> must equal 12.
PB63	If PEDESTRIAN/BIKE TYPING - <b>CRASH TYPE - PEDESTRIAN</b> equals 230, then at least one RELATED FACTOR - CRASH LEVEL should equal 19 or 23.
<b>PB66</b>	<b><i>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.</i></b>
<b>PB67</b>	<b><i>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.</i></b>
<b>PB68</b>	<b><i>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.</i></b>
<b>PB69</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.</i></b>
<b>PB70</b>	<b><i>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.</i></b>
<b>PB71</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02, 03, 09, 16 or 22.</i></b>

<b>ERROR CODE</b>	<b>ERROR TEST</b>
<b>PB72</b>	<b><i>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, 24, 25, 28, 98, 99.</i></b>
<b>PB73</b>	<b><i>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, 24, 28, 98, 99.</i></b>
<b>PB74</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24, 25, 98, 99.</i></b>
<b>PB75</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 16, 22, 24, 98 or 99.</i></b>
<b>PB76</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03.</i></b>
<b>PB77</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 2, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 01, 02 or 10.</i></b>
<b>PB78</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 3, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 11, 13.</i></b>
<b>PB79</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16, 20, 98 or 99.</i></b>
<b>PB80</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 5, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 21, 23, 24, 98 or 99.</i></b>
<b>PB81</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 6, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98 or 99.</i></b>
<b>PB82</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 7 or 8, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.</i></b>

<b>ERROR CODE</b>	<b>ERROR TEST</b>
<b>PB83</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 09, 20, 22, 28, 98 or 99.</i></b>
<b>PB84</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 1, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 03, 09, 11 or 13.</i></b>
<b>PB85</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 2, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 14, 16 or 20.</i></b>
<b>PB86</b>	<b><i>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.</i></b>
<b>PB87</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 4, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 24.</i></b>
<b>PB88</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 5 or 6, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 25.</i></b>
<b>PB89</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 8, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 20, 22, 28, 98 or 99.</i></b>
<b>PB90</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION equals 9, then NON-MOTORIST LOCATION AT TIME OF CRASH must equal 22, 98 or 99.</i></b>
<b>PB91</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 1, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 1, 2 or 9.</i></b>
<b>PB92</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 2, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 3, 4, 5, 6, 7, 8 or 9.</i></b>
<b>PB93</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 3, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 3, 4, 5, 6, or 9.</i></b>

<b>ERROR CODE</b>	<b>ERROR TEST</b>
<b>PB94</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 4, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 7, 8 or 9.</i></b>
<b>PB95</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - PEDESTRIAN equals 9, then PEDESTRIAN/ BIKE TYPING - PEDESTRIAN POSITION must equal 2, 5 or 9.</i></b>
<b>PB96</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 1, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 8 or 9.</i></b>
<b>PB97</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 3, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 1, 2, 3, 4, 8 or 9.</i></b>
<b>PB98</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION - BICYCLE equals 4, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 4, 5, 6 or 9.</i></b>
<b>PB99</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH LOCATION-BICYCLE equals 9, then PEDESTRIAN/ BIKE TYPING - BICYCLIST POSITION must equal 9.</i></b>
<b>PBA0</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 111, 211, 212, and VEHICLE NUMBER - VEHICLE LEVEL equals NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 11.</i></b>
<b>PBA1</b>	<b><i>If PEDESTRIAN/ BIKE TYPING - CRASH TYPE - BICYCLE equals 112, 151, 213, 214, 217 or 218, and VEHICLE NUMBER_ VEHICLE LEVEL equals NUMBER OF MOTOR VEHICLE STRIKING NON-MOTORIST, then PRE-EVENT MOVEMENT (PRIOR TO RECOGNITION OF CRITICAL EVENT) should equal 10.</i></b>

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