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ANSI D16.1-1996 Manual on Classification of Motor Vehicle Traffic Accidents

Sixth Edition

National Safety Council

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American National Standard —

Manual on Classification of Motor Vehicle Traffic Accidents, Sixth Edition

Secretariat

National Safety Council
Prepared by the Committee on Motor Vehicle Traffic Accident Classification under the direction of the Traffic Records Committee of the National Safety Council Highway Traffic Safety Division.

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Foreword (This Foreword is not a part of American National Standard, Manual on Classification of Motor Vehicle Traffic Accidents, Sixth Edition.)

The purpose of this American National Standard is to provide a common language for reporters, classifiers, analysts, and users of traffic accident data. The Manual on Classification of Motor Vehicle Traffic Accidents and its predecessor, Uniform Definitions of Motor Vehicle Accidents, have provided classification assistance for more than half a century.

The Manual is designed to facilitate the development of data on accidents involving motor vehicles and other road vehicles in and out of traffic. It is a standard for statistical classifications of motor vehicle traffic accidents for nationwide use.

The principal changes in this Sixth Edition are the incorporation of a number of changes to the definitions of the various components comprising a Trafficway and new definitions for School buses and School bus accidents.

Evidence of consensus on this standard is obtained through the ANSI canvass method. The canvass list includes the membership of the Committee on Motor Vehicle Traffic Accident Classification, which is sponsored by the Traffic Records Committee, Highway Traffic Safety Division, National Safety Council. Committee members are listed below. Recommendations for additional members, particularly those with experience in fields that do not appear to be well covered by the current membership, are welcome.

Many users of the Manual have had questions about its interpretation or its application in unusual situations. The Committee is particularly interested in questions which help to identify problems in the Manual or subjects that need more detailed coverage. In addition, suggestions for improvement of the Manual are actively solicited and may be submitted at any time. Please submit questions or comments to the Committee Chairman, Kenneth D. Hackman, National Institute for Safety Research, Inc., P.O. Box 2493, Germantown, MD, 20875, or to the National Safety Council, 1121 Spring Lake Drive, Itasca, IL, 60143. When submitting questions or comments please include a telephone number where you may be contacted should additional information or clarification be required.

The Committee on Motor Vehicle Traffic Accident Classification had the following membership at the time it approved this standard:

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American National Standard —

Manual on Classification of Motor Vehicle Traffic Accidents

1 Introduction

The primary purpose of the Manual on Classification of Motor Vehicle Traffic Accidents is to promote uniformity and comparability of motor vehicle traffic accident statistics now being developed in states and local jurisdictions.

The definitions in this Manual are related, but not necessarily identical, to the definitions found in the Uniform Vehicle Code; Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death (ICD); United States Code, Title 23, Highways; and the Manual on Uniform Traffic Control Devices, ANSI D6.1e-1989. These documents were developed for a variety of purposes. This variety is reflected in the definition of terms; similar terms do not necessarily have similar definitions.

The body of the Manual is divided into two sections, one containing definitions and one containing classification instructions. The definitions are presented in an order which avoids dependence upon special terms not previously defined. In addition, an attempt has been made to make every definition complete; modifications of definitions are not introduced intentionally in subsequent sections or subsections.

The use of this standard does not require the use of all classifications described in the Manual or prohibit the use of additional classifications. Accident report forms and summaries should, however, be compatible with the Manual to permit compilation and comparison of information collected in different jurisdictions.

Nothing in this Manual is to be construed as a requirement for accident reporting or investigation. Reporting requirements which govern drivers or police are generally established by state law or city ordinance, while requirements for investigation are ordinarily specified in investigative agencies.

The assignment of accidents to a geographical location, such as a city, county or state, does not imply that the jurisdiction is responsible for such accidents or that it could have prevented them. Such arbitrary assignments indicate only that the accidents occurred within the geographical limits of the jurisdiction.

2 Definitions

2.1 Transport Vehicles and Transport Ways

2.1.1 person: A person is any living human. Within the context of this manual, a fetus is considered to be part of a pregnant woman rather than a separate individual. After death, a human body is not considered to be a person.

2.1.2 property: Property is any physical object other than a person.

Inclusions:

— Real property, personal property

— Animals — wild or domestic

— Signs, guard rails, impact attenuators

— And others

2.1.3 transport device: A transport device is any device designed primarily for moving persons or property along with the device itself from one place to another, except (1) a weapon, (2) a device used primarily within the confines of a building and its premises, or (3) a human-powered nonmotorized device not propelled by pedalling.

Inclusions:

— Airplane

— Helicopter

— Hovercraft

— Ship

— Submarine

— Train

— Boxcar

— Caboose

— Snowmobile

— Automobile (See 2.2.12.)

— Bus (See 2.2.10.)

— Truck (See 2.2.13-2.2.26.)

— Trailer (See 2.2.15.)

— Semitrailer (See 2.2.17.)

— Motorcycle (See 2.2.9.)

— Bicycle

— Moped (See 2.2.9.4.)

— And others

Exclusions:

— Devices not designed primarily for moving persons or property, such as construction machinery, farm or industrial machinery, snow plows, army tanks, etc.

— Devices which do not move from one place to another, such as pipelines, elevators, escalators, ski lifts, conveyor belt systems, etc.

— Weapons, such as guns, torpedoes, etc.

— Devices used primarily within buildings and their premises, such as fork lifts in factories or lumber yards, motorized baggage trucks in railroad stations, etc.

— Human-powered nonmotorized devices not propelled by pedalling, such as skis, scooters, roller skates, baby carriages, etc.

2.1.4 transport vehicle: A transport vehicle consists of one or more devices or animals and their load. Such devices or animals must include at least one of the following:

1) a transport device, or a unit made up of connected transport devices, while idle or in use for moving persons or property from one place to another,

2) an animal or team of animals while in use for moving persons or property other than the animal or team itself from one place to another, or

3) a movable device such as construction, farm, or industrial machinery outside the confines of a building and its premises while in use for moving persons, the device itself, or other property from one place to another.

If such a device or animal has a load, the load is part of that transport vehicle. Loads include:

— persons or property upon, or set in motion by, the device or animal

— persons boarding or alighting from the device or animal

— persons or property attached to and in position to move with the device or animal

If the load upon a transport device includes another transport device, the entire unit including the load is considered to be a single transport vehicle.

Inclusions:

1) Transport Devices

— Airplane towing a sailplane

— Tugboat pushing a barge

— Boxcar coupled to a caboose

— Truck tractor towing a semitrailer and a trailer (See 2.2.21.)

— Automobile towing a person on skates, skateboard or bicycle

— Snowmobile towing a skier

— Automobile towing another automobile

— And others

2) Animals

— Horse and rider

— Dog team drawing a sled

— Team of horses drawing a sled

— Burro carrying a load of firewood

— Mule towing a boat on a canal

— And others

3) Other Movable Devices

— Road grader while traveling under its own power from a maintenance depot to a working place

— Lawn mower while being ridden down a street under its own power

— Farm tractor while pulling a wagon loaded with corn from a field to a storage place

— Army tank while moving under its own power from a firing range to a motor pool

— And others

Exclusions:

1) Transport Devices

— Pickup truck while being used to power a saw

— Dump truck while spreading its load

— Tow truck while using its winch

— Jeep while pulling a device picking up golf balls

— Transit-mix concrete truck while discharging its load

— Dump truck while plowing snow

— And others

2.1.5 aircraft: An aircraft is a transport vehicle designed primarily for, or in use for, moving persons or property through the air from one place to another.

Inclusions:

— Airplane

— Balloon

— Dirigible

— Glider

— Parachute

— Spacecraft

— And others

2.1.6 watercraft: A watercraft is a transport vehicle designed primarily for, or in use for, moving persons or property on or through, and supported by, water from one place to another.

2.1.7 land vehicle: A land vehicle is a transport vehicle which is neither an aircraft nor a watercraft.

2.1.8 transport way: A transport way is any way or place reserved or commonly used for the operation of transport vehicles.

Exclusions:

— Hiking trail, sidewalk, footpath

— And others

2.1.9 airway: An airway is a transport way reserved primarily for use by aircraft taking off, in flight, or landing.

2.1.10 waterway: A waterway is a transport way reserved primarily for use by watercraft.

2.1.11 land way: A land way is the space within property lines or other boundary lines of any transport way that is neither an airway nor a waterway.

2.2 Land Ways, Land Vehicles and Users

2.2.1 trafficway: A trafficway is any land way open to the public as a matter of right or custom for moving persons or property from one place to another. See Figure 1.

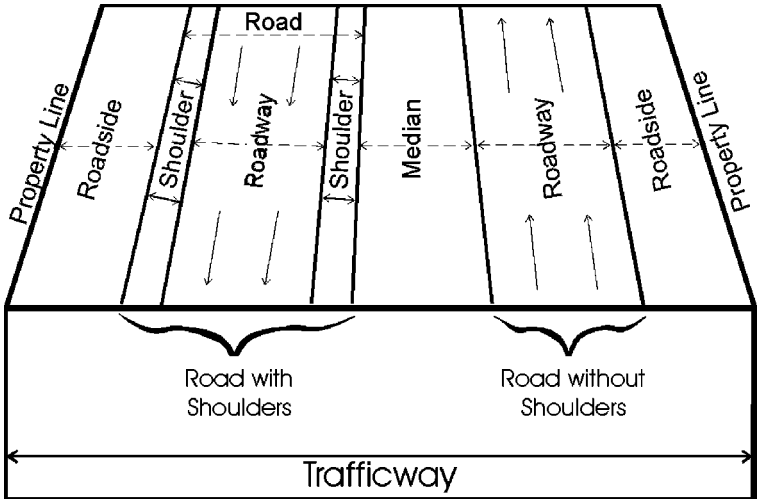

Figure 1 — Trafficway (See 2.2.1)

Inclusions:

— Within areas with guarded entrances, such as military posts or private residential developments, land ways are trafficways if the guards customarily admit public traffic.

— And others

Exclusions:

— A land way under construction is not a trafficway if traffic is prohibited from entering by signing or barriers which are in conformance with applicable standards. However, if any part of the land way is open to traffic while the remainder is closed, that part which is open for traffic is a trafficway. Likewise, any temporary bypass of a construction site is a trafficway.

— A land way temporarily closed to travel and marked by signing or barriers which are in conformance with applicable standards is not a trafficway even though used by authorized vehicles, such as maintenance vehicles, or when intentionally or inadvertently used by unauthorized vehicles. A land way open only to local traffic is not considered closed.

— And others

2.2.2 private way: A private way is any land way other than a trafficway. The space within a crossing of a private way and a trafficway shall be considered to be trafficway.

2.2.3 railway: A railway is any private way reserved primarily for land vehicles moving persons or property from one place to another on rails.

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

Inclusions:

— Street car on private way

— And others

Exclusions:

— Street car operating on trafficway (See 2.2.8.)

— And others

2.2.5 railway train: A railway train is any motorized railway vehicle.

2.2.6 road vehicle: A road vehicle is any land vehicle other than a railway vehicle. (See 2.2.7 and 2.2.8.)

2.2.7 motor vehicle: A motor vehicle is any motorized (mechanically or electrically powered) road vehicle not operated on rails. (See 2.2.9-2.2.26.)

2.2.8 other road vehicle: An other road vehicle is any road vehicle other than a motor vehicle.

Inclusions:

— Animal-drawn vehicle (any type)

— Animal harnessed to a conveyance

— Animal carrying a person

— Street car (See 2.2.4.)

— Pedalcycle (See 2.2.27.)

— And others

2.2.9 motorcycle: A motorcycle is any motor vehicle having a seat or saddle for the use of its operator and designed to travel on not more than three wheels in contact with the ground.

Exclusions:

— Construction, farm or industrial machinery

Inclusions:

— Large motorcycle (See 2.2.9.2.)

— Motor-driven cycle (See 2.2.9.1.)

— Speed-limited motor-driven cycle (See 2.2.9.3.)

— Moped (See 2.2.9.4.)

— Motor scooter

— Motorized or motor-assisted bicycle

— And others

2.2.9.1 motor-driven cycle: A motor-driven cycle is any motorcycle having an engine with less than 150 cubic centimeters displacement or with five brake horsepower or less.

2.2.9.2 large motorcycle: A large motorcycle is any motorcycle other than a motor-driven cycle.

2.2.9.3 speed-limited motor-driven cycle: A speed-limited motor-driven cycle is any motor-driven cycle which:

1) will not attain a speed of more than 30 miles per hour (48 kilometers per hour) in one mile (1.609 kilometers) from a standing start,

2) has an engine with not more than 50 cubic centimeters displacement or with two brake horsepower or less, and

3) has a power drive system which does not require its operator to shift gears.

2.2.9.4 moped: A moped is a speed-limited motor-driven cycle which may be propelled by pedalling.

Exclusions:

— Motor scooters

— Motorized or motor-assisted bicycles

— And others

2.2.10 bus: A bus is a motor vehicle consisting primarily of a transport device designed for carrying more than ten persons.

Exclusions:

— Any school bus that is not designed for carrying more than ten persons

— Any school bus that is an automobile, van, utility vehicle, or truck (See 2.8.1 School bus.)

2.2.11 utility vehicle: An utility vehicle is a motor vehicle other than a motorcycle or bus consisting primarily of a transport device designed for carrying ten or fewer persons, and generally considered a multi-purpose vehicle that is designed to have off-road capabilities. These vehicles are generally four-wheel-drive (4 x 4) and have increased ground clearance. An utility vehicle has a gross vehicle weight rating (GVWR) of 10,000 pounds or less. Utility vehicles with wheelbases greater than 88 inches are classified by overall width. The wheelbase and overall width should be rounded to the nearest inch.

Primary size categories are:

Mini — The wheelbase is less than or equal to 88 inches. These are typically a microcar with a high clearance, off-road capability.

Small — The wheelbase is greater than 88 inches. Overall width is less than or equal to 66 inches. These are typically a short wheelbase and narrow tracked multi-purpose vehicle.

Midsize — The wheelbase is greater than 88 inches. Overall width is greater than 66, but less than 75 inches. These are typically a multi-purpose vehicle designed around a shortened pickup truck chassis.

Full-size — The wheelbase is greater than 88 inches. Overall width is from 75 inches to less than or equal to 80 inches. These are typically a multi-purpose vehicle designed around an enlarged pickup truck chassis.

Large — The wheelbase is greater than 88 inches. Overall width is more than 80 inches. These are typically a multi-purpose vehicle designed around an enlarged pickup truck chassis.

Exclusions:

— Four-wheel-drive automobiles (see 2.2.12) are not considered utility vehicles

Examples:

1) Small — S-10, Blazer, Wrangler, Ranger, Jimmy, Tracker

2) Midsize — Cherokee, Commanche, Yukon, Typhoon, Explorer

3) Fullsize — Blazer, Suburban, Bronco, F Series, Sierra

4) Large — Hummer

2.2.12 automobile: An automobile is a motor vehicle other than a motorcycle or utility vehicle consisting of a transport device designed for carrying ten or fewer persons. Automobiles may be classified by size or weight, or both. Size classification is based on wheelbase. Weight classification is based on curb weight, the weight of an automobile with standard equipment and a full complement of fuel and other fluids, but with no load of persons or property. Before classification wheelbase should be rounded to the nearest inch and curb weight should be rounded to the nearest 100 pounds.

Primary size categories are:

Small — wheelbase 99 inches (2.51 meters) or less

Midsize — wheelbase 100 to 109 inches (2.54 to 2.77 meters)

Large — wheelbase 110 inches (2.79 meters) or more

Primary weight categories are:

Light — curb weight 2400 pounds (1089 kilograms) or less

Midweight — curb weight 2500 to 3400 pounds (1134 to 1542 kilograms)

Heavy — curb weight 3500 pounds (1588 kilograms) or more

Secondary size and weight categories may be developed by subdivision of the primary categories. (See 3.10 and 3.11.)

2.2.13 truck: A truck is a motor vehicle designed primarily for carrying property.

Inclusions:

— Single-unit truck (See 2.2.19.)

— Truck combination (See 2.2.21.)

Exclusions:

— Truck tractor (See 2.2.18.)

2.2.14 van: A van is a motor vehicle consisting primarily of a transport device which has a gross vehicle weight rating of 10,000 pounds or less and is basically a “box on wheels” that is identifiable by its enclosed passenger and/or cargo area, step-up floor, and relatively short (or nonexistent) hood. Vans are classified by size based on frame type and overall vehicle body width. Before classification, vehicle width should be rounded to the nearest inch.

Primary size categories are:

Minivan — Unibody vans. The body and frame are one integral unit.

Small — Frame-based small vans. The overall body width is from 72 to less than or equal to 78 inches. These are frame-based standard cargo vans or passenger vans.

Midsize — Frame-based midsize vans. The overall body width is from more than 78 to less than or equal to 80 inches. These are frame-based large cargo vans or passenger vans.

Large — Frame-based large vans. The overall body width is more than 80 inches. These are frame-based large cargo vans or passenger vans.

Inclusions:

— Passenger vans (See 2.2.14.1.)

— Cargo van or delivery van (See 2.2.14.2.)

— Van-based motorhome (See 2.2.14.3.)

Exclusions:

— Utility Vehicle

Examples:

1) Minivan — Caravan, Voyager, Transport, Lumina

2) Small — Astro Van, Safari

3) Midsize — Vandura, Econoline

4) Large — Step vans

2.2.14.1 passenger van: A passenger van is any van where the area behind the driver or cab is designed for carrying passengers.

Inclusions:

— Some automobiles and buses. (See 2.2.12 and 2.2.10.)

2.2.14.2 cargo van: A cargo van is any van where the area behind the driver or cab is designed for transporting cargo or operated for general commercial use.

Inclusions:

— Some single-unit trucks (See 2.2.19.)

2.2.14.3 van-based motorhomes: A van-based motorhome is any van where a frame-mounted recreational unit is added behind the driver or cab area.

2.2.15 trailer: A trailer is a road vehicle designed to be drawn by another road vehicle.

Inclusions:

— Pole trailer (See 2.2.16.)

— Semitrailer (See 2.2.17.)

— Full trailer (See 2.2.18.)

2.2.16 pole trailer: A pole trailer is a trailer designed to be attached to the towing road vehicle by means of a reach or pole, or by being boomed or otherwise secured to the towing road vehicle, and ordinarily used for carrying property of a long or irregular shape such as poles, pipes or structural members that are generally capable of sustaining themselves as beams between the supporting connections.

2.2.17 semitrailer: A semitrailer is a trailer, other than a pole trailer, designed for carrying property and so constructed that part of its weight rests upon or is carried by the towing road vehicle.

2.2.18 full trailer: A full trailer is a trailer, other than a pole trailer, designed for carrying property and so constructed that no part of its weight rests upon or is carried by the towing road vehicle. An auxiliary undercarriage assembly, commonly known as a converter dolly and consisting of a chassis, fifth wheel and one or more towbars, is sometimes used to convert a semitrailer to a full trailer.

2.2.19 single-unit truck: A single-unit truck is a truck consisting primarily of a single motorized transport device. When connected to a trailer, such a device may be part of a truck combination. (See 2.2.21.)

2.2.20 truck tractor: A truck tractor is a motor vehicle consisting of a single motorized transport device designed primarily for drawing trailers.

2.2.21 truck combination: A truck combination is a truck consisting primarily of a transport device which is a single-unit truck or truck tractor together with one or more attached trailers.

Inclusions:

— Truck tractor with semitrailer

— Truck tractor with semitrailer and one or more full trailers

— Single-unit truck with one or more full trailers

— And others

2.2.22 gross weight: Gross weight is the weight of a road vehicle including the weight of the road vehicle, its load of persons and property, and all added equipment.

2.2.23 gross vehicle weight rating: A gross vehicle weight rating is (1) a value specified by the manufacturer for a single-unit truck, truck tractor or trailer, or (2) the sum of such values for the units which make up a truck combination. In the absence of a gross vehicle weight rating, an estimate of the gross weight of a fully loaded unit may be substituted for such a rating.

2.2.24 light truck: A light truck is a truck which has a gross vehicle weight rating of less than 10,000 pounds (4,536 kilograms).

2.2.25 medium truck: A medium truck is a truck which has a gross vehicle weight rating of from 10,000 to 26,000 pounds (4,536 to 11,793 kilograms).

2.2.26 heavy truck: A heavy truck is a truck which has a gross vehicle weight rating of more than 26,000 pounds (11,793 kilograms).

2.2.27 pedalcycle: A pedalcycle is a non-motorized other road vehicle propelled by pedalling.

Inclusions:

— Bicycle, tricycle, unicycle, pedalcar

— And others

2.2.28 roadway: A roadway is that part of a trafficway designed, improved, and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. See Figure 1.

Exclusions:

— Bridle paths, bicycle paths

— And others

NOTE — The above definition of “roadway” is consistent with definitions in general use by police and by traffic engineers. See the Uniform Vehicle Code and the Manual on Uniform Traffic Control Devices (ANSI D6.1e-1989, page 1A-8). Other highway engineers commonly use the term "roadway" as the term “road” is defined in 2.2.33 below. See AASHO Highway Definitions, American Association of State Highway Officials (now American Association of State Highway and Transportation Officials), January 1968. For a more recent reference, see the definition of “shoulder” in A Policy on Geometric Design of Highways and Streets, AASHTO, 1984, page 362.

2.2.29 median: A median is an area of a trafficway between parallel roads separating travel in opposite directions (see Figure 1). A median should be four or more feet wide.

Inclusions:

— Physical barriers separating roads with travel in opposite directions

— Depressed, raised or flush areas between roads with travel in opposite directions

— Painted medians of four or more feet between roads with travel in opposite directions, including continuous left-turn lanes

Exclusions:

— Shoulders, separators (See 2.2.30.)

Examples:

1) A depressed grassy median separating directions of travel of a divided highway

2) A median with a concrete traffic barrier, guardrail or other physical barrier, separating roads of a multi-lane divided highway

3) A flush, painted median of four or more feet of a divided highway

2.2.30 separator: A separator is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road (see 2.5.18) from other roads (see Figures 2 and 3).

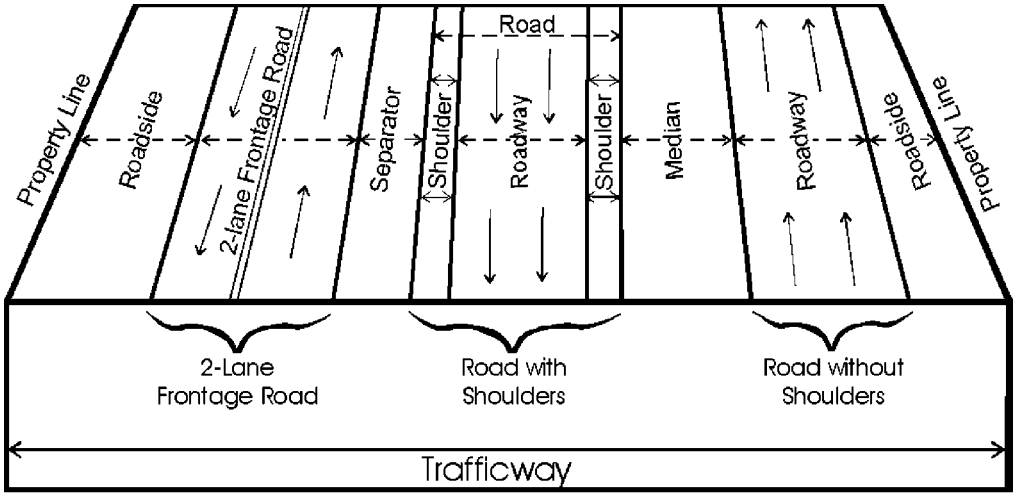

Figure 2 — Trafficway with Frontage Road (See 2.2.30)

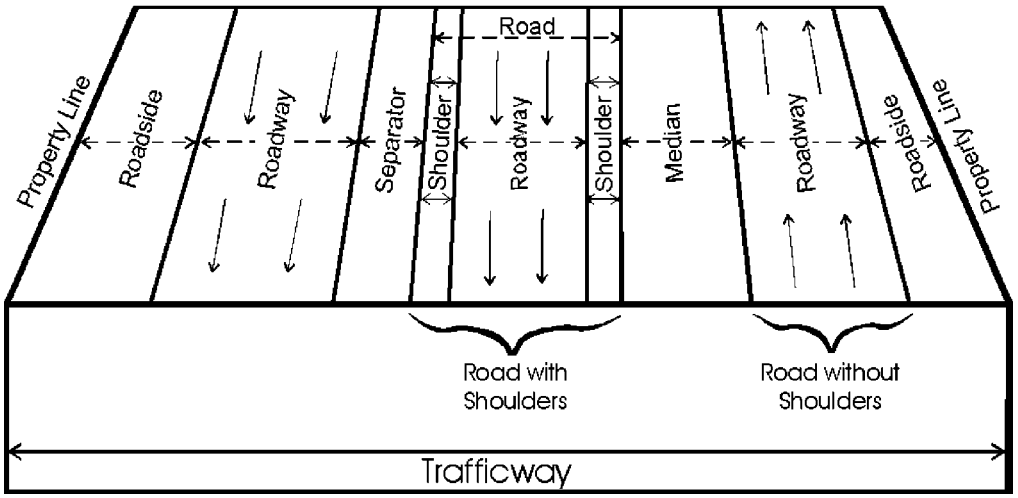

Figure 3 — Trafficway with Multiple Roadways in the Same Direction (See 2.2.30)

Inclusions:

— Physical barriers separating roads with travel in the same direction

— Physical barriers separating a frontage road from other roads of a trafficway

— Depressed, raised or flush areas between roads with travel in the same direction

— Depressed, raised or flush areas between a frontage road and other roads of a trafficway

Exclusions:

— Shoulders, medians

Examples:

1) A depressed grassy separator of a free-way between the main travel lanes and a frontage road

2) A concrete separator between the express travel lanes and local travel lanes of a freeway

2.2.31 roadside: Roadside is the outermost part of the trafficway from the property line or other boundary in to the edge of the first road (see Figure 1).

Inclusions:

— Area between edge of trafficway and edge of roadway with no shoulder

— Area between edge of trafficway and edge of shoulder

Exclusions:

— Roadways, shoulders, separators, and medians

2.2.32 shoulder: A shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped road vehicles, and for lateral support of the roadway structure. See Figure 1.

2.2.33 road: Road is that part of a trafficway which includes both the roadway and any shoulder alongside the roadway. See Figure 1.

Inclusions:

— Designated parking areas on a roadway or between the roadway and the curb

2.2.34 in transport: The term “in transport" denotes the state or condition of a transport vehicle which is in motion or within the portion of a transport way ordinarily used by similar transport vehicles. When applied to motor vehicles, “in transport" means in motion or on a roadway.

Inclusions:

— Motor vehicle in traffic on a highway

— Driverless motor vehicle in motion

— Motionless motor vehicle abandoned on a roadway

— Disabled motor vehicle on a roadway

— And others

In roadway lanes used for travel during rush hours and parking during off-peak periods, a parked motor vehicle is in transport during periods when parking is forbidden.

2.2.35 occupant: An occupant is any person who is part of a transport vehicle.

2.2.36 pedestrian: A pedestrian is any person who is not an occupant.

2.2.37 driver: A driver is an occupant who is in actual physical control of a transport vehicle or, for an out-of-control vehicle, an occupant who was in control until control was lost.

2.2.38 passenger: A passenger is any occupant of a road vehicle other than its driver.

2.2.39 pedalcyclist: A pedalcyclist is any occupant of a pedalcycle in transport.

2.2.40 motorist: A motorist is any occupant of a motor vehicle in transport.

2.2.41 non-motorist: A non-motorist is any person other than a motorist.

Inclusions:

— Pedestrians

— Occupants of motor vehicles not in transport

— Occupants of transport vehicles other than motor vehicles

2.2.42 traffic unit: A traffic unit is a road vehicle or a pedestrian.

2.2.43 bikeway: A bikeway is that part of a trafficway specifically designated as being open for

pedalcycle travel or, where various classes of pedalcycle are segregated, that part of a trafficway open for a particular class. (See 2.2.28.)

2.2.44 bicycle trail: A bicycle trail is a bikeway reserved exclusively for pedalcycles and separated from roadways by open space or barriers.

2.2.45 bicycle lane: A bicycle lane is a bikeway which (1) is contiguous with a parallel roadway and (2) has been designated for preferential or exclusive use by pedalcycles.

2.2.46 shared road: A shared road is any bikeway which is part of a roadway, but not a bicycle lane.

2.3 Injuries and Damage

2.3.1 injury: An injury is bodily harm to a person.

Exclusions:

- Effects of diseases such as stroke, heart attack, diabetic coma, epileptic seizure
- And others

2.3.2 fatal injury: A fatal injury is any injury that results in death. (See 3.1.3.)

2.3.3 fatality: A fatality is any death resulting from a fatal injury. (See 3.1.3.)

2.3.4 incapacitating injury: An incapacitating injury is any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred.

Inclusions:

- Severe lacerations
- Broken or distorted limbs
- Skull or chest injuries
- Abdominal injuries
- Unconsciousness at or when taken from the accident scene
- Unable to leave the accident scene without assistance
- And others

Exclusions:

- Momentary unconsciousness
- And others

2.3.5 nonincapacitating evident injury: A nonincapacitating evident injury is any injury, other than a fatal injury or an incapacitating injury, which is evident to observers at the scene of the accident in which the injury occurred.

Inclusions:

- Lump on head, abrasions, bruises, minor lacerations
- And others

Exclusions:

- Limping (the injury cannot be seen)
- And others

2.3.6 possible injury: A possible injury is any injury reported or claimed which is not a fatal injury, incapacitating injury or nonincapacitating evident injury.

- Momentary unconsciousness
- Claim of injuries not evident
- Limping, complaint of pain, nausea, hysteria
- And others

2.3.7 damage: Damage is harm to property that reduces the monetary value of that property.

Inclusions:

- Harm to wild animals, or birds, which havemonetary value
- And others

Exclusions:

- Harm to wild animals, or birds, which have no monetary value
- Harm to a snowbank unless, for example, additional snow removal costs are incurred because of the harm
- Mechanical failure during normal operation, such as tire blowout, broken fan belt, or broken axle
- And others

2.3.8 road vehicle damage: Road vehicle damage is damage to a road vehicle.

Inclusions:

- Damage to any part of a road vehicle

Exclusions:

— Injury to any person, whether or not the person is part of the road vehicle

2.3.9 motor vehicle damage: Motor vehicle damage is road vehicle damage to a motor vehicle.

2.3.10 other-road-vehicle damage: Other-road-vehicle damage is road vehicle damage to an other road vehicle.

2.3.11 disabling damage: Disabling damage is road vehicle damage which precludes departure of the vehicle from the scene of the accident in its usual operating manner by daylight after simple repairs.

Inclusions:

— Vehicles which could be driven but would be further damaged thereby

— And others

Exclusions:

— Damage which can be remedied temporarily at the scene without special tools or parts other than tires

— Tire disablement without other damage even if no spare tire is available

— Headlamp or taillight damage, which would make night driving hazardous but would not affect daytime driving

— Damage to turn signals, horn, or windshield wipers which makes them inoperative

— And others

2.3.12 functional damage: Functional damage is any road vehicle damage, other than disabling damage, which affects operation of the road vehicle or its parts.

Inclusions:

— Doors, windows, hood, and trunk lids which will not operate properly

— Broken glass which obscures vision

— Any damage which would prevent the motor vehicle from passing an official motor vehicle inspection

— Tire damage even though the tire may be changed at the scene

— Bumpers which are loose

— And others

Exclusions:

— Dented or bent fenders, bumpers, grills, body panels, destroyed hubcaps

— And others

2.4 Accidents

2.4.1 harmful event: A harmful event is an occurrence of injury or damage.

Inclusions:

— Injury or damage resulting when a driver dies or loses consciousness because of a disease condition such as a stroke, heart attack, diabetic coma, or epileptic seizure. In such a case the immediate effect of the disease, such as the driver's death or loss of consciousness, is not itself considered to be a harmful event.

2.4.2 deliberate intent: Deliberate intent is the classification given to the cause of an event which occurs when a person acts deliberately to cause the event or deliberately refrains from prudent acts which would prevent occurrence of the event.

Inclusions:

— Suicide

— Self-inflicted injury

— Homicide

— Injury or damage purposely inflicted

— And others

Exclusions:

— Injury or damage beyond that which was intended

— And others

Examples:

1) When a driver intentionally kills or injures himself with a motor vehicle, by driving it against a fixed object or into a body of water, for example, the driver's death or injury is a result of deliberate intent.

2) When a driver intentionally kills or injures another person with a motor vehicle, by running into a pedestrian, for example, the death or injury is a result of deliberate intent.

3) When a driver intentionally causes damage with a motor vehicle, by ramming another vehicle, for example, the damage is a result of deliberate intent.

2.4.3 legal intervention: Legal intervention is a category of deliberate intent in which the person who acts or refrains from acting is a law-enforcing agent or other official.

Examples:

1) If a lawbreaker crashes either intentionally or unintentionally into a road block set up by police to stop him, the crash is considered a result of legal intervention. If a driver other than the lawbreaker crashes into the road block, the crash is not considered to be a result of legal intervention.

2) If a police car is intentionally driven into another vehicle, the crash is considered to result from legal intervention. If a lawbreaker being pursued by the police loses control of his vehicle and crashes, the crash is not considered to result from legal intervention unless the police intended that the lawbreaker crash.

3) If during the course of the pursuit, the police vehicle strikes a road vehicle other than the subject of the pursuit, a nonmotorist, or property, then that harmful event is not legal intervention.

2.4.4 unstabilized situation: An unstabilized situation is a set of events not under human control. It originates when control is lost and terminates when control is regained or, in the absence of persons who are able to regain control, when all persons and property are at rest.

Exclusions:

— Sets of events which are the result of deliberate intent or legal intervention

Examples:

1) If intentional acts cause injury or damage beyond that reasonably to be expected from the acts, the unexpected injury or damage is not the result of deliberate intent. There is, therefore, an unstabilized situation unless the contrary can be clearly established.

2) In a motor vehicle crash live electric wires fall on a motor vehicle, but there is no injury from the electric current while the occupants remain in the motor vehicle. The unstabilized situation ends with the occupants in a temporary position of safety. Any subsequent injury resulting from attempts by the occupants to leave the motor vehicle, or attempts by others to rescue the occupants, is a part of a new unstabilized situation.

3) In a motor vehicle crash the occupants of the motor vehicle are carried or thrown into water, but there is no injury from the submersion and the occupants reach a temporary position of safety. At this point the unstabilized situation has ended. Any subsequent injury from attempts by the occupants to reach shore, or from attempts by others to rescue the occupants is part of a new unstabilized situation.

4) In a motor vehicle crash objects are loosened but remain in place until all persons are removed from danger from objects that might fall or roll. No property damage would result if the objects fell or rolled. This ends the unstabilized situation. Any subsequent injury attributable to the fall or roll of the loosened objects is not part of the original unstabilized situation.

5) In a motor vehicle crash the motor vehicle catches on fire and is burning, but all occupants have been rescued and the fire is under control. No additional property damage is expected. This is the end of the unstabilized situation. If the heat of the fire ignites nearby combustible materials, any subsequent injury or damage from the induced ignition is not a part of the original unstabilized situation.

6) In a motor vehicle crash an involved motor vehicle carrying explosive materials is stopped and occupants and bystanders are removed from the scene. At this point the unstabilized situation is ended. If the explosive materials detonate during later attempts to remove or salvage them, any injury or damage resulting from the explosion is not a part of the original unstabilized situation.

7) A pedestrian is struck by a motor vehicle in transport which leaves the scene. The pedestrian comes to rest in the roadway. Any subsequent injury resulting from contact with another motor vehicle in transport is part of a new unstabilized situation.

8) A pedestrian is struck by a motor vehicle and thrown into the path of another motor

vehicle and the pedestrian is struck a second time before coming to rest. There is only one unstabilized situation.

9) A motor vehicle in transport brakes, attempting to avoid a pedestrian crossing the roadway. The motor vehicle in transport strikes the pedestrian. At the same time (i.e., when the first vehicle started to brake and before it came to rest), a second motor vehicle in transport swerves to avoid a collision with the braking vehicle, striking a utility pole. The two motor vehicles in transport do not strike each other, but these events are all within one unstabilized situation.

NOTE — If thorough investigation fails to establish whether an accident scene is the result of one or more unstabilized situations, then it should be treated as a single unstabilized situation.

2.4.5 cataclysm: A cataclysm is an avalanche, cloudburst, cyclone, earthquake, flood, hurricane, landslide, lightning, tidal wave, tornado, torrential rain, or volcanic eruption.

2.4.6 accident: An accident is an unstabilized situation which includes at least one harmful event.

2.4.7 contact vehicle: A contact vehicle is any road vehicle which comes in contact with one or more road vehicles, non-motorists, or property in a collision accident, or has a noncollision accident. A contact vehicle is directly involved in an accident. (See 2.6.2. Collision accident and 2.6.3 Noncollision accident.)

2.4.8 noncontact vehicle: A noncontact vehicle is any vehicle other than a contact vehicle. A noncontact vehicle is indirectly involved in an accident.

Examples:

1. A vehicle changes lanes into the path of another vehicle (without making contact) causing an accident. The vehicle changing lanes is a noncontact vehicle.

2. A school bus is stopped on the roadway picking up or discharging pupils and one of the pupils is struck without the school bus being struck. The school bus is a noncontact vehicle.

3. A pedestrian darts into the roadway causing a motor vehicle to stop suddenly without striking the pedestrian. A following vehicle swerves to avoid the stopped vehicle and collides with a fixed object. The first vehicle is a noncontact vehicle.

2.4.9 transport accident: A transport accident is an accident (1) that involves a transport vehicle in transport, (2) in which the first harmful event is not produced by the discharge of a firearm or explosive device, and (3) that does not directly result from a cataclysm.

Inclusions:

— Motor vehicle driven into water after bridge was washed out during a hurricane or flood (cataclysm)

— Motor vehicle driven into fallen materials covering a roadway after a landslide or avalanche (cataclysm)

— And others

2.4.10 aircraft accident: An aircraft accident is a transport accident that involves an aircraft in transport.

2.4.11 watercraft accident: A watercraft accident is a transport accident if it (1) involves a watercraft in transport and (2) is not an aircraft accident.

2.4.12 motor vehicle accident: A motor vehicle accident is a transport accident that (1) involves a motor vehicle in transport, (2) is not an aircraft accident or watercraft accident, and (3) does not include any harmful event involving a railway train in transport prior to involvement of a motor vehicle in transport.

Exclusions:

— Any school bus accident in which no school bus is directly involved and which involves no other motor vehicle (See 2.8.2.)

Example:

If a child approaching a school bus, stopped with its red lights flashing, is struck by a pedalcycle, but neither the pedalcycle nor the child come in contact with the schoolbus, then there is (1) a school bus accident that is not a motor vehicle accident and (2) an other road vehicle accident (collision involving pedestrian).

GO BACK

2.4.13 railway accident: A railway accident is a transport accident that (1) involves a railway train in transport and (2) is not an aircraft accident, watercraft accident or motor vehicle accident.

2.4.14 other-road-vehicle accident: An other-road-vehicle accident is a transport accident that (1) involves an other road vehicle in transport and (2) is not an aircraft accident, watercraft accident, motor vehicle accident or railway accident.

2.4.15 street car accident: A street car accident is an other-road-vehicle accident that involves a street car in transport.

2.4.16 pedalcyde accident: A pedalcycle accident is an other-road-vehicle accident that (1) involves a pedalcycle in transport and (2) is not a street car accident.

2.4.17 road vehicle accident: A road vehicle accident is a transport accident that is either a motor vehicle accident or an other-road-vehicle accident.

2.4.18 traffic accident: A traffic accident is a road vehicle accident in which (1) the unstabilized situation originates on a trafficway or (2) a harmful event occurs on a trafficway.

2.4.19 nontraffic accident: A nontraffic accident is a road vehicle accident which is not a traffic accident.

2.4.20 road vehicle traffic accident: A road vehicle traffic accident is a traffic accident.

2.4.21 road vehicle nontraffic accident: A road vehicle nontraffic accident is a nontraffic accident.

2.4.22 motor vehicle traffic accident: A motor vehicle traffic accident is a motor vehicle accident which is a traffic accident.

2.4.23 motor vehicle nontraffic accident: A motor vehicle nontraffic accident is a motor vehicle accident which is a nontraffic accident.

2.4.24 other-road-vehicle traffic accident: An other-road-vehicle traffic accident is an other-road-vehicle accident which is a traffic accident.

2.4.25 other-road-vehicle nontraffic accident: An other-road-vehicle nontraffic accident is an other-road-vehicle accident which is a nontraffic accident.

2.4.26 injury accident: An injury accident is any road vehicle accident that results in one or more injuries.

2.4.27 fatal accident: A fatal accident is any injury accident that results in one or more fatal injuries.

2.4.28 nonfatal injury accident: A nonfatal injury accident is any injury accident other than a fatal accident.

2.4.29 noninjury accident: A noninjury accident is any road vehicle accident other than an injury accident. A noninjury accident is also called a property-damage-only accident. (See 2.4.30.)

2.4.30 property-damage-only accident: A property-damage-only accident is a noninjury accident.

2.5 Location

2.5.1 urban area: An urban area is an area whose boundaries shall be those fixed by responsible state and local officials in cooperation with each other and approved by the Federal Highway Administration, U. S. Department of Transportation. Such boundaries are established in accordance with the provisions of Title 23 of the United States Code. Urban area boundary information is available from state highway or transportation departments. In the event that boundaries have not been fixed as above for any urban place designated by the Bureau of the Census having a population of 5000 or more, the area within boundaries fixed by the Bureau of the Census shall be an urban area.

2.5.2 rural area: A rural area is any area which is not within urban areas.

2.5.3 Interstate System: The Interstate System is the National System of Interstate and Defense Highways as defined in Section 101, Title 23, United States Code.

2.5.4 interstate highway: An Interstate highway is a trafficway on the Interstate System.

2.5.5 other U. S. route numbered highway: An other U. S. route numbered highway is a trafficway numbered by the American Association of State Highway Officials, but not an Interstate highway.

2.5.6 other state route numbered highway: An other state route numbered highway is a trafficway within a state trafficway system, but not an Interstate highway or other U. S. route numbered highway.

2.5.7 county road: A county road is a trafficway within a county trafficway system that is not an Interstate highway, other U. S. route numbered highway, or other state route numbered highway.

2.5.8 city street: A city street is trafficway within a city trafficway system that is not an Interstate highway, other U. S. route numbered highway, other state route numbered highway, or county road.

2.5.9 driveway access: A driveway access is a roadway providing access to property adjacent to a trafficway. See Figure 4.

Inclusions:

— Entrances to gas stations

— And others

Exclusions:

— Any area not within a trafficway

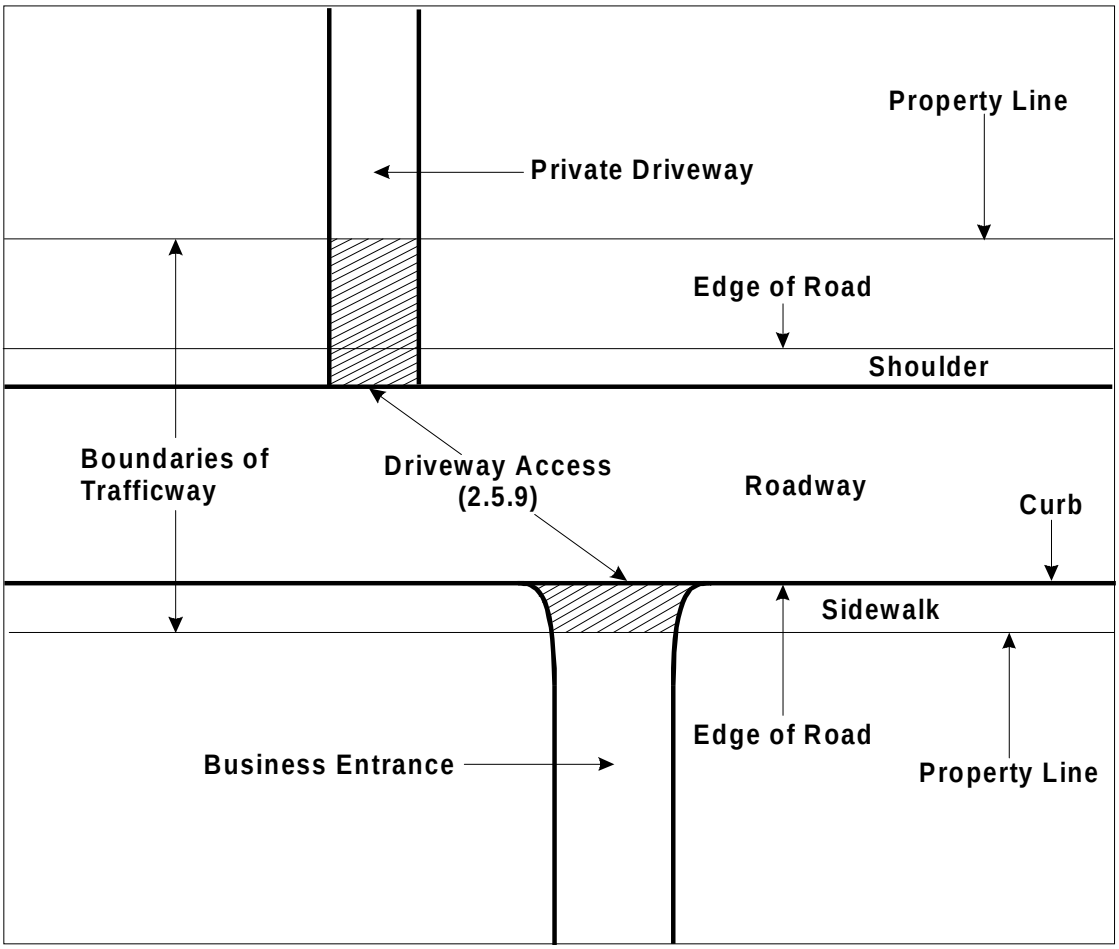

Figure 4 — Driveway Access (See 2.5.9)

2.5.10 intersection: An intersection is an area which (1) contains a crossing or connection of two or more roadways not classified as driveway access and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters (33 feet), the two areas and the roadway connecting them are considered to be parts of a single intersection. See Figure 5.

2.5.11 junction: A junction is either an intersection or the connection between a driveway access and a roadway other than a driveway access.

2.5.12 at-grade intersection: An at-grade intersection is an intersection where all roadways cross or join at the same level.

2.5.13 channelized intersection: A channelized intersection is an at-grade intersection in which traffic is diverted into definite paths by raised or painted traffic islands.

2.5.14 grade separation: A grade separation is a crossing at different levels of two trafficways, or a trafficway and a railway.

2.5.15 fully-controlled access highway: A fully-controlled access highway is a trafficway on which preference is given to through traffic by permitting access only from other trafficways and by providing grade separations at all crossing trafficways.

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

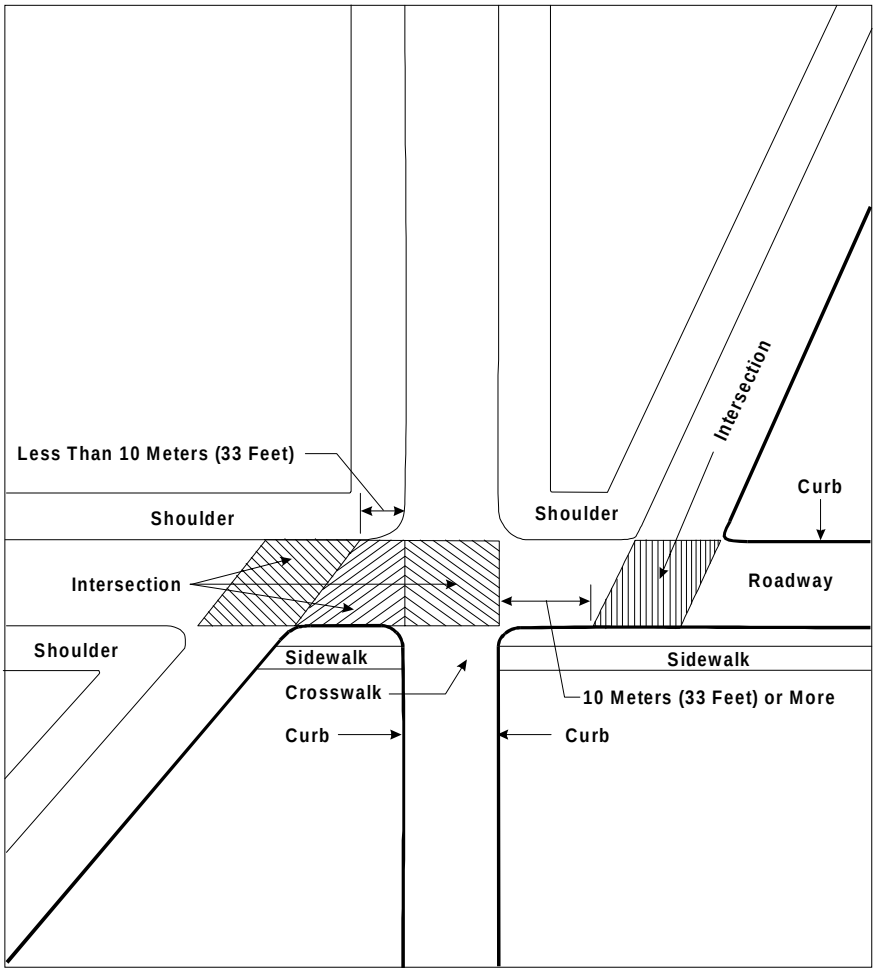

Figure 5 — Intersection (See 2.5.10)

2.5.17 ramp: A ramp is an auxiliary roadway used for entering or leaving through-traffic lanes.

2.5.18 frontage road: A frontage road is a roadway generally paralleling an expressway, freeway, parkway, or through street so designed as to intercept, collect and distribute traffic desiring to cross, enter, or leave such facility and to furnish access to property which otherwise would be isolated as a result of controlled-access features. The frontage road may be within the same trafficway as the main roadway or in a separate trafficway.

2.5.19 gore: A gore is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadways, which join at the point of divergence or convergence. The direction of traffic must be the same on both sides of these roadways. The area includes shoulders or marked pavement, if any, between the roadways. The third side is 60 meters (approximately 200 feet) from the point of divergence or convergence or, if any other road is within 70 meters (230 feet) of that point, a line 10 meters (33 feet) from the nearest edge of such road. See Figure 6.

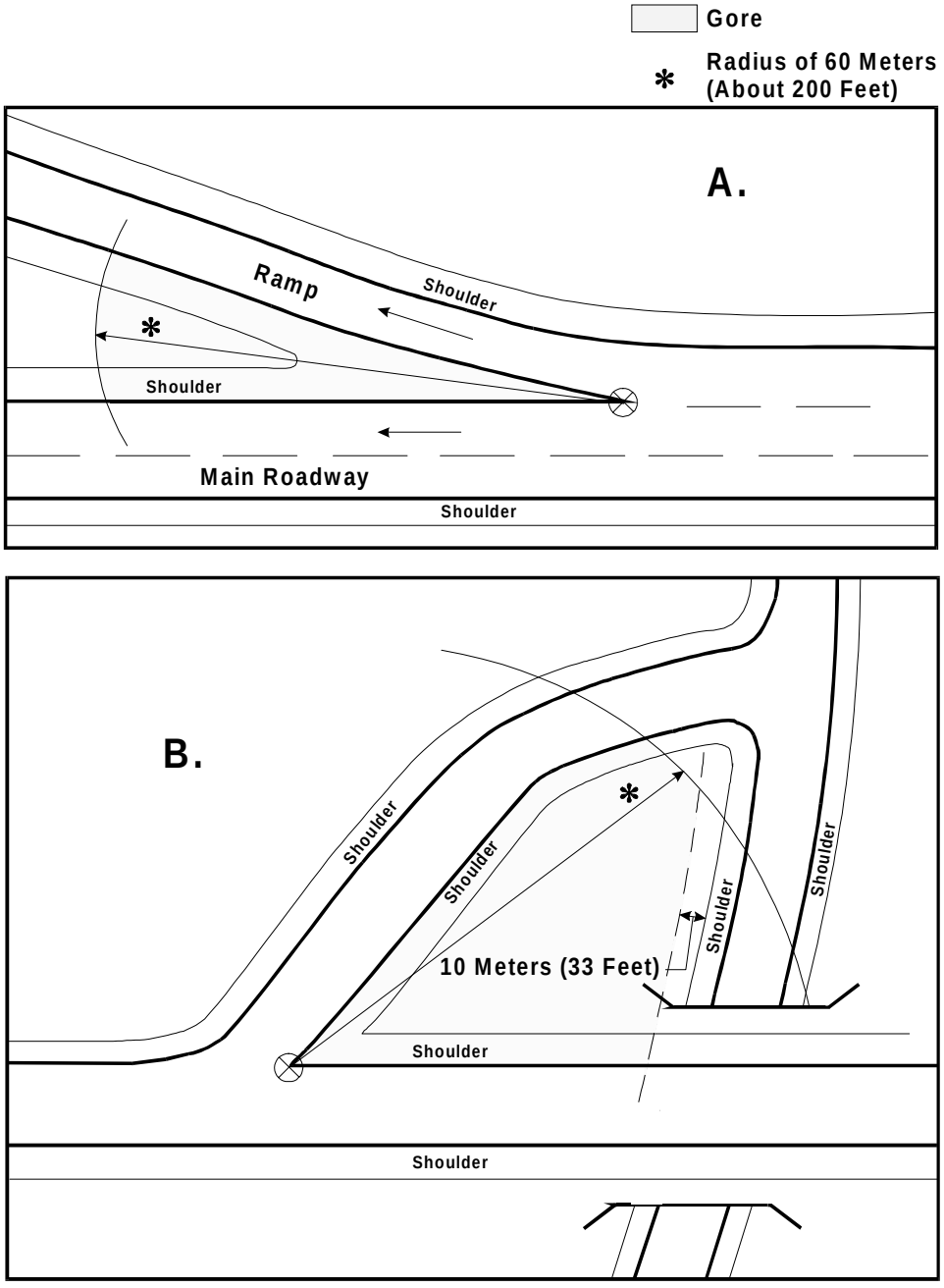

Figure 6 — Gore (2.5.19)

Inclusions:

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

Exclusions:

- Islands for channelization of vehicle movements
- Islands for pedestrian refuge
- And others

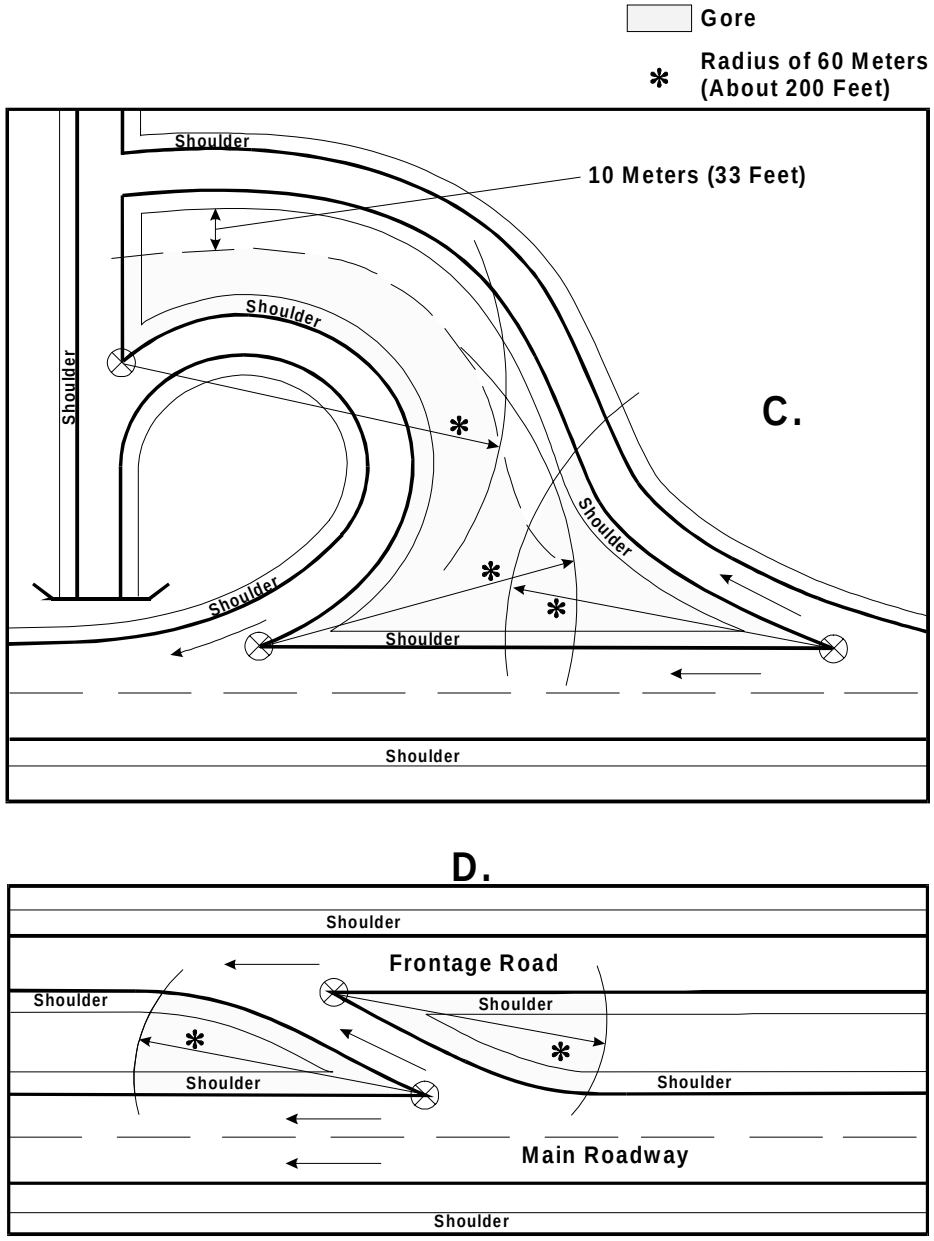

Figure 6 — Gore continued (See 2.5.19)

2.5.20 curb return: A curb return is the curved section of curb used at intersections in joining straight sections of curb.

2.5.21 crosswalk: A crosswalk is (1) that part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the roadway measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway, or (2) any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway.

2.5.22 parking lot: A parking lot is an area used primarily for parking road vehicles. When paved and marked it commonly includes the following areas:

1) Parking stalls — areas reserved primarily for parked road vehicles

2) Parking lot aisles — areas used primarily for vehicular access to parking stalls. Parking lot aisles are not trafficways.

3) Parking lot ways — land ways which are used primarily for vehicular circulation within parking lots and for vehicular access to parking lot aisles. Parking lot ways in parking lots open to the public are trafficways.

2.6 Road Vehicle Accident Types

2.6.1 overturning accident: An overturning accident is a road vehicle accident in which the first harmful event is the overturning of a road vehicle.

2.6.2 collision accident: A collision accident is a road vehicle accident other than an overturning accident in which the first harmful event is a collision of a road vehicle in transport with another road vehicle, other property or pedestrians.

2.6.3 noncollision accident: A noncollision accident is any road vehicle accident other than a collision accident.

Inclusions:

- Overturning accident
- Jackknife accident (See 2.6.4.)
- Accidental poisoning from carbon monoxide generated by a road vehicle in transport
- Breakage of any part of a road vehicle in transport, resulting in injury or in further property damage
- Explosion of any part of a road vehicle in transport
- Fire starting in a road vehicle in transport
- Fall or jump from a road vehicle in transport
- Occupant hit by an object in, or thrown against some part of a road vehicle in transport
- Injury or damage from moving part of a road vehicle in transport
- Object falling from, or in, a road vehicle in transport
- Object falling on a road vehicle in transport
- Toxic or corrosive chemicals leaking out of a road vehicle in transport
- Injury or damage involving only the road vehicle that is of a non-collision nature, such as a bridge giving way under the weight of a road vehicle, striking holes or bumps on the surface of the trafficway, or driving into water, without overturning or collision
- And others

2.6.4 jackknife accident: A jackknife accident is a noncollision accident in which the first harmful event results from unintended contact between any two units of a multiunit road vehicle such as a truck combination.

2.6.5 collision involving pedestrian: A collision involving pedestrian is a collision accident in which the first harmful event is the collision of a pedestrian and a road vehicle in transport.

2.6.6 collision involving motor vehicle in transport: A collision involving motor vehicle in transport is an accident that is both a motor vehicle accident and a collision accident in which the first harmful event is the collision of two or more motor vehicles in transport.

2.6.7 collision involving other road vehicle in transport: A collision involving other road vehicle in transport is an accident that is both an other-road-vehicle accident and a collision accident in which the first harmful event is the collision of two or more other road vehicles in transport.

2.6.8 collision involving parked motor vehicle: A collision involving parked motor vehicle is a collision accident in which the first harmful event is the striking of a motor vehicle not in transport by a road vehicle in transport.

2.6.9 collision involving railway vehicle: A collision involving railway vehicle is a collision accident in which the first harmful event is the collision of a road vehicle in transport and a railway vehicle.

2.6.10 collision involving pedalcycle: A collision involving pedalcycle is an accident that is both a motor vehicle accident and a collision accident in which the first harmful event is the collision of a pedalcycle in transport and a motor vehicle in transport.

2.6.11 collision involving animal: A collision involving animal is a collision accident in which the first harmful event is the collision of an animal, other than an animal powering an other road vehicle, and a road vehicle in transport.

2.6.12 collision involving fixed object: A collision involving fixed object is a collision accident in which the first harmful event is the striking of a fixed object by a road vehicle in transport. Fixed objects include such objects as guardrail, bridge railing or abutments, construction barricades, impact attenuators, trees, embedded rocks, utility poles, ditches, steep earth or rock slopes, culverts, fences and buildings.

2.6.13 collision involving other object: A collision involving other object is any collision accident other than a (1) collision involving pedestrian, (2) collision involving motor vehicle in transport, (3) collision involving other road vehicle in transport, (4) collision involving parked motor vehicle, (5) collision involving railway vehicle, (6) collision involving pedalcycle, (7) collision involving animal, or (8) collision involving fixed object.

2.7 Location of Road Vehicle Accidents

2.7.1 on-roadway accident: An on-roadway accident is (1) a collision accident in which the initial point of contact between colliding units in the first harmful event is within a roadway or (2) a non-collision accident in which the road vehicle involved was partly or entirely on the roadway at the time of the first harmful event.

2.7.2 off-roadway accident: An off-roadway accident is any road vehicle accident other than an on-roadway accident.

2.7.3 at-intersection accident: An at-intersection accident is a traffic accident in which the first harmful event occurs within the limits of an intersection. See Figure 5.

2.7.4 driveway access accident: A driveway access accident is a traffic accident in which the first harmful event occurs on a driveway access or involves a road vehicle entering or leaving another roadway by way of a driveway access. See Figure 4.

2.7.5 intersection-related accident: An intersection-related accident is a traffic accident in which the first harmful event (1) occurs on an approach to or exit from an intersection and (2) results from an activity, behavior or control related to the movement of traffic units through the intersection. See Figure 5.

2.7.6 nonjunction accident: A nonjunction accident is a road vehicle accident that is not an at-intersection accident, a driveway access accident or an intersection-related accident.

2.7.7 interchange accident: An interchange accident is a traffic accident in which the first harmful event occurs within boundaries which include all ramps of auxiliary roadways and include each roadway entering or leaving the interchange to a point 30 meters (100 feet) beyond the gore or curb return at the outermost ramp connection. Interchange accidents may include at-intersection accidents, intersection-related accidents, driveway access accidents or nonjunction accidents. See Figure 7.

2.8 School Bus

2.8.1 school bus: A school bus is a motor vehicle used for the transportation of any school pupil at or below the 12th-grade level to or from a public or private school or school-related activity. A motor vehicle is not a school bus while on trips which involve the transportation exclusively of other passengers or exclusively for other purposes. A motor vehicle is a school bus only if it is externally identifiable by the following characteristics:

1) Its color is yellow.

2) The words “school bus" appear on the front and rear.

3) Flashing red lights are located on the front and rear.

4) Lettering on both sides identifies the school or school district served, or the company operating the bus.

Inclusions:

— Any automobile, bus, van, utility vehicle, truck, or other vehicle which meets the above criteria

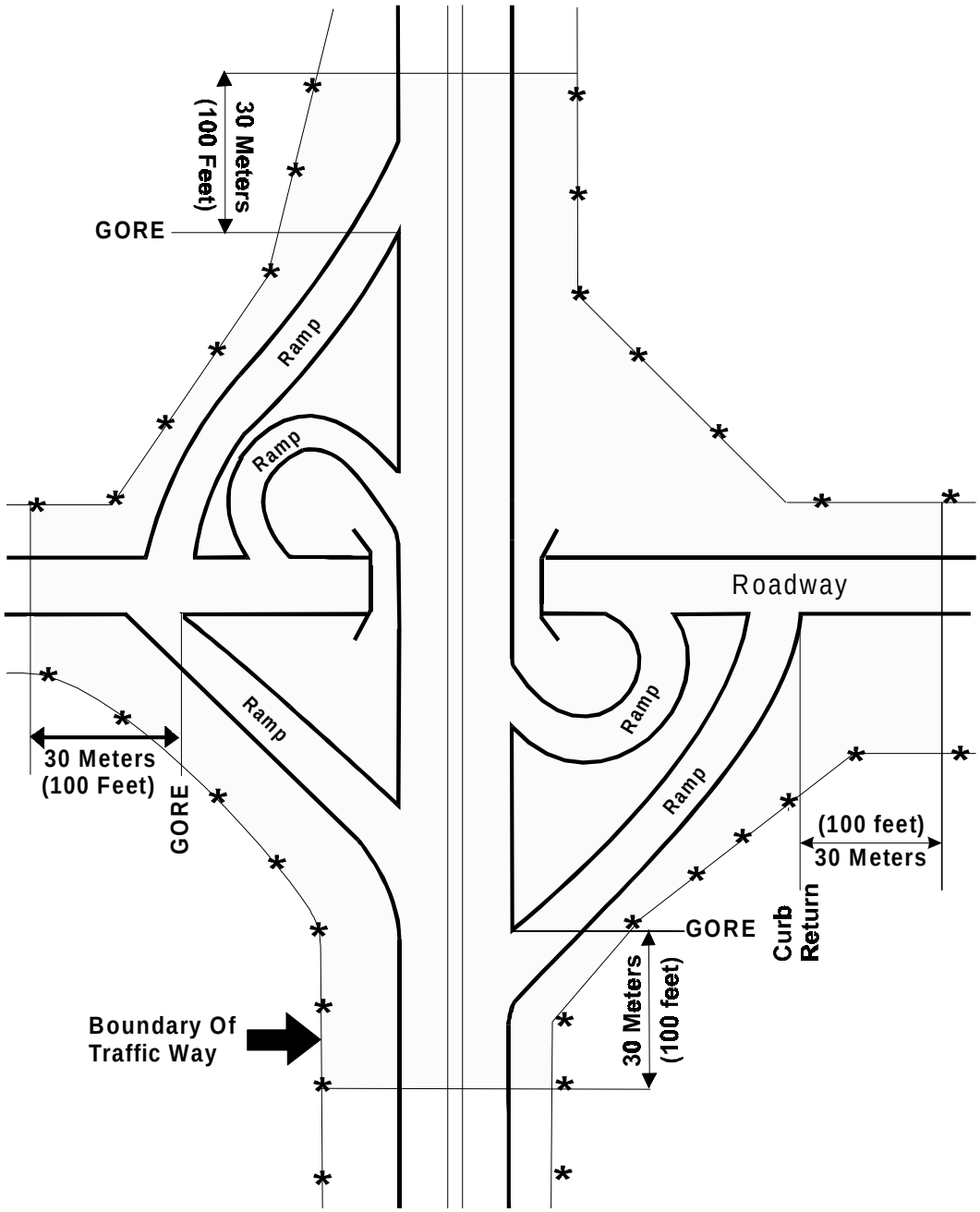

Figure 7 — Interchange Accidents Accidents which occur within the shaded area are interchange accidents (See 2.7.7)

— Any such vehicle going to pick up, or returning from delivering school pupils

Exclusions:

— Any vehicle while being used to transport non-school pupils such as senior citizens or migrant workers

2.8.2 school bus accident: A school bus accident is (1) a motor vehicle accident in which a school bus, with or without a pupil on board, is involved directly as a contact vehicle, or (2) a motor vehicle accident or an other-road-vehicle accident in which a school bus, with or without a pupil on board, is involved indirectly as a noncontact vehicle.

Inclusions:

— A collision involving motor vehicle in transport in which one or more school buses strike(s) or are (is) struck by another road vehicle (directly involved)

— A collision involving pedestrian in which a child approaching or leaving a school bus, stopped and with its red lights flashing, is struck and injured by a motor vehicle (School bus indirectly involved)

— A collision accident or noncollision accident involving a motor vehicle in transport passing a school bus stopped and with its red lights flashing (The school bus is a noncontact vehicle indirectly involved)

— A collision accident in which a child approaching or leaving a school bus, stopped and with its red lights flashing, is struck and injured by a pedalcycle (School bus indirectly involved)

Exclusions:

— A collision accident or non-collision accident involving a motor vehicle which is normally used as a school bus, but is carrying only senior citizens when the collision occurs

3 Classification

3.1 Classification of Persons by Injury Severity

3.1.1 Introduction. The purpose of this classification is to describe the most severe injury to any person involved in a road vehicle accident.

3.1.2 Categories. There are five mutually exclusive categories for classification of injured persons. In order of precedence, these are:

— person with fatal injury

— person with incapacitating injury

— person with nonincapacitating evident injury

— person with possible injury

— person with no injury

3.1.3 Time of classification. Injuries should be classified on the basis of conditions at the scene of the accident. The single exception to this rule applies to fatal injuries. If any injury results in death within a specified period after the road vehicle accident in which the injury occurred, the injury classification should be changed to fatal injury. For general use in the administration of highway safety programs, the specified period is 30 days. This 30-day fatality counting rule is suitable for most applications, but other fatality counting rules are sometimes needed to meet specialized requirements. A 12-month rule for counting fatalities is used under World Health Organization procedures adopted for vital statistics reporting in the United States. Experience indicates that, of the deaths from motor vehicle accidents which occur within 12 months of those accidents, about 99.5 percent occur within 90 days and about 98.0 percent occur within 30 days.

3.1.4 Guide to classification. The injury classification applies to any person involved in road vehicle accidents while either in or out of a road vehicle. The categories are so defined that, for the most part, neither medical attention nor special tests are required for classification. Classification usually can be done by ordinary observation at the time of the accident or from information submitted on the accident report.

3.1.5 Additional guides for fatal injuries. The underlying cause of death recorded in the medical certification part of the death certificate determines whether or not a death is classified as a fatal injury resulting from a road vehicle accident. Instructions for interpretation of information reported on death certificates are too detailed for inclusion in this manual. Normally, the medical examiner or coroner will be the final authority on matters pertaining to cause of death whether or not an autopsy is performed.

3.1.6 Alternate injury scale. A more detailed scale for recording injuries by type and severity is available in The Abbreviated Injury Scale (AIS), a publication of the American Association for Automotive Medicine.

3.2 Classification of Road Vehicles by Damage Severity

3.2.1 Introduction. The purpose of this classification is to describe the most severe damage to any road vehicle involved in a road vehicle accident.

3.2.2 Categories. There are four mutually exclusive categories for road vehicle damage to motor vehicles (see 3.2.2.1) or other road vehicles. (See 3.2.2.2.)

3.2.2.1 Motor vehicles. In order of precedence, motor vehicle categories by severity of damage are:

— Disabling damage to motor vehicle

— Functional damage to motor vehicle

— Other motor vehicle damage

— No damage to motor vehicle

3.2.2.2 Other road vehicles. In order of precedence, other road vehicle categories by severity of damage are:

— Disabling damage to other road vehicle

— Functional damage to other road vehicle

— Other other-road-vehicle damage

— No damage to other road vehicle

3.2.3 Alternate damage scale. A more detailed scale for recording damage by severity and type of impact is available in Vehicle Damage Scale for Traffic Accident Investigators, a National Safety Council publication.

3.3 Accident Classification by Transport Vehicle Type

3.3.1 Introduction. The purpose of this classification is to describe the type of transport accident.

3.3.2 Categories. There are five mutually exclusive categories for classification of transport accidents. In order of precedence, these are:

— Aircraft accident

— Watercraft accident

— Motor vehicle accident

— Railway accident

— Other-road-vehicle accident

3.3.3 Basis for categories. The five categories of transport accident listed above are based upon those used for compilation of vital statistics. Current definitions for this purpose are given in the World Health Organization “Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death,” Volume I, pages 547-552 (1975 Revision, published in 1977).

3.4 Accident Classification by Injury Severity

3.4.1 Introduction. The purpose of this classification is to describe the severity of a road vehicle accident in terms of injuries received. The accident is classified according to the most serious injury to any person involved.

3.4.2 Categories. There are five mutually exclusive categories of injury severity for classification of road vehicle accidents. (See 3.4.2.1.) These may be reduced to three mutually exclusive categories by combining the nonfatal injury categories. (See 3.4.2.2.)

3.4.2.1 Five category set. Road vehicle accident categories, in order of precedence, are:

— Fatal accident

— Incapacitating injury accident

— Nonincapacitating evident injury accident

— Possible injury accident

— Noninjury accident

3.4.2.2 Three category set. Road vehicle accident categories, in order of precedence, are:

— Fatal accident

— Nonfatal injury accident

— Noninjury accident

3.4.3 General. The “noninjury accident" classification applies only to road vehicle accidents which result in damage but not injury.

3.5 Accident Classification by Damage Severity

3.5.1 Introduction. The purpose of this classification is to describe the severity of a road vehicle accident in terms of damage to property.

3.5.2 Categories. There are five categories of damage severity for classification of motor vehicle accidents (see 3.5.2.1) or other-road-vehicle accidents. (See 3.5.2.2.)

3.5.2.1 Motor vehicle accidents. Motor vehicle accident categories, in order of precedence, are:

— Disabling damage accident

— Functional damage accident

— Other motor vehicle damage accident

— Other property damage accident

— No damage accident

3.5.2.2 Other-road-vehicle accidents. Other-road-vehicle accident categories, in order of precedence, are:

— Disabling damage accident

— Functional damage accident

— Other other-road-vehicle damage accident

— Other property damage accident

— No damage accident

3.5.3 Interpretation. This classification does not actually describe or measure the severity of the whole road vehicle accident, but only the most serious damage to one road vehicle. A motor vehicle accident in which one motorcycle was disabled would have the same “damage severity" as one in which four trucks with trailers were demolished.

3.5.4 General. The “no damage" classification applies only when there is injury (see 2.3.1) but no damage in a road vehicle accident; if there were neither damage nor injury there would be no accident.

3.6 Accident Classification by Number of Vehicles

3.6.1 Introduction. The purpose of this classification is to describe a motor vehicle accident in terms of the number of motor vehicles in transport which are involved, or other-road-vehicle accident in terms of the number of other road vehicles in transport which are involved.

3.6.2 Categories. The categories for classification of road vehicle accidents by number of vehicles are:

- Single vehicle accident
- Two vehicle accident
- Three vehicle accident
- And so on

3.6.3 Noncontact road vehicles. A noncontact (or “phantom") road vehicle is not counted as one of the road vehicles involved in an accident. (See 2.4.8.) Noncontact vehicles may or may not be recorded on accident reports but should not be counted when classifying accidents by number of vehicles involved. Information about a noncontact vehicle may be recorded for legal purposes, but such vehicles are not counted for statistical purposes.

3.6.4 Single-vehicle accidents. Common types of single-vehicle accidents are noncollision accidents or collisions involving pedestrians, fixed objects, wild animals or unrestrained domestic animals.

3.6.5 School bus. If a school bus is directly involved (as a contact vehicle) in a motor vehicle accident, the school bus is counted as any other motor vehicle would be. If a school bus is indirectly involved (e.g., as a noncontact vehicle) in a motor vehicle accident or an other-road-vehicle accident, it is not counted.

3.7 Accident Classification by First Harmful Event

3.7.1 Introduction. The purpose of this classification is to describe a road vehicle accident in terms of the first harmful event that occurred.

3.7.2 Categories. Under two broad classifications, there are ten mutually exclusive categories for classification of motor vehicle accidents (see 3.7.2.1) and nine mutually exclusive categories for classification of other-road-vehicle accidents (see 3.7.2.2).

3.7.2.1 Motor vehicle accidents. Motor vehicle accident categories are:

- Collision accident
- Collision involving pedestrian
- Collision involving motor vehicle in transport
- Collision involving parked motor vehicle
- Collision involving railway vehicle
- Collision involving pedalcycle
- Collision involving animal
- Collision involving fixed object
- Collision involving other object
- Noncollision accident
- Overturning accident
- Jackknife accident
- Other noncollision accident

3.7.2.2 Other-road-vehicle accidents. Other-road-vehicle accident categories are:

- Collision accident
- Collision involving pedestrian
- Collision involving other road vehicle in transport
- Collision involving parked motor vehicle
- Collision involving railway vehicle
- Collision involving animal
- Collision involving fixed object
- Collision involving other object
- Noncollision accident
- Overturning accident

— Jackknife accident

— Other noncollision accident

3.7.3 Guide to classification. The use of the first harmful event rather than the most severe or significant harmful event is specified for uniformity in reported road vehicle accident statistics. For analytic purposes it may be desirable to collect and use information about subsequent harmful events.

3.8 Accident Classificaton by Location

3.8.1 Roadway-Related Location

3.8.1.1 Introduction. The purpose of this classification is to describe a road vehicle traffic accident in terms of its location with respect to roadways.

3.8.1.2 Categories. There are two mutually exclusive categories for classification of road vehicle traffic accidents in terms of location with respect to roadways. These are:

— On-roadway accident

— Off-roadway accident

3.8.1.3 Inadequate information. If there is insufficient information to determine clearly in which category a road vehicle traffic accident belongs, classify the accident as an on-roadway accident.

3.8.2 Junction-Related Location

3.8.2.1 Introduction. The purpose of this classification is to describe a traffic accident in terms of its location with respect to junctions.

3.8.2.2 Categories. There are four mutually exclusive categories for classification of traffic accidents in terms of location with respect to junctions. In order of precedence, these are:

— At-intersection accident

— Driveway access accident

— Intersection-related accident

— Nonjunction accident

3.8.3 Administrative Class of Trafficway

3.8.3.1 Introduction. The purpose of this classification is to describe a traffic accident in terms of the administrative class of trafficway on which it occurred.

3.8.3.2 Categories. There are six mutually exclusive categories for classification of traffic accidents by administrative class of trafficway. In order of precedence these are:

— Interstate highway accidents

— Other U. S. route numbered highway accidents

— Other state route numbered highway accidents

— County road accidents

— City street accidents

— All other traffic accidents

3.8.3.3 Intersections or interchanges. For traffic accidents within intersections or interchanges, assign the administrative class of trafficway as follows:

— In an at-intersection accident, assign the accident to the highest class of trafficway at the intersection.

— In an interchange accident, assign the accident to the highest class of trafficway in the interchange unless the accident occurs on the lower class trafficway and does not occur at the connections of ramps and lower class roadways. Accidents which occur at the connections of ramps and the lower class roadways, including those in merge/diverge lanes, should be assigned to the highest class trafficway in the interchange. (See Figure 6.) (See also 3.8.3.4 Ramps or frontage roads.)

3.8.3.4 Ramps or frontage roads. A ramp or connecting road at an intersection or interchange is presumed to be part of the highest class of trafficway with which it connects. A frontage road is not considered to be a ramp or connecting road.

3.8.3.5 First harmful event. The location of the first harmful event determines the trafficway classification for the traffic accident. When the first harmful event does not occur on a trafficway the traffic accident should be attributed to the class of trafficway on which the unstabilized situation originated.

3.8.3.6 Overlapping systems. Some sections of trafficways are on more than one administrative system. For example, a highway may have both a U. S. route number and a state route number. In such a case, a traffic accident should be assigned

to the highest administrative system at the accident location.

3.8.3.7 Inadequate information. In any case where there is a question as to which administrative class of trafficway a traffic accident should be assigned, it should be assigned to the higher class.

3.8.4 Access Class of Trafficway

3.8.4.1 Introduction. The purpose of this classification is to describe a traffic accident in terms of the access class of trafficway on which it occurred.

3.8.4.2 Categories. There are two mutually exclusive categories for classification of traffic accidents by access class of trafficway. These are:

- Fully-controlled access highway accidents
- Other traffic accidents

3.8.4.3 Guide to classification. Classification of traffic accidents by access class of traffficway should be compatible with classification of accidents by administrative class of trafficway. (See 3.8.3.)

3.8.5 Land Use Character

3.8.5.1 Introduction. The purpose of this classification is to describe the location of a road vehicle accident in terms of the general area in which it occurred.

3.8.5.2 Categories. There are two mutually exclusive categories for classifying road vehicle accidents with respect to location by land use character. These categories are:

- Urban area accident
- Rural area accident

3.8.6 Political Subdivision

3.8.6.1 Introduction. The purpose of this classification is to describe the location of a road vehicle accident in terms of the political subdivision in which it occurred.

3.8.6.2 Categories. Any city, county, state or other political jurisdiction is a possible category for classification of road vehicle accident by political jurisdiction. Such categories are not necessarily mutually exclusive.

3.8.6.3 Guide to classification. The location of the first harmful event is presumed to be the accident location for purposes of classification of road vehicle accidents by political jurisdiction.

3.8.7 Bikeway-Related Location

3.8.7.1 Introduction. The purpose of this classification is to describe a road vehicle traffic accident involving one or more pedalcycles in terms of its location with respect to bikeways.

3.8.7.2 Categories. There are four mutually exclusive categories for classification of road vehicle traffic accidents in terms of location with respect to bikeways. These are:

- Bicycle trail accidents
- Bicycle lane accidents
- Shared road accidents
- Non-bikeway accidents

3.8.7.3 Inadequate information. If there is insufficient information to determine clearly in which category a road vehicle traffic accident belongs, classify the accident as a non-bikeway accident.

3.9 Motor-Vehicle Classification

3.9.1 Introduction. The purpose of this classification is to describe the type of motor vehicle involved in a motor vehicle accident.

3.9.2 Categories. Categories for classification of motor vehicles by type include:

- Automobile (See 3.10, 3.11.)
  - Van
  - Other automobile
- Utility vehicle
- Bus
  - Van
  - Other bus
- Motorcycle (See 3.12.)
- Truck tractor
- Truck (See 3.13.)
  - Single-unit
    - Van
    - Other single-unit
    - Truck
  - Truck combination
- Other motor vehicle

3.10 Automobile Classification Size

3.10.1 Introduction. The purpose of this classification is to describe the sizes of automobiles involved in accidents.

3.10.2 Categories. There are three mutually exclusive categories of automobile size, based on wheelbase expressed to the nearest inch. Where a finer breakdown is desired, the three-category set may be expanded to a seven-category set.

3.10.2.1 Three-category set. Primary automobile size categories are:

Small — wheelbase 99 inches (2.51 meters) or less

Midsize — wheelbase 100 to 109 inches (2.54 to 2.77 meters)

Large — wheelbase 110 inches (2.79 meters) or more

3.10.2.2 Seven-category set. Secondary automobile size categories are:

Ultrasmall — wheelbase 89 inches (2.26 meters) or less

Minicompact — wheelbase 90 to 94 inches (2.29 to 2.39 meters)

Subcompact — wheelbase 95 to 99 inches (2.41 to 2.51 meters)

Compact — wheelbase 100 to 104 inches (2.54 to 2.64 meters)

Intermediate — wheelbase 105 to 109 inches (2.67 to 2.77 meters)

Full-size — wheelbase 110 to 114 inches (2.79 to 2.90 meters)

Largest — wheelbase 115 inches (2.92 meters) or more

3.10.3 Guide to classification. It is not expected that automobile size categories will generally be determined by investigating officers or entered on accident report forms. These data ordinarily may be obtained more economically and accurately by computer interpretation of vehicle identification numbers (VIN's), from tables of size by year, make and model, or by other means.

3.11 Automobile Classification by Weight

3.11.1 Introduction. The purpose of this classification is to describe the weights of automobiles involved in accidents.

3.11.2 Categories. There are three mutually exclusive categories of automobile weight, based on curb weight expressed to the nearest 100 pounds. Curb weight is the weight of an automobile with standard equipment and a full complement of fuel and other fluids, but with no occupants or other load. Where a finer breakdown is desired, the three- category set may be expanded to a seven-category set.

3.11.2.1 Three-category set. Primary automobile weight categories are:

Light — curb weight 2400 pounds (1089 kilograms) or less

Midweight — curb weight 2500 to 3400 pounds (1134 to 1542 kilograms)

Heavy — curb weight 3500 pounds (1588 kilograms) or more

3.11.2.2 Seven-category set. Secondary automobile weight categories are:

A — curb weight 1400 pounds (635 kilograms) or less

B — curb weight 1500 to 1900 pounds (680 to 862 kilograms)

C — curb weight 2000 to 2400 pounds (907 to 1089 kilograms)

D — curb weight 2500 to 2900 pounds (1134 to 1315 kilograms)

E — curb weight 3000 to 3400 pounds (1361 to 1542 kilograms)

F — curb weight 3500 to 3900 pounds (1588 to 1769 kilograms)

G — curb weight 4000 pounds (1814 kilograms) or more

3.11.3 Guide to classification. It is not expected that automobile weight categories will generally be determined by investigating officers or entered on accident report forms. These data ordinarily may be obtained more economically and accurately by computer interpretation of vehicle identification numbers (VIN's), from tables of weight by year, make and model, or by other means.

3.12 Motorcycle Classification by Type

3.12.1 Introduction. The purpose of this classification is to describe the type of motorcycle involved in a motor vehicle accident.

3.12.2 Categories. Categories of motorcycle include:

- Large motorcycle
- Motor-driven cycle
  - Speed-limited motor-driven cycle
  - Moped
  - Other speed-limited motor-driven cycle
- Other motor-driven cycle

3.12.3 General. Motorcycles include a broad range of transport devices. To support traffic safety programs, it is desirable that motor vehicle accident records permit distinction at least between large motorcycles and motor-driven cycles. Where distinctive license plates are used for motor-driven cycles, speed-limited motor-driven cycles, or mopeds, they facilitate accurate identification of these vehicles.

3.13 Truck Classification by Weight

3.13.1 Introduction. The purpose of this classification is to describe the weights of trucks involved in accidents.

3.13.2 Categories. There are three mutually exclusive categories of trucks based on gross vehicle weight rating. The categories are:

Light truck — gross vehicle weight rating under 10,000 pounds (4,536 kilograms)

Medium truck — gross vehicle weight rating 10,000 to 26,000 pounds (4,536 to 11,793 kilograms)

Heavy truck — gross vehicle weight rating over 26,000 pounds (11,793 kilograms)

3.13.3 Guide to classification. A gross vehicle weight rating appears on a label or tag affixed to single-unit trucks, truck tractors and trailers manufactured for use in the United States. Such a label is required by federal regulations issued by the National Highway Traffic Safety Administration (49CFR567). The required label is generally placed on the door or door frame next to the driver's seating position or, for trailers, on the forward half of the left side.

Gross vehicle weight ratings for trucks are also encoded in vehicle identification numbers and may be included in computerized motor vehicle records maintained by the states.

Substitution of an estimate for a gross vehicle weight rating should take place only when the rating is not available from the above sources.

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Characteristics of Motor Vehicle Traffic Accidents

Motor vehicle traffic accidents have a number of characteristics which are used to distinguish between motor vehicle traffic accidents and other events such as non-accidents, aircraft or railway accidents and other motor vehicles, cataclysms and nontraffic accidents. The questions below address all of the distinguishing characteristics of motor vehicle traffic accidents. If the answer to each of the questions below is “yes", the incident is a motor vehicle accident.

1) Did the incident include one or more occurrences of injury (2.3.1) or damage (2.3.7)?

2) Was there at least one occurrence of injury or damage which was not a direct result of a cataclysm (2.4.5)?

3) Did the incident involve one or more motor vehicles (2.2.7)?

4) Of the motor vehicles involved, was at least one in transport (2.2.34)?

5) Was the incident an unstabilized situation (2.4.4)?

6) Did the unstabilized situation originate on a trafficway (2.2.1) or did injury or damage occur on a trafficway?

7) If the incident involved a railway train (2.2.5) in transport, did a motor vehicle in transport become involved prior to any injury or damage involving the train?

8) Is it true that neither an aircraft (2.1.5) in transport nor a watercraft (2.1.6) in transport was involved in the incident?

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