

AMERICAN NATIONAL STANDARD

ANSI D.16-2017

8th Edition



# Manual on Classification of Motor Vehicle Traffic Crashes

ANSI D.16-2017





ANSI D.16 – 2017  
American National Standard

# Manual on Classification of Motor Vehicle Traffic Crashes Eighth Edition

Secretariat  
Association of Transportation Safety Information Professionals  
Prepared by the D.16-2017 Committee on Classification of Motor Vehicle Traffic Crashes under the direction of  
the Association of Transportation Safety Information Professionals

Approved December 18, 2017  
American National Standards Institute, Inc.

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### **Published by**

Association of Transportation Safety Information Professionals (ATSIP)  
c/o R. Robert Rasmussen II,  
6394 Greystone Creek Road  
Mechanicsville, Virginia 23111  
Secretariat: Joan Vecchi, TSASS Project Manager

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Printed in the United States of America

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## Eighth Edition Revised and New D.16-2017 Definitions

Revised from 7 <sup>th</sup> Edition		New for 8 <sup>th</sup> Edition	
Ref#	Description	Ref#	Description
2.1.3	Transport device	2.2.9.5	Motorcycle Conversion Kit
2.2.7.3	Commercial Motor Vehicle	2.2.9.7	Autocycle
2.2.33	Trafficway	2.2.33.1	Total Lanes in Roadway
2.2.41	Non-motorist	2.5.22.1	Parking Lot Way Definition
2.2.45	Bicycle Lane	2.7.9	Entrance/exit Ramp Crash
2.3.2	Fatal Injury (K)	2.7.9.1	Entrance/exit Ramp-related Crash
2.3.4	Suspected Serious Injury (A)	3.16	Vehicle Automation Classification
2.3.5	Suspected Minor Injury (B)	3.17	Distracted Driving Classification
2.3.6	Possible Injury (C)	3.18	Vehicle Special Use Classification
2.3.6.1	No Apparent Injury (O)		
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2.4.4	Unstabilized Situation		
2.4.10	Aircraft Accidents		
2.4.11	Watercraft Accidents		
3.9	Type of Motor Vehicle Classification		

## Foreword

(This foreword is not part of American National Standard, Manual on Classification of Motor Vehicle Traffic Crashes, Eighth Edition, ANSI D.16-2017.)

This American National Standard has been used for many decades and serves to maintain uniformity for those who report, analyze, classify, and otherwise use traffic crash data. The Standard has been developed for use throughout the United States and its Territories, to facilitate reporting and classification of crashes across jurisdictions. The uniformity of reporting that results from this standard facilitates development of data on crashes in and out of traffic for nationwide use. Such data becomes the basis for decisions about traffic safety initiatives throughout the country.

The principal changes in this Eighth Edition are the incorporation of new definitions/classifications and modifications to existing definitions/classifications (see “Eighth Edition Revised and New D.16-2017 Definitions” chart on page iv.) During the review for this Eighth Edition, care was taken to maintain consistency between this standard and the Model Minimum Uniform Crash Criteria guidelines.

Evidence of consensus on this standard is obtained through the ANSI committee method. The D.16-2017 Committee on Classification of Motor Vehicle Traffic Crashes, also called a Consensus Body, includes diverse representation from data collectors, managers, users, analysts, and researchers. Consensus Body members are listed on the next page. Recommendations for additional qualified members are welcome.

Questions may arise regarding the application or interpretation of the Standard in unusual situations. Review of the Standard and its continued coverage of all aspects of motor vehicle crashes will ensure that problems or changes may be addressed. The ANSI 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 Board of Directors, Association of Transportation Safety Information Professionals at: c/o R. Robert Rasmussen II, 6394 Greystone Creek Road, Mechanicsville, Virginia 23111. When submitting questions or comments, please include a telephone number and/or e-mail address where you may be contacted should additional information or clarification be required.

## D.16-2017 8<sup>th</sup> Edition Consensus Body Members

The following members of the D.16-2017 Consensus Body participated in the review and voting of the Eighth Edition's new and revised definitions and classifications:

*1 Participated in ANSI D16.1-2007 consensus body.  
2 Participated in the MMUCC 5<sup>th</sup> Edition expert panel.*

### Secretariat

**Joan L. Vecchi**<sup>12</sup>  
Program Manager  
Traffic Safety Analysis Systems and Services, Inc.

### Data Collectors

**Sergeant Thomas Gorman**  
Connecticut State Police –Troop H

**Major Mike McDonald**<sup>2</sup>  
(Retired) Director of Information Technology/CJIS  
Systems Officer  
Delaware State Police

**Matthew Packard**  
Colorado State Patrol

**Marty Pollock**  
Tennessee State Patrol

**Mark Thompson**  
Law Enforcement Liaison  
Utah Highway Patrol/Highway Safety Office

### Data Users/Engineers

**Daniel J. Magri**<sup>1</sup>  
Louisiana Department of Transportation and  
Development Planning Division

**Mike Pawlovich**  
Iowa DOT

**R. Robert Rasmussen, II**  
(Retired) Program Administration Manager III  
Virginia Department of Transportation

**Eagan Foster**  
Traffic Engineer  
City of Dublin, OH

### Data Managers

**Charles Grasso**  
University of Connecticut

**Kathleen Haney**<sup>2</sup>  
Traffic Records Coordinator  
Minnesota Department of Public Safety Office of  
Traffic Safety

**Juliet Little**  
Traffic Records Coordinator  
State of Connecticut

**Chris Osbourn**<sup>2</sup>  
TITAN Program Director and Tennessee TRCC  
Co-chair  
Tennessee Department of Safety and Homeland  
Security

**Warren Stanley**<sup>2</sup>  
Crash Data and Reporting Branch Manager  
Washington Dept. of Transportation

### Data Analysts – Researchers

**Dan Blower**<sup>1</sup>  
Associate Research Scientist emeritus  
University of Michigan Transportation Research  
Institute

**Cindy Burch**  
University of Maryland, Baltimore - National Study  
Center for Trauma & EMS

**J. Patrick Dolan III**

Statistical Research Specialist/TRCC Co-Chair  
Tennessee Department of Safety and Homeland  
Security

**Bob Scopatz, PhD.<sup>12</sup>**

Senior Transportation Analyst  
VHB

**Dennis Kleen**

Iowa Department of Transportation  
FARS Manager and Driver Data

**Miles Brookes**

Traffic Records Research Analyst (FARS)  
Alaska Highway Safety Office

Federal Agencies**Jenny Guarino<sup>2</sup>**

Federal Motor Carrier Safety Administration  
Office of Analysis, Research and Technology,  
Analysis Division

**Sarah Weissman-Pascual<sup>2</sup>**

National Highway Traffic Safety Administration,  
National Driver Register and Traffic Records  
Division

**Bob Pollack<sup>2</sup>**

Federal Highway Administration

Other Interested Agencies**John McDonough<sup>2</sup>**

President  
National Institute for Safety Research

**Brian Tefft<sup>1</sup>**

AAA Foundation for Safety Research

**Deborah Trombley**

Senior Program Manager  
National Safety Council

**Ken Kolosh**

Manager Statistics Department  
National Safety Council

**Barbara Harsha**

Principal  
BLH Consulting, LLC (GHSA)

**Mark Pritchard**

Lead Data Analyst  
American Association of Motor Vehicle  
Administrators

# Manual on Classification of Motor Vehicle Traffic Crashes

## 1 Introduction

The primary purpose of the Manual on Classification of Motor Vehicle Traffic Crashes is to promote uniformity and comparability of motor vehicle traffic crash statistics now being developed in Federal, state, and local jurisdictions.

The definitions in this Manual are related, but not necessarily identical, to the definitions found in the 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 three sections, one containing definitions, one containing classification instructions, and a separate alphabetical listing of ANSI D.16-2017 definitions for ease of reference. Within the first section, 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. Crash 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 crash reporting or investigation. Reporting requirements which govern drivers or law enforcement are generally established by state law or city ordinance, while requirements for investigation are ordinarily specified in investigative agencies' policies and procedures.

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

**NOTE:** The change in the title of this standard from Manual on Classification of Motor Vehicle Traffic Accidents to Manual on Classification of Motor Vehicle Traffic Crashes is the result of the evolution of terminology use from "accident" to "crash" generally as it relates to motor vehicles. The use of the term "crash" instead of "accident" is not a change in the classification other than the term. Traffic safety advocates recognize that, while neither term, accident nor crash, adequately defines all incidents and collisions, the term "accident" connotes an unpreventable event. Many crashes involve behaviors such as speeding, aggressive driving, driver impairment, or distraction. All of these are preventable behaviors. It is also understood that some incidents that are included here are not well-defined by the term "crash" (such as fires and explosions). However, how the terminology is understood in the community generally impacts how these incidents are treated by legislatures, safety programs, and the media. Currently, both terms are used by various agencies and within state and federal statutes and regulations.

Terminology was not changed as it relates to other types of transport vehicles, such as aircraft, watercraft, and trains. Those industries may have different definitions and understanding of what constitutes an accident versus what is a crash.

## 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 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
- Animal — wild or domestic
- Sign, guardrail, impact attenuator

**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 personal conveyance.

Inclusions:

- Aircraft, including drones
- Watercraft
- Train, including individual cars, caboose, engine
- Snowmobile
- Farm Tractor
- Automobile (See 2.2.12)
- Van (See 2.2.14)
- Utility Vehicle (See 2.2.11)
- Bus (See 2.2.10)
- Truck (See 2.2.13-2.2.26 – except 2.2.14)
- Trailer (See 2.2.15)
- Semitrailer (See 2.2.17)
- Motorcycle (See 2.2.9)
- Bicycle
- Moped (See 2.2.9.4)

Exclusions:

- Devices not designed primarily for moving persons or property for transportation purposes, such as construction machinery, farm or industrial machinery, 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, non-motorized devices not propelled by pedaling, such as skis, scooters, roller skates, baby carriages, etc.

- Personal conveyances

**2.1.4 transport vehicle:** A transport vehicle consists of one or more devices or animals and their load. Such devices or animals shall 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 a single transport vehicle.

Inclusions:

1.) Transport Devices

- Boxcar coupled to a caboose
- Truck tractor towing a semitrailer and a trailer (See 2.2.21)
- Automobile or ATV towing a person on skates, skateboard, sled or bicycle
- Snowmobile towing a skier
- Automobile towing another automobile

## 2.) Animals

- Horse and rider
- Dog team drawing a sled
- Team of horses drawing a sled
- Burro carrying a load of firewood

## 3.) Other Movable Devices

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

**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.

**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

**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

Figures 1 and 2 below are examples of common configurations and components of trafficways. They are not required for a land way to be a trafficway.

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
- Privately constructed and/or maintained road open to the public for moving persons or property for transportation purposes
- Local road in a residential development, which is open to the public
- Land way providing vehicular access and/or circulation from a trafficway to a business open to the public (See 2.5.22)

Examples:

- 1.) Land way within a gated community when the gates are open to the public
- 2.) Circulating system of roadways in the land way of a shopping center or shopping mall which provides public access to the parking lots
- 3.) A road providing access to the public from the trafficway to the parking lot of a major chain store
- 4.) A road with unrestricted access in a private retirement community

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.

- o 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.
- o A road in a gated community that is only open to residents and their guests
- o A land way not open to the public
- o Parking space and parking aisle (See 2.5.22)

Examples:

- 1.) Driveway to a residence or business
- 2.) Military base or gated community with restricted access
- 3.) Parking aisle providing entry to parking spaces or stalls

**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 a 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:

- Streetcar on private way

Exclusions:

- o Streetcar operating on trafficway (See 2.2.8)

**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)

**2.2.6.1 personal conveyance:** A personal conveyance is a device, other than a transport device, used by a pedestrian (See 2.2.36) for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Inclusions:

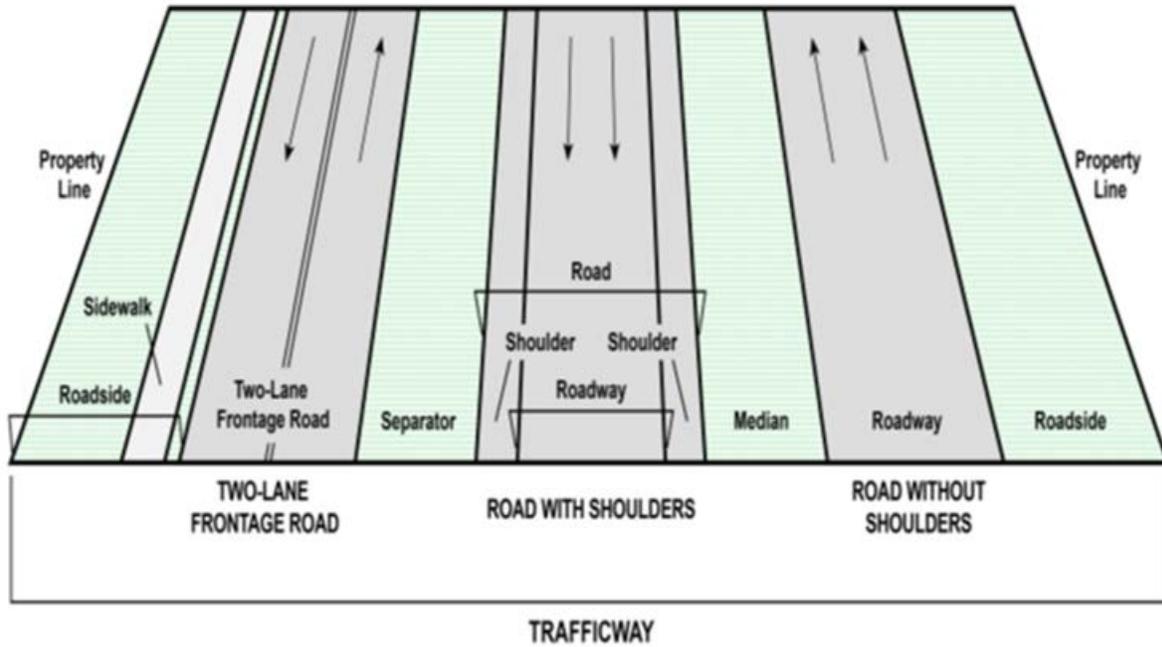
- 1.) Rideable toys
  - Roller skates, in-line skates
  - Skateboard
  - Skates
  - Baby Carriage
  - Scooter
  - Toy Wagon
- 2.) Motorized rideable toys
  - Motorized skateboard
  - Motorized toy car
- 3.) Devices for personal mobility assistance
  - Segway-style device
  - Motorized and non-motorized wheelchair
  - Handicapped scooter

Exclusions:

- o Golf cart
- o Low Speed Vehicle (LSV) (See 2.2.7.1)
- o Go-cart
- o Minibike
- o "Pocket" motorcycle
- o Motor scooter
- o Moped (See 2.2.9.4)

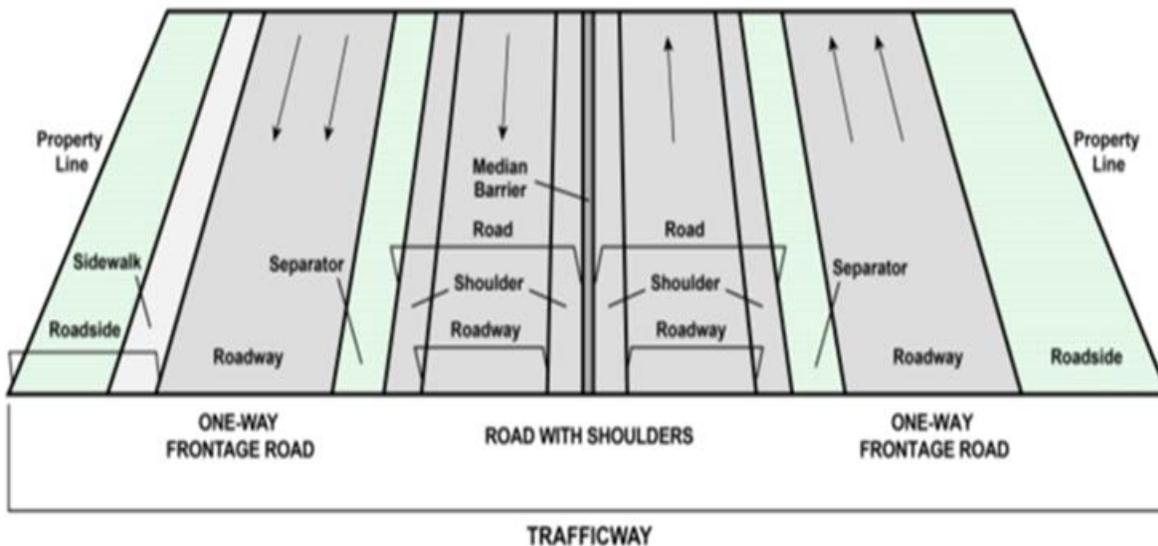
**2.2.7 motor vehicle:** A motor vehicle is any motorized (mechanically or electrically powered) road vehicle not operated on rails. (See 2.2.7.1, 2.2.7.2, 2.2.7.3, 2.2.9 - 2.2.26)

Figure 1: Trafficway (See 2.2.1, 2.2.28 through 2.2.33)



Source: Model Minimum Uniform Crash Criteria, 5<sup>th</sup> Edition

Figure 2: Trafficway including frontage road (See 2.2.1, 2.2.28 through 2.2.33)



Source: Model Minimum Uniform Crash Criteria, 5<sup>th</sup> Edition

## Inclusions:

- Electrically powered bus attached to cables
- Trolley on highway tires
- Low speed vehicle (LSV) (See 2.2.7.1)
- Motor-driven cycle (See 2.2.9.1)
- All working motor vehicles (See 2.2.7.2)

## Examples:

- 1.) A tow truck using its winch to pull a vehicle out of a ditch
- 2.) Electric or telephone company truck with cherry picker repairing cables on a utility pole
- 3.) Road paint striping truck in the process of painting lines on the roadway
- 4.) Garbage truck being loaded with trash

## Exclusions:

- Motorized personal conveyance (See 2.2.6.1)

## Examples:

- 1.) Motorized skate board
- 2.) Motorized toy car
- 3.) Motorized wheelchair or handicapped scooter
- 4.) Segway-style device

**2.2.7.1 low speed vehicle:** A low speed vehicle (LSV) is a motor vehicle with four or more wheels whose top speed is greater than 20 miles per hour, but not greater than 25 miles per hour (mph).

LSVs are required to be equipped with basic items of safety equipment: headlamps, stop lamps, turn signal lamps, tail lamps, reflex reflectors, parking brake, windshields of either type AS-1 or AS-5 glazing, rearview mirrors, seat belts, and vehicle identification numbers (VINs).

## Inclusions:

- A conventional golf cart that was modified, after its original manufacture, to increase its top speed into the 20-25 mph range
- An originally manufactured custom golf cart (that is not a modified conventional golf cart) that has a top speed above 20 mph but not greater than 25 miles per hour <sup>1</sup>

## Examples:

- 1.) Neighborhood Electric Vehicle (NEV)
- 2.) Fleet golf carts sold to golf courses that have been speed-modified to increase their top speed into the 20-25 mph range
- 3.) Personal golf carts sold to individual persons that have been speed-modified or originally manufactured to achieve a top speed above 20 mph but not greater than 25 miles per hour
- 4.) Other low speed motor vehicles designed for transport on local streets

## Exclusions:

- Conventional golf cart not modified or originally custom manufactured to achieve top speeds above 20 mph
- Automobile
- Any personal conveyance (See 2.2.6.1)
- Any size slow moving farm tractor/equipment

## Examples:

- 1.) A golf cart used solely to carry one or more people and golf equipment to play golf, sold to golf courses
- 2.) A golf cart used to carry one or more people and may carry golf equipment to play golf, sold to individual persons who may use them to travel on trafficways to and from golf courses and to play

<sup>1</sup> LSVs will be subject to Federal Motor Vehicle Safety Standard (FMVSS), No. 500, Low Speed Vehicles.

golf, to travel on trafficways for purposes unrelated to golf, or for all these purposes

3.) A golf cart that has been speed-modified after its manufacture or originally custom manufactured to achieve top speeds greater than 25 mph

4.) Motorized wheelchair

5.) Motorized skateboard

6.) Motorized handicapped scooter

7.) Personal transport devices such as the Segway

**2.2.7.2 working motor vehicle:** A working motor vehicle is a motor vehicle in the act of performing construction, maintenance, or utility work related to the trafficway. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside of the trafficway boundaries.

Inclusions:

- Vehicle at work in a marked work zone
- Vehicle at work on the median, shoulder, or roadside.
- Mobile maintenance convoy
- A law enforcement vehicle which is participating strictly in a stationary construction or mobile maintenance activity as a traffic slowing, control, signaling, or calming influence

Examples:

1) Asphalt roller working in a highway construction zone

2) State highway maintenance crew mowing grass on roadside

3.) Utility truck performing maintenance on the power lines along the roadway

4.) A private excavating company contracted by the state digging the foundation for a new overpass

Exclusions:

- Vehicle performing a private construction/maintenance activity

- Law enforcement vehicle performing other work activities, such as traffic stops, crash investigation, patrolling, and traffic control, which is not related to construction, maintenance, or utility work on the trafficway

- Vehicle performing a work activity other than highway construction, maintenance, or utility work

- Construction, maintenance, utility vehicle while moving from one job site to another

Examples:

1.) An excavation company digging a foundation for a new building

2.) Garbage truck, delivery truck, taxi, emergency vehicle, tow truck, etc.

**2.2.7.3 commercial motor vehicle:** A commercial motor vehicle is any motor vehicle used for the transportation of goods, property or people in interstate (See 2.9.2) or intrastate (See 2.9.3) commerce.

Inclusions:

- Motor vehicle providing transportation of goods, property, or people for compensation (for-hire)
- Privately owned motor vehicle providing transportation of privately owned goods or property in furtherance of a business enterprise
- Privately owned motor vehicle providing passenger transportation in furtherance of a business enterprise

Examples:

1.) A trucking company hauling a manufacturing company's goods for a fee

2.) A motor coach transporting passengers within and between cities and towns

3.) A truck or truck tractor owned by an individual truck driver used to carry goods or property under contract

4.) An airport shuttle bus service paid to transport persons to hotels and other businesses

5.) A manufacturing company hauling its own products to retail stores

- 6.) A retail store delivering products to its buyers
- 7.) A business engaged in the transportation of students to and from school and school-related activities
- 8.) An agricultural farm hauling its produce to market
- 9.) A taxi or limousine service transporting passengers for a fee

Exclusions:

- Privately owned motor vehicle providing private transportation of personal property or people

Examples:

- 1.) A noncommercial horse rancher transporting hay bales from his pasture on one side of the road to his stables on the other side in a medium truck
- 2.) Homeowner carrying recyclables to a drop-off point in a personally owned pickup truck greater than 10,000 lbs.
- 3.) Large family of 10 persons taking a trip in the family's 12-person van

NOTE: The definition of commercial vehicle for the purposes of this standard relates to vehicle use. Federal Code defines Commercial Motor Vehicles in Part 390.5 as follows: "Commercial motor vehicle means any self-propelled or towed motor vehicle used on a highway in interstate commerce to transport passengers or property when the vehicle—

- 1.) Has a gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR), or gross vehicle weight or gross combination weight, of 4,536 kg (10,001 pounds) or more, whichever is greater; or
- 2.) Is designed or used to transport more than 8 passengers (including the driver) for compensation; or
- 3.) Is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or
- 4.) Is used in transporting material found by the Secretary of Transportation to be hazardous under 49 U.S.C. 5103 and transported in a quantity requiring placarding under regulations prescribed by the Secretary under 49 CFR, subtitle B, chapter I, subchapter C."

**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
- Streetcar (See 2.2.4)
- Pedalcycle (See 2.2.27)

**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.

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)
- Three-wheeled motorcycle (See 2.2.9.6)
- Motor scooter
- Motorized or motor-assisted bicycle
- Autocycle (See 2.2.9.7)

Exclusions:

- Construction, farm or industrial machinery

**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.

Inclusions:

- Moped (See 2.2.9.4)
- Miniature motorcycle (e.g., "Pocket Bike")

**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 1 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 pedaling.

Exclusions:

- Motor scooter
- Motorized or motor-assisted bicycles

**2.2.9.5 motorcycle conversion kit:** A motorcycle conversion assembly makes it possible to convert a conventional two-wheel motorcycle into a motorcycle having the look and the stability of a tricycle-type vehicle, which improves stability and increases ease of operation.

**2.2.9.6 three-wheeled motorcycle:** A three-wheeled motorcycle is any motor vehicle having a seat or saddle for the use of its operator, and having three wheels in contact with the ground.

Exclusions:

- Autocycle (See 2.2.9.7)

**2.2.9.7 autocycle:** A large motorcycle with one rear wheel and two front wheels, with either a saddle and handlebars or seat(s) and a steering wheel, that can be fully enclosed, partially enclosed, or unenclosed.

**2.2.10 bus:** A bus is a motor vehicle with seating for transporting nine or more persons, including the driver.

Inclusions:

- Van-based bus (See 2.2.14.4)
- Small bus (See 2.2.10.1)
- Large bus (See 2.2.10.2)

- School bus designed to carry nine or more persons, including the driver (See 2.8.1)
- Transit bus (See 2.2.10.3)
- Intercity bus (See 2.2.10.4)
- Charter bus (See 2.2.10.5)
- Other bus (See 2.2.10.6)
- Limousine designed for carrying nine or more persons, including the driver

Exclusions:

- Any school bus that is not designed for carrying nine or more persons
- Any school bus that is an automobile or truck (See 2.8.1)
- Any school bus that is a van or utility vehicle that is not designed for carrying nine or more persons, including the driver
- Recreation vehicle, motorhome and van-based motorhome
- Limousine not designed for carrying nine or more persons

**2.2.10.1 small bus:** A small bus is a bus with seating for nine to fifteen persons, including the driver.

Inclusions:

- Van-based bus (See 2.2.14.4)
- Limousine with seating for nine to fifteen persons, including the driver
- Utility vehicle with nine or more seats (See 2.2.11)

**2.2.10.2 large bus:** A large bus is a bus with seating for sixteen or more persons, including the driver.

**2.2.10.3 transit bus:** A transit bus is a bus used for passenger transportation over fixed, scheduled routes within primarily urban geographical areas.

Inclusions:

- Bus that includes service within a city and between cities that share borders

Examples:

- 1.) City metro or ride-on bus
- 2.) Trolley (on highway tires)

**2.2.10.4 intercity bus:** An intercity bus is a bus used for long-distance passenger transportation between cities over fixed routes with regular schedules.

Inclusions:

- Cross-country bus
- Bus service between cities some distance apart, not cities that share borders.

Examples:

- 1.) Greyhound or Trailways bus

**2.2.10.5 charter bus:** A charter bus is a bus providing contract service for a group tour or outing, usually on a round-trip basis.

Inclusions:

- Limousine designed for carrying nine or more persons, including the driver.

**2.2.10.6 other bus:** An other bus is any bus used for transportation purposes other than a school bus (See 2.8), transit bus, intercity bus, or charter bus.

Inclusions:

- Private company providing transportation services for its own employees and others (hotel shuttles, etc.)
- Non-governmental organization (such as churches and non-profit groups)
- Non-educational unit of government (such as departments of corrections)

**2.2.11 utility vehicle:** A utility vehicle is a motor vehicle other than a motorcycle or large bus consisting primarily of a transport device designed for carrying persons, and generally considered a multi-purpose vehicle that is designed to have off-road capabilities. These vehicles are generally four-wheel-drive (4 x 4) and have increased ground clearance. A utility vehicle typically 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.

Midsized — the wheelbase is greater than 88 inches. Overall width is greater than 66 inches, 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.

Inclusions:

- Small bus

Examples:

Small utility vehicle — S-10 Blazer, Wrangler, Ranger, Jimmy, Tracker

Midsized utility vehicle — Cherokee, Comanche, Yukon, Typhoon, Explorer, Escape, Envoy, Sorrento, Element, Axiom, Rodeo, Mountaineer, Xterra

Full-size utility vehicle — Blazer, Suburban, Bronco, F-Series, Sierra, Land Cruiser, Pathfinder, Armada, Ascender, Pilot, Escalade, Expedition, Excursion, Yukon

Large utility vehicle — Hummer, Navigator

Small bus — Utility vehicles with 9 or more seats, including the driver; i.e., Chevy Suburban, Ford Excursion, Ford Expedition, GMC Yukon XL, Chevy Tahoe

Exclusions:

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

**2.2.12 automobile:** An automobile is a motor vehicle other than a motorcycle, utility vehicle, or low speed vehicle consisting of a transport device typically designed for carrying eight 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 2,400 pounds (1,089 kilograms) or less

Midweight — curb weight 2,500 to 3,400 pounds (1,134 to 1,542 kilograms)

Heavy — curb weight 3,500 pounds (1,588 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 2.2.20)

**2.2.14 van:** A van is a motor vehicle consisting primarily of a transport device which has a gross vehicle weight rating (GVWR) 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 non-existent) 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 van: The body and frame are one integral unit

Small — Frame-based small vans: The overall body width is from 72 inches 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 inches to less than or equal to 80 inches. These are frame-based midsize 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 van (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 van

**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 (See 2.2.12)
- Minivan
- Van-based bus (See 2.2.14.4)

## Exclusions:

- Cargo van (See 2.2.14.2)

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

**2.2.14.4 van-based bus:** A van-based bus is any passenger van designed for carrying nine or more persons, including the driver.

## Examples:

- 1.) Full-sized passenger van with nine seats or more, including the driver
- 2.) Van cutaway or cab-chassis with nine or more seats, including the driver

## Exclusions:

- Any limousine

**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 tow bars, is sometimes used to convert a semitrailer to a full trailer. A semitrailer equipped with a converter dolly is considered a full trailer.

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

## Examples:

- 1.) Two-axle, four-tire truck
- 2.) Two-axle, six-tire truck
- 3.) Three or more-axle truck

## Exclusions:

- Truck tractor (See 2.2.20)
- 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

**2.2.22 gross vehicle weight (GVW):** Gross vehicle weight is the actual 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 (GVWR):** A gross vehicle weight rating is the value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle. This rating includes the maximum rated capacity of a vehicle, including the base vehicle, mounted equipment, and any cargo and passengers. Most of the time, GVWR is the sum of the maximum rated capacity of the axles of the vehicle.

## Inclusions:

- Initial or second-stage manufacturing GVWR ratings

**2.2.23.1 gross combination weight rating (GCWR):** A gross combination weight rating is the value specified by the manufacturer(s) as the recommended maximum loaded weight of a combination (articulated) motor vehicle. This is for truck tractors and single-unit trucks pulling a trailer(s). GCWR is the sum of the gross vehicle weight ratings (GVWR) of all units; power unit and its trailer(s).

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

**2.2.25 medium truck:** A medium truck is a truck which has a gross vehicle weight rating (GVWR) of more than 10,000 pounds and less than or equal 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 (GVWR) of more than 26,000 pounds (11,793 kilograms).

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

## Inclusions:

- Bicycle, tricycle, unicycle, pedalcycle

**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 opposing directions of traffic or for trucks and automobiles (See Figures 1 and 2).

## Exclusions:

- Bridle path, bicycle path

NOTE: The above definition of "roadway" is consistent with definitions in general use by law enforcement and by traffic engineers. Other highway engineers commonly use the term "roadway" as the term "road" is defined in 2.2.33 below (to include shoulder). The Model Inventory of Roadway Elements and American Association of State Highway and Transportation Officials' guidelines and references may be different.

**2.2.29 median:** A median is an area of a trafficway between parallel roads separating travel in opposite directions (See Figures 1 and 2). A flush or painted median should be 4 or more feet wide between inside roadway edge lines. Medians fewer than 4 feet wide shall have a barrier to be considered a median. Continuous left-turn lanes are not considered painted medians.

## Inclusions:

- Physical barrier separating roads with travel in opposite directions
- Depressed, raised, or flush area between roads with travel in opposite directions
- Painted median of 4 or more feet wide between roads with travel in opposite directions

## 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 4 or more feet of a divided highway

Exclusions:

- Shoulder, separator (See 2.2.30)
- Turn lane (See 2.5.23)
- Continuous left-turn lane

**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 Figure 3).

Inclusions:

- Physical barrier separating roads with travel in the same direction
- Physical barrier separating a frontage road from other roads of a trafficway
- Depressed, raised, or flush area between roads with travel in the same direction
- Depressed, raised, or flush area between a frontage road and other roads of a trafficway

Examples:

- 1.) A depressed grassy separator of a freeway 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

Exclusions:

- Shoulder, median

**2.2.31 roadside:** A 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 3).

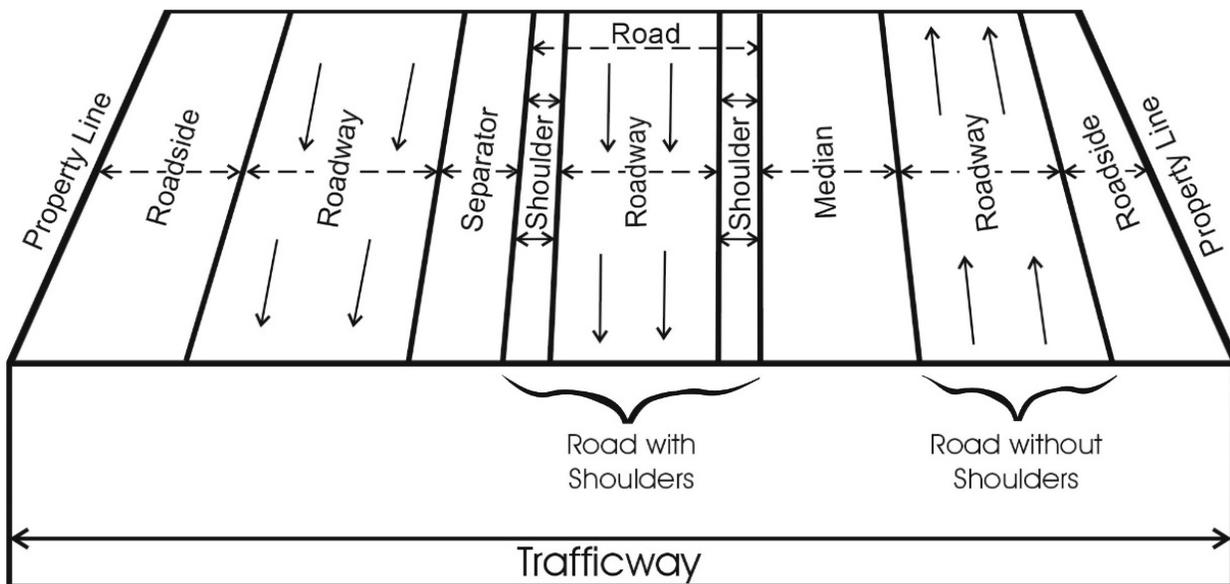
Inclusions:

- 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

Figure 3 Trafficway with Multiple Roadways in the Same Direction (See 2.2.1, 2.2.28 through 2.2.33)



**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:** A 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

**2.2.33.1 total lanes in roadway:** The total number of lanes in a roadway is collected for each vehicle, on the roadway on which that vehicle was traveling. Through lanes also include shared through/turn lanes but exclude turn-only lanes, auxiliary lanes such as collector-distributor lanes, weaving lanes, frontage road lanes, parking lanes, acceleration/deceleration lanes, toll-collection lanes, and truck climbing lanes. Total lanes are collected in two parts as total through lanes and total auxiliary lanes.

**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 on a roadway or in motion within or outside the trafficway.

A transport vehicle which is also a working motor vehicle at the time of the unstabilized situation (See 2.4.4) is not "in-transport."

In roadway lanes used for travel during some periods and for parking during other periods, a parked motor vehicle should be considered in-transport during periods when parking is forbidden.

Inclusions:

- Motor vehicle in traffic on a roadway
- Driverless motor vehicle in motion on the shoulder, roadside, or median
- Motionless or disabled motor vehicle abandoned on a roadway
- Motor vehicle in motion outside the trafficway

- A stopped motor vehicle with any portion of its primary outline as defined by the four sides of the vehicle (e.g., tires, bumpers, fenders) and load, if any, within the roadway

Examples:

- 1.) A driverless vehicle previously parked on the shoulder begins to roll forward because the parking brake was not set
- 2.) A stopped vehicle partially on the shoulder with two tires on the roadway
- 3.) A tractor trailer with its load hanging over the roadway edge line
- 4.) A person deliberately driving an all-terrain-vehicle (ATV) down a median or the roadside
- 5.) A police vehicle patrolling or responding to an emergency
- 6.) A police or emergency vehicle stopped on the roadway at the scene of a crash or traffic stop or other action, whether or not the emergency lights have been activated
- 7.) Construction, maintenance, or utility work vehicle traveling on a trafficway from one work site to another location
- 8.) Taxi, limousine, or other passenger vehicle, with or without passengers while on the roadway or in motion on a trafficway
- 9.) A school bus stopped in a travel lane with signs and/or lights activated
- 10.) A private citizen using his pickup truck or lawn tractor with a blade removing snow from the roadways in his neighborhood (Not a highway maintenance activity)
- 11.) A farm tractor or combine moving from a storage facility to a field under its own power on the trafficway
- 12.) A moving motor vehicle on a private driveway
- 13.) A car pulling away from a gas pump in a gas station

14.) An ATV driving on a recreational off-road trail inside or outside the trafficway

15.) A vehicle operating in the closed portion of the trafficway

16.) A van left unattended in a lane during rush hour when parking is prohibited because it is in an open travel lane at the time

Exclusions:

- Transport vehicle stopped off the roadway within the trafficway
- Transport vehicle stopped in parking lanes during periods when parking is allowed
- Transport vehicle performing construction, maintenance, or utility work related to the work zone of a trafficway
- A stopped motor vehicle with any portion of its primary outline as defined by the four sides of the vehicle (e.g., tires, bumpers, fenders) and load, if any, not within the roadway

Examples:

- 1.) A disabled utility vehicle stopped on the shoulder, median, or roadside
- 2.) An automobile parked in an area designated for parking against the curb of a residential street or in a parking space/lane
- 3.) A truck stopped on the shoulder where only the extended side-view mirror overhangs the roadway edge line
- 4.) A power company truck working on the power lines in an elevated basket in a maintenance work zone
- 5.) A paint striping highway truck in the act of painting the lines in a mobile maintenance zone
- 6.) A concrete mixer discharging its load of concrete in a construction work zone
- 7.) An asphalt spreader or roller repaving the roadway

8.) A highway road grader grading a soft, sloped roadside

9.) Highway snow removal truck removing or plowing snow as part of a highway maintenance activity

**2.2.34.1 not in-transport:** Not in-transport means any transport vehicle which is not "in-transport".

Inclusions:

- Legally parked transport vehicles off the roadway
- Motionless vehicles off the roadway
- Working motor vehicles (See 2.2.7.2)

Examples:

- 1.) A stopped vehicle on the shoulder to change a tire
- 2.) An asphalt spreader or roller repaving the roadway
- 3.) A car stopped at the exit of a gas station waiting to enter the roadway
- 4.) A pickup stopped on a private driveway
- 5.) A car legally parked against the curb on a residential street
- 6.) A parked truck completely on the shoulder of a road

Exclusions:

- Transport vehicles in-transport

**2.2.34.2 parked motor vehicle:** A parked motor vehicle is a motor vehicle not in-transport, other than a working motor vehicle, that is not in motion and not located on the roadway.

In roadway lanes used for travel during some periods and for parking during other periods, a parked motor vehicle should be considered in-transport during periods when parking is forbidden.

Inclusions:

- Any stopped motor vehicle where the entirety of the vehicle's primary outline as defined by the four

sides of the vehicle (e.g., tires, bumpers, fenders) and load, if any, is not within the roadway

Examples:

- 1.) A driver of vehicle stopped curbside on a city street opens his door into the travel lane
- 2.) A truck stopped on the shoulder where only the extended side-view mirror overhangs the roadway edge line
- 3.) A motionless vehicle on the shoulder, median, or roadside
- 4.) A truck stopped at a gas station pump
- 5.) A car stopped in a private driveway
- 6.) A van parked in a metered parking lane, even when the meter time has expired

Exclusions:

- A motor vehicle in motion anywhere within the trafficway boundaries or any vehicle that has any portion of its primary outline or load, if any, overlapping or falling completely within the roadway
- A motor vehicle left unattended on a roadway, where parking is always prohibited

Examples:

- 1.) A vehicle driving down the road shoulder, median, or roadside
- 2.) A driverless motor vehicle without engine power starts in motion from a stopped position on the shoulder
- 3.) A stopped vehicle partially on the shoulder with two tires on the roadway
- 4.) A tractor trailer with part of its load extending over the roadway edge line
- 5.) A van left unattended in a lane during rush hour when parking is prohibited because it is in an open travel lane at that time

6.) A delivery service leaves a truck stopped at the curb of a street marked with "no parking at any time" signs while making a delivery

**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.

Inclusions:

- Person on foot
- Person walking, running, jogging, hiking, sitting, or lying within the trafficway or on private property, etc.
- Persons in buildings
- Person on personal conveyance (See 2.2.6.1)
- A person ejected from a transport vehicle who has come to rest in the trafficway during a prior unstabilized situation and struck in a second or subsequent unstabilized situation

Exclusions:

- A person ejected from a transport vehicle during one unstabilized situation is still considered an occupant and not a pedestrian for the purposes of that unstabilized situation.

**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.

Inclusions:

- Occupants of motor vehicles not in-transport

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

Inclusions:

- Any pedestrian (See 2.2.36)
- Occupants of transport vehicles other than motor vehicles

**2.2.42 traffic unit:** A traffic unit is a land vehicle or a pedestrian.

Inclusions:

- Motor vehicles in-transport (See 2.2.34), motor vehicles not in-transport (See 2.2.34.1), railway trains
- Pedestrians and pedalcyclists
- Other non-motorists

**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 (also known as a shared use path) is a bikeway reserved for pedalcycles and separated from roadways by open space or barriers.

**2.2.45 bicycle lane:** 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.

**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

**2.3.2 fatal injury (K):** A fatal injury is any injury that results in death (See 3.1.3) within 30 days after the motor

vehicle crash in which the injury occurred. If the person did not die at the scene but died within 30 days of the motor vehicle crash in which the injury occurred, the injury classification should be changed from the attribute previously assigned to the attribute "Fatal injury".

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

**2.3.4 suspected serious injury (A):** A suspected serious injury is any injury other than fatal which results in one or more of the following:

- Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood
- Broken or distorted extremity (arm or leg)
- Crush injuries
- Suspected skull, chest, or abdominal injury other than bruises or minor lacerations
- Significant burns (second- and third-degree burns over 10% or more of the body)
- Unconsciousness when taken from the crash scene
- Paralysis

**2.3.5 suspected minor injury (B):** A suspected minor injury is any injury that is evident at the scene of the crash, other than fatal or serious injuries.

Inclusions:

- Lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscles)

**2.3.6 possible injury (C):** A possible injury is any injury reported or claimed which is not a fatal, suspected serious, or suspected minor injury. Possible injuries are those that are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.

Inclusions:

- Momentary loss of consciousness

- Claim of injury, limping, or complaint of pain or nausea

**2.3.6.1 no apparent injury (O):** No apparent injury is a situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.

**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 have monetary value

Exclusions:

- Harm to wild animals, or birds, which have no monetary value
- Harm to a snow bank 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

**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 crash in its usual operating manner by daylight after simple repairs.

Inclusions:

- Vehicle which could be driven but would be further damaged thereby

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

**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:

- Door, window, hood, or trunk lid 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
- Bumper which is loose

Exclusions:

- Dented or bent fender, bumper, grill, body panel; destroyed hubcap

## 2.4 Crashes

**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

## 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.

## Exclusions:

- Injury or damage beyond that which was intended

**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 law enforcement loses control of his vehicle and crashes, the crash is not considered to result from legal intervention unless law enforcement intended that the lawbreaker crash.

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

**2.4.3.1 police pursuit:** A police pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop to a motorist the officer is attempting to contact, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. This notice needs to be either through the use of visual or audible emergency signals, including alternating flashing headlights, or a combination of emergency devices. A pursuit is terminated when the motorist stops or when the attempt to apprehend is discontinued.

**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.

## 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.) An occupant of a vehicle that is a sinking vehicle, or that enters into swift moving water, is not in a 'position of safety'. In these occurrences, the unstabilized situation has not ended and any damage or injury is still part of the same unstabilized situation.

5.) 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.

6.) 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.

7.) 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.

8.) 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.

9.) 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.

10.) 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.

#### Exclusions:

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

NOTE: If thorough investigation fails to establish whether a crash 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, landslide/mudslide, hurricane, cyclone, downburst, flood, torrential rain, cloudburst, lightning, tornado, tidal wave, earthquake, or volcanic eruption (See 2.4.9 transport crash).

The following are typical definitions of cataclysms:

- **Avalanche:** A mass of snow, rock, and/or ice falling down a mountain or incline. (Source: National Weather Service)
- **Landslide/Mudslide:** Fast moving soil, rocks, and water that flow down hills, mountain slopes, and canyons. (Source: National Weather Service)
- **Hurricane:** A tropical cyclone with surface winds in excess of 32 m/s (64 knots or 74 mph) in the Western Hemisphere. There are various regional names for these storms. (Source: National Weather Service)

- Cyclone: A large-scale circulation of winds around a central region of low atmospheric pressure, counterclockwise in the Northern Hemisphere. (Source: National Weather Service) To qualify as a cataclysm, the winds must be 74 mph or greater.
- Downburst: A strong downdraft current of air from a cumulonimbus cloud, often associated with intense thunderstorms. Downdrafts may produce damaging winds at the surface. To qualify as a cataclysm, the winds must be 74 mph or greater.
- Flood: The inundation of a normally dry area caused by an increased water level in an established watercourse, such as a river, stream, or drainage ditch. A flash flood can be caused by a Cloudburst or Torrential Rainfall that occurs in a short period of time, generally less than 6 hours. Also, at times, a dam failure can cause a flash flood, depending on the type of dam and time period during which the break occurs.
- Lightning: A visible electrical discharge produced by a thunderstorm. The discharge may occur within or between clouds, between a cloud and air, between a cloud and the ground, or between the ground and a cloud. (Source: National Weather Service)
- Tornado: A violently rotating column of air, usually pendant to a cumulonimbus, with circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena.
- Earthquake: Shock waves detectable and sometimes causing violent tremors at the earth's surface, generally originating by movements along deep-seated fault planes.
- Volcanic Eruption: Formed by the partial melting of existing rock and dissolved gases; the liberation of this gas and magma under considerable pressure is considered an eruption. Products of the volcanic eruption include lava flows, pyroclastic materials (volcanic glass), volcanic dust/ash, and gases.

Inclusions:

- Any wind above the minimum speed associated with a category one hurricane (75 mph or more)

- Damage produced by very large hail

Exclusions:

- Natural events not listed above

Examples:

- 1.) Rain, snow, fog, small hail, ice, smog, etc.
- 2.) Winds below the minimum speed associated with a category one hurricane (74 mph or less)
- 3.) A few small falling rocks not associated with a landslide or avalanche
- 4.) An old tree falling only due to a rotting root system
- 5.) Shallow standing water

**2.4.6 crash:** A crash is an unstabilized situation which includes at least one harmful event. (See 2.2.4)

**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 crash, or has a noncollision crash. A contact vehicle is directly involved in a crash. (See 2.6.2 Collision crash and 2.6.3 Noncollision crash).

**2.4.8 noncontact vehicle:** A noncontact vehicle is any vehicle other than a contact vehicle. A noncontact vehicle is indirectly involved in a crash.

Examples:

- 1.) A vehicle changes lanes into the path of another vehicle (without making contact) causing a crash. 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 crash:** A transport crash is a crash (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 where the timing is such that the cataclysm is occurring at the time of the crash. (See 2.4.5 Cataclysm)

Inclusions:

- A crash occurring as a result of natural events which are not a cataclysm.
- A crash related to a cataclysm, but occurring after the cataclysm has ended

Examples:

- 1.) Motor vehicle driven into water after a hurricane or flood because a bridge was washed out by the hurricane or flood (after a cataclysm has ended)
- 2.) Motor vehicle driven into fallen materials covering a roadway after a landslide or avalanche (after a cataclysm has ended)
- 3.) Motor vehicle driven into a fallen tree in a roadway after a tornado or hurricane (after a cataclysm has ended)
- 4.) After an earthquake, a motor vehicle in-transport drives into a hazard created by buckled or collapsed features of the roadway left behind after the earthquake is over (after a cataclysm has ended)
- 5.) A tree branch from a rotted tree or a tree with a deteriorated root structure falls across several motor vehicles in the roadway from winds below 74 mph or more (less than a category one hurricane)
- 6.) 25 mph wind propels a trash can from a city sidewalk into a passing motor vehicle
- 7.) A motor vehicle is struck by loosened, deteriorated, or previously damaged parts that fall from an overpass as it passes under (there is no cataclysm)
- 8.) The scaffolding at a building under construction collapses and falls on a motor vehicle traveling on the roadway adjacent to the building (there is no cataclysm)

9.) Power lines or overhead traffic signal falling on a motor vehicle in-transport (there is no cataclysm)

Exclusions:

- Crashes occurring as a direct result of and during a cataclysm

Examples:

- 1.) Motor vehicle is swept away while a bridge it was crossing is washed out during a hurricane or flood (crash directly results from a cataclysm)
- 2.) Motor vehicle is struck and damaged by falling materials (rock and earth or snow) of significant size or amount to be a landslide or avalanche (crash directly results from a cataclysm)
- 3.) Motor vehicle on roadway is struck by a wind-blown tree during a tornado or winds of 74 mph or more (crash directly results from a cataclysm)
- 4.) A motor vehicle in-transport suffers damage because of structures collapsing, buckling, or shifting during an earthquake (crash directly results from a cataclysm)
- 5.) A motor vehicle in-transport suffers damage from golf-ball-sized hail during a tornado
- 6.) Motor vehicle sustains damage from very large raindrops during torrential rain

**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 crash:** A motor vehicle crash is a transport crash 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 crash in which no school bus is directly involved and which involves no other motor vehicle (See 2.8.2)

## Examples:

1.) 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 school bus, then there is (1) a school bus crash that is not a motor vehicle crash and (2) an other-road-vehicle crash (collision involving pedalcycle).

**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 crash.

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

**2.4.15 streetcar crash:** A streetcar crash is an other-road-vehicle crash that involves a streetcar in-transport.

**2.4.16 pedalcycle crash:** A pedalcycle crash is an other-road-vehicle crash that (1) involves a pedalcycle in-transport and (2) is not a streetcar crash.

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

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

## Exclusions:

- A road vehicle in-transport has both its unstabilized situation and harmful events on a private way

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

## Inclusions:

- A road vehicle in-transport has both its unstabilized situation and harmful events on a private way

**2.4.20 road vehicle traffic crash:** A road vehicle traffic crash is a traffic crash.

**2.4.21 road vehicle nontraffic crash:** A road vehicle nontraffic crash is a nontraffic crash.

**2.4.22 motor vehicle traffic crash:** A motor vehicle traffic crash is a motor vehicle crash which is also a traffic crash.

**2.4.23 motor vehicle nontraffic crash:** A motor vehicle nontraffic crash is a motor vehicle crash which is a nontraffic crash.

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

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

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

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

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

**2.4.29 no apparent injury crash:** A no apparent injury crash is any road vehicle crash other than an injury crash. A no apparent injury crash is also called a property damage only crash (See 2.4.30).

**2.4.30 property damage only crash:** A property damage only crash is a no apparent injury crash.

## 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. If boundaries have not been fixed as above for any urban place designated by the Bureau of the Census having a population of 5,000 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 Transportation 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 a 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 portion of the trafficway at the end of a driveway (See 2.5.9.1), providing access to property adjacent to a trafficway (See Figure 4).

Inclusions:

- Entrance to private residence
- Entrances to gas station
- Sidewalks which cross over a driveway access

Exclusions:

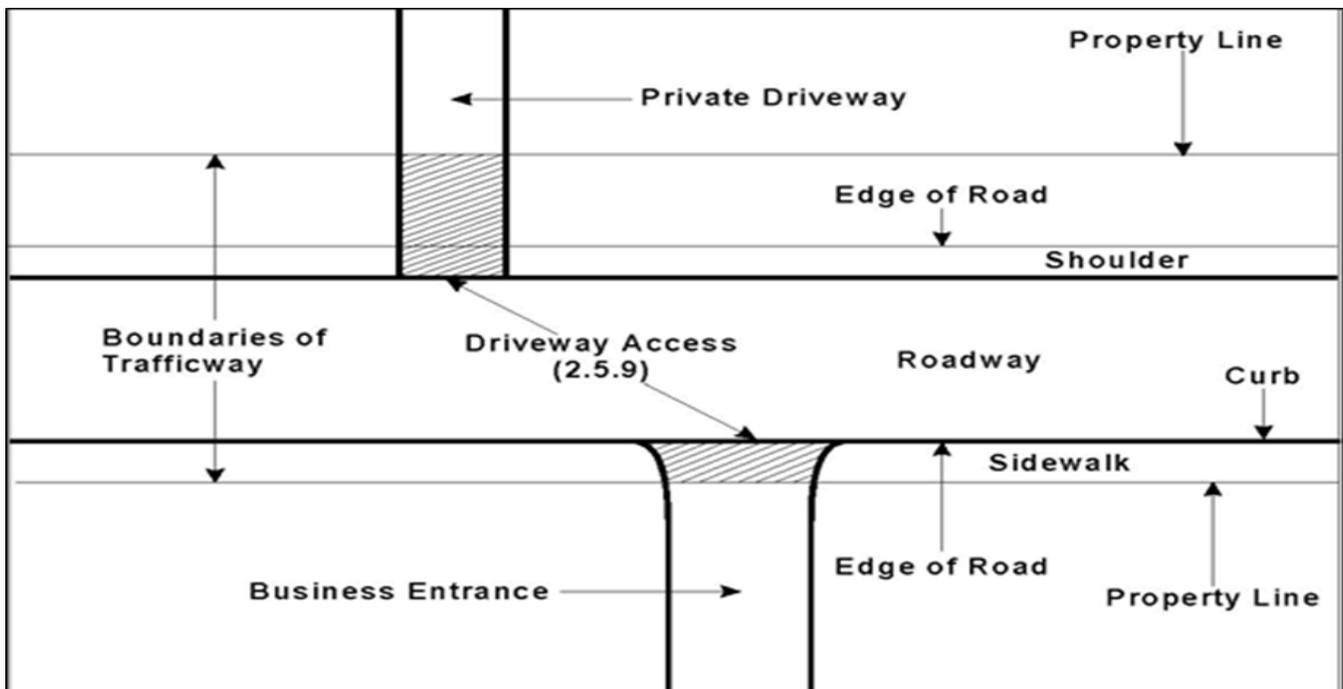
- Any area not within a trafficway

**2.5.9.1 driveway:** A driveway is a private way which provides vehicular access to the public from a trafficway to property, parking, or loading areas outside the boundaries of the trafficway, but is not considered open to the public for transportation purposes as a trafficway. A driveway is outside the trafficway and is typically not provided an official identification name or number.

Inclusions:

- A private drive providing access to a residence
- Entrance to business or other private entity not open to the public for transportation purpose

Figure 4 – Driveway Access (See 2.5.9)



## Exclusions:

- Privately constructed and/or maintained road open to the public for moving persons or property from one place to another
- Parking lot (See 2.5.22), which includes parking stalls, parking lot aisles, and parking lot ways
- Entrance to a business or other entity open to the public
- 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 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 (See Figure 6).

**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.

**2.5.17 ramp, exit/entrance:** An exit/entrance 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 (See Figure 7).

**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 shall 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 8).

## Inclusions:

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

## Exclusions:

- Island for channelization of vehicle movements
- Island for pedestrian refuge

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

Figure 5 - Intersection (See 2.5.10)

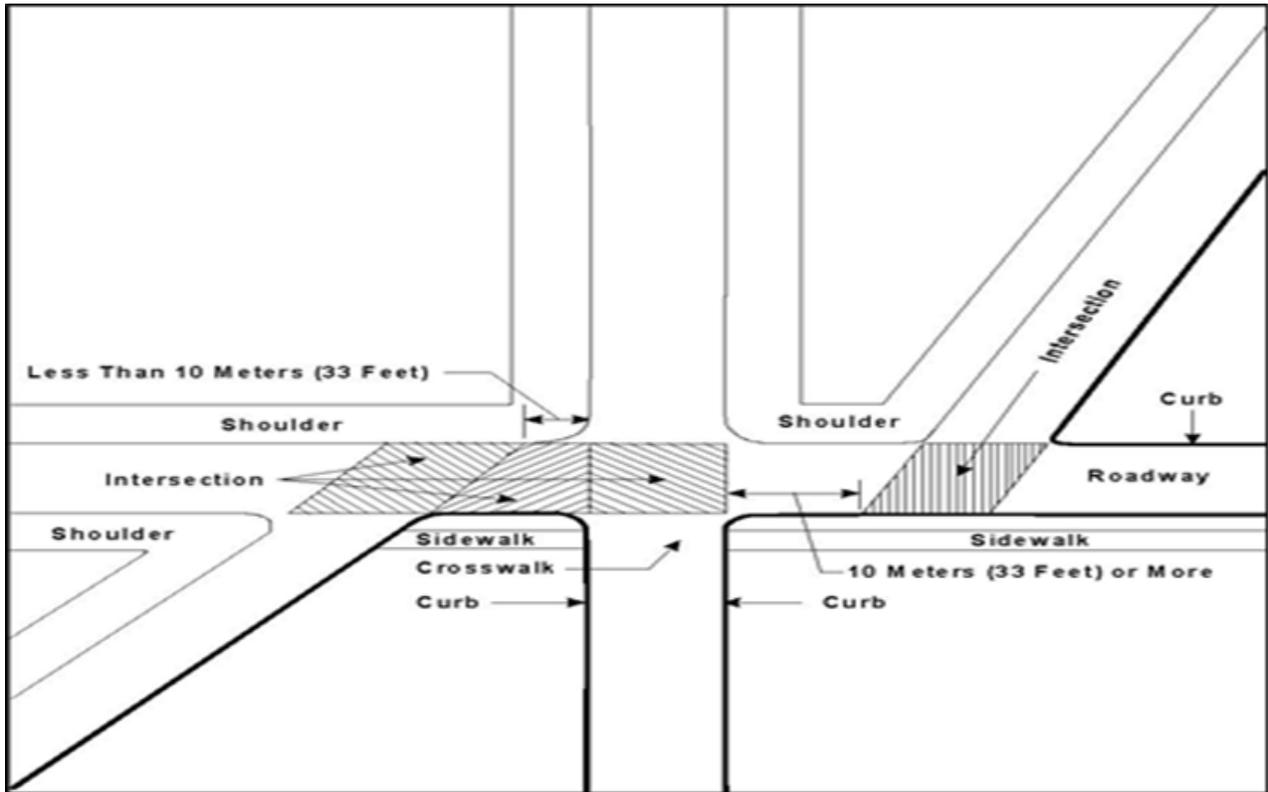


Figure 6 - Channelized Intersection (See 2.5.13)

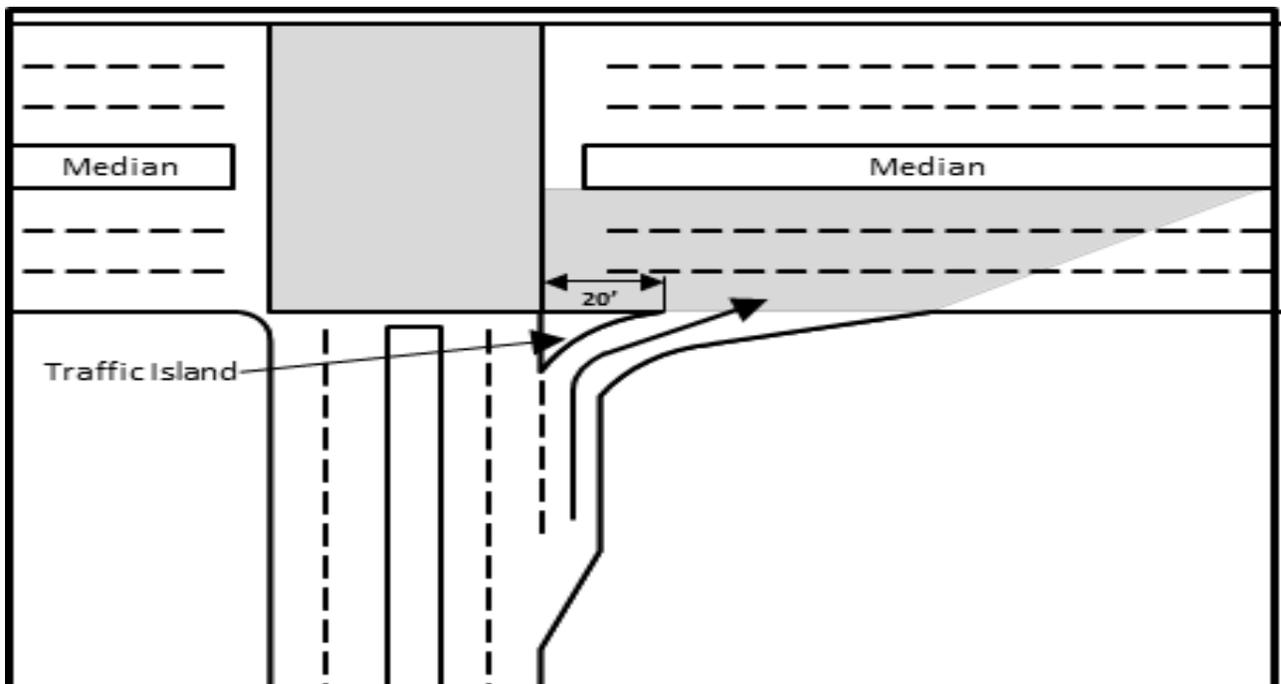


Figure 7 – Frontage Road (See 2.5.18)

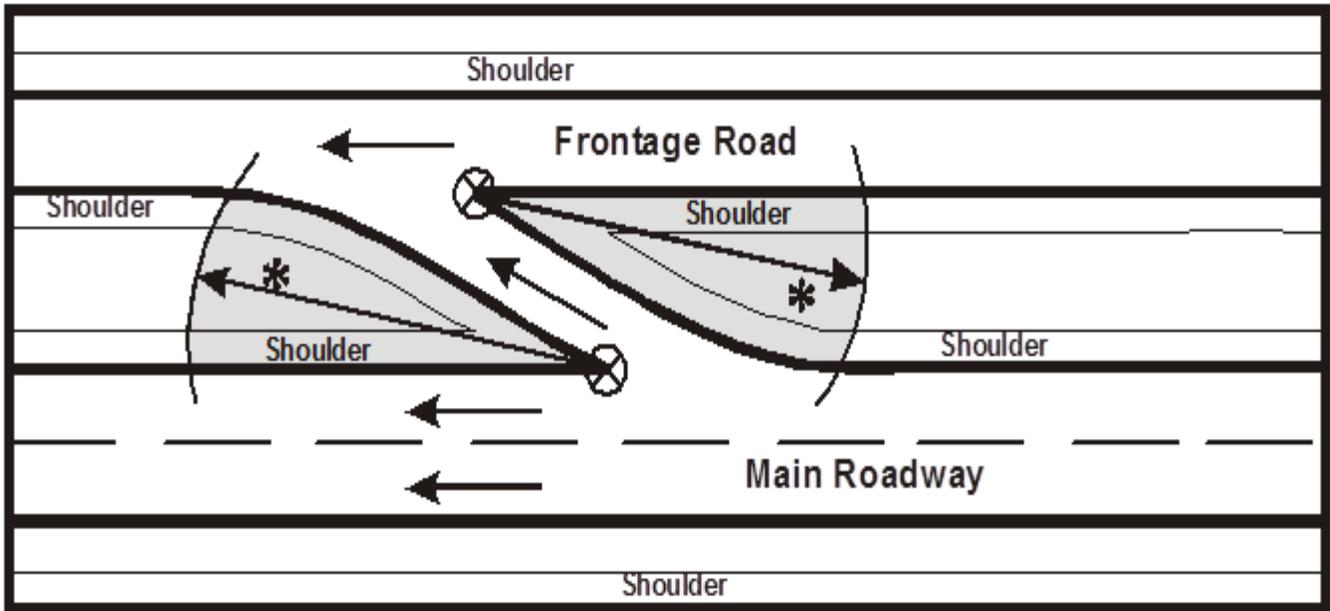
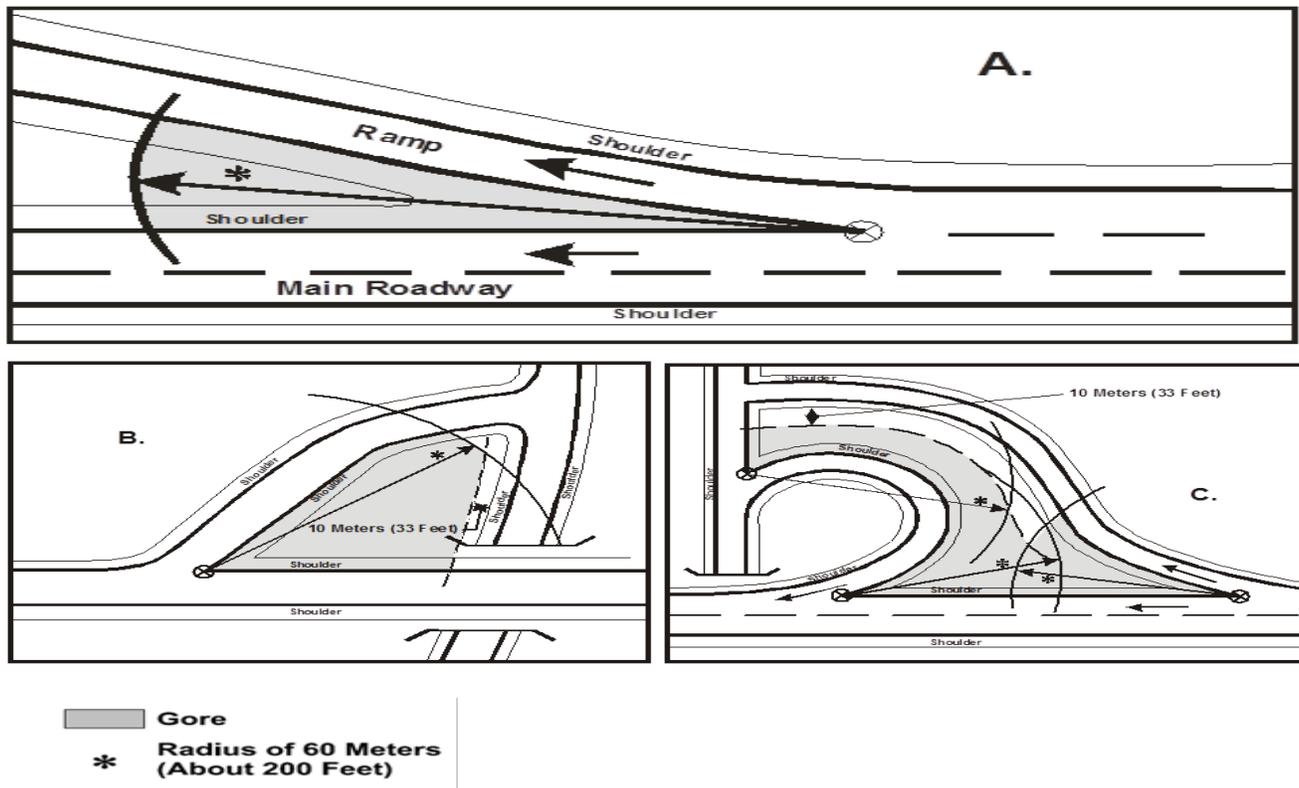


Figure 8 – Gore (See 2.5.19)



**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 — (See 2.5.22.1)

**2.5.22.1 parking lot way:** A parking lot way is a land way which is 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.

**2.5.23 turn lane:** A turn lane is a lane exclusively designated for vehicles turning from one trafficway to another.

Inclusions:

- Continuous left-turn lane

Exclusions:

- Through travel lanes

**2.5.24 work zone:** A work zone is an area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/indicators, including those on transport devices (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs and arrow boards mounted on the vehicles in a mobile maintenance activity) that mark the beginning and end of a construction, maintenance, or utility work activity.

It extends from the first warning sign, signal, or flashing lights to the END ROAD WORK sign or the last traffic control device pertinent to that work activity.

Work zones also include roadway sections where there is ongoing, moving (mobile) work activity such as lane line painting or roadside mowing only if the beginning of the ongoing, moving (mobile) work activity is designated by warning signs or signals.

Inclusions:

The following situations within the trafficway:

- Long-term stationary construction such as building a new bridge, adding travel lanes to the roadway, extending an existing trafficway, etc. (construction activity/work)
- Work involving moving activities such as striping the roadway, median and roadside grass mowing/landscaping, pothole repair, snowplowing, lane line painting, etc., where there are warning signs or signals marking the beginning of the moving work area (Mobile maintenance activity/work)
- Short-term stationary work such as repairing/maintaining electric, gas, water lines, or traffic signals (Utility activity/work)
- Areas identified by signage as a work zone where the ongoing work activity has temporarily paused

Exclusions:

- Any private construction, maintenance, or utility work outside the trafficway
- Any area of the trafficway where there is moving maintenance activity (e.g., roadside grass mowing/landscaping, pothole repair, snowplowing, lane line painting) without warning signs or signals
- Citizen removing snow from the trafficway as a neighborly gesture
- Area identified by signage, where the activity has not begun or is complete

## 2.6 Road Vehicle Crash Types

**2.6.1 overturning crash:** An overturning crash is a road vehicle crash in which the first harmful event is the overturning of a road vehicle in-transport.

**2.6.2 collision crash:** A collision crash is a road vehicle crash other than an overturning crash 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 crash:** A noncollision crash is any road vehicle crash other than a collision crash.

Inclusions:

- Overturning crash (See 2.6.1)
- Jackknife crash (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 only to the road vehicle that is of a noncollision 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

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

**2.6.5 collision involving pedestrian:** A collision involving pedestrian is a collision crash 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 a crash that is both a motor vehicle crash and a collision crash 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 a crash that is both an other-road-vehicle crash and a collision crash 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 (See 2.2.34.2) is a crash in which the first harmful event is the striking of a motor vehicle not in-transport (See 2.2.34.1) by a road vehicle in-transport (See 2.2.34).

**2.6.9 collision involving railway vehicle:** A collision involving railway vehicle is a collision crash 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 a crash that is both a motor vehicle crash and a collision crash 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 crash 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 crash 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 guardrails, bridge railings 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 crash 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 Crashes

**2.7.1 on-roadway crash:** An on-roadway crash is (1) a crash in which the initial point of contact between colliding units in the first harmful event is within a roadway or (2) a noncollision crash 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 crash:** An off-roadway crash is any road vehicle crash other than an on-roadway crash.

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

**2.7.4 driveway access crash:** A driveway access crash is a traffic crash in which the first harmful event occurs on a driveway access (See 2.5.9) or involves a road vehicle entering or leaving another roadway by way of a driveway access (See Figure 4). This requires at least one traffic unit (vehicle, pedalcyclist, or pedestrian) to be physically on the driveway access within the trafficway.

Inclusions:

- Crashes occurring on sidewalks within the driveway access

Examples:

- 1) A car turning into a private residence driveway striking a bicyclist riding on the sidewalk that crosses over the driveway access
- 2.) A tractor trailer backing out of a business

entrance onto the trafficway, while partially on the driveway access, is struck by a car on the roadway

Exclusions:

- Driveway access-related crashes (See 2.7.4.1)

Examples:

- 1.) A car on the roadway waiting to turn into a driveway is rear-ended by another motor vehicle
- 2.) A truck in the process of turning out of a driveway, but is no longer on the driveway, strikes a motor vehicle (or non-motorist) on the roadway

**2.7.4.1 driveway access-related crash:** A driveway access related-crash is a traffic crash that (1) occurs adjacent to a driveway, (2) is not a driveway access crash, and (3) results from an activity, behavior, or control related to the movement of traffic units onto or out of a driveway.

Inclusions:

- A traffic crash, other than a driveway access crash, which occurs at the connection of a driveway and a roadway and is related to the driveway access

Examples:

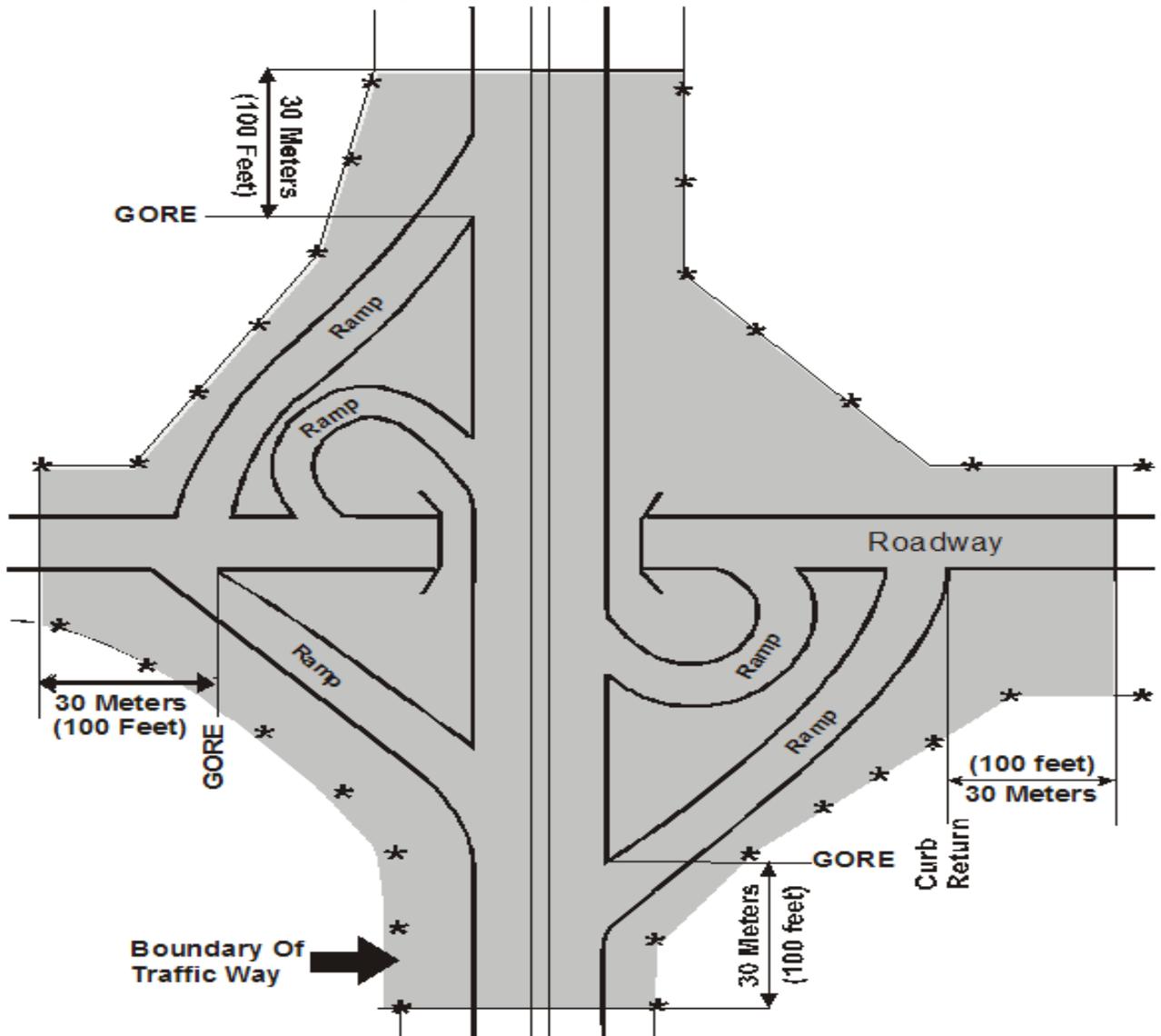
- 1.) A car on the roadway waiting to turn into a driveway is rear-ended by another motor vehicle
- 2.) A truck in the process of turning out of a driveway, but is no longer on the driveway, strikes a motor vehicle (or non-motorist) on the roadway

Exclusions:

- Driveway access crash (See 2.7.4)

**2.7.5 intersection-related crash:** An intersection-related crash is a traffic crash 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).

Figure 9 – Interchange crashes (See 2.7.7)



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

**2.7.7 interchange crash:** An interchange crash is a traffic crash 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 crashes may include at-intersection crashes, intersection-related crashes, driveway access crashes, or nonjunction crashes (See Figure 9).

**2.7.8 work zone crash:** A work zone crash is a motor vehicle traffic crash in which the first harmful event occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior, or control related to the movement of the traffic units through the work zone (See 2.5.24).

Inclusions:

- Collision and noncollision crashes occurring within the signs or markings indicating a work zone
- Collision and noncollision crashes occurring on approach to, exiting from, or adjacent to work

zones that are related to the work zone, regardless of distance

Examples:

- 1.) An automobile on the roadway loses control within a work zone due to a shift or reduction in the travel lanes and crashes into another vehicle in the work zone
- 2.) A van in an open travel lane strikes a highway worker in the work zone
- 3.) A highway construction vehicle working on the edge of the roadway is struck by a motor vehicle in-transport in a construction work zone
- 4.) A rear-end collision crash occurs before the signs or markings indicating a work zone caused by vehicles slowing or stopped on the roadway because of the work zone activity
- 5.) A pickup truck in-transport loses control in an open travel lane within a work zone caused by a shift or reduction in the travel lanes and crashes into another vehicle down the road that had already exited the work zone
- 6.) A truck tractor approaching an intersection strikes a pedestrian outside of the work zone. The crash is caused by a lack of visibility created by work zone equipment on the intersecting roadway
- 7.) A sport utility vehicle loses control and overturns on a roadway within a work zone due to a severe lane shift without any collision event

Exclusions:

- Crashes involving working motor vehicles that do not involve a motor vehicle in-transport
- A crash that occurs on the opposite side of a divided highway from the work zone, if the work zone is not signed on the crash side of the highway, and the crash is clearly unrelated to the work zone

Examples:

- 1.) Two motor vehicles performing work in a work zone collide

- 2.) A highway maintenance truck strikes a highway worker. Both are within the closed portion of the work zone

- 3.) A utility worker repairing the electrical lines over the trafficway falls from the bucket of a cherry picker without being struck by a motor vehicle in-transport

**2.7.9 entrance/exit ramp crash:** An entrance/exit ramp crash is a traffic crash in which the first harmful event occurs on an entrance or exit ramp roadway and is not the result of an activity, behavior, or control related to the movement of traffic units through an intersection. This would include all areas between the gore and termination of the entrance/exit ramp.

**2.7.9.1 entrance/exit ramp-related crash:** An entrance/exit ramp-related crash is a traffic crash in which the first harmful event occurs off the entrance/exit ramp roadway, but is related to the use of or entry onto the ramp. If the first harmful event occurs in the intersection of a ramp and a surface roadway, then it would be classified under 2.7.3 – at-intersection crash.

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

## Exclusions:

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

**2.8.2 school bus crash:** A school bus crash is (1) a motor vehicle crash in which a school bus, with or without a pupil on board, is involved directly as a contact vehicle, or (2) a motor vehicle crash or an other-road-vehicle crash 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 crash or noncollision crash involving a motor vehicle in-transport passing a school bus, stopped and with its red lights flashing (School bus is a noncontact vehicle indirectly involved)
- A collision crash 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 crash or noncollision crash involving a motor vehicle which is normally used as a school bus, but is carrying only senior citizens when the collision occurs

## 2.9 Commerce

**2.9.1 commerce:** Commerce is any trade, traffic, or transportation of commodities or persons for financial consideration or exchange, or in the furtherance of a business enterprise.

**2.9.2 interstate commerce:** Interstate commerce is commerce in the United States where the transit between the points of origin and termination does not occur entirely within the borders of the state of origin.

## Inclusions:

- Between a place in a state and place outside of such state (including a place outside of the U.S.)
- Between two places in a state through another state or a place outside of the U.S.
- Between two places in a state as part of trade, traffic, or transportation originating or terminating outside the state or the U.S.

## Exclusions:

- Intrastate commerce

**2.9.3 intrastate commerce:** Intrastate commerce is commerce in any state where the transit between the points of origin and termination occurs entirely within the borders of the state of origin.

## Exclusions:

- Interstate commerce

**2.9.4 motor carrier:** A motor carrier is the legal business entity, individual, partnership, corporation, or organization that directs, controls, and is responsible for the transportation of goods, property, or people.

## Inclusions:

- For-hire and private business entities engaged in commerce
- Governments
- Religious organizations; i.e., churches, temples, synagogues, mosques, etc.
- Charities
- All other entities responsible for the transportation of goods, property, or people

**2.9.5 hazardous material:** Hazardous material is a substance or material which has been designated by the U.S. Department of Transportation, or other authorizing entity, as capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Any motor vehicle transporting hazardous materials in quantities

above the thresholds established by the U.S. Department of Transportation, or other authorized entity, is required to display a hazardous materials placard (See 2.9.5.1).

Exclusions:

- Fuel or oil carried by the vehicle for its own use

**2.9.5.1 hazardous materials placard:** A hazardous materials placard is a sign required to be affixed to any motor vehicle transporting hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity. This placard identifies the hazard class division number, 4-digit hazardous material identification number, or name of the hazardous material being transported.

**2.9.6 at work:** A person is at work when engaged in duties, activities, or tasks that produce a product or service; that are done in exchange for money, goods, services, profit, or benefit; and that are legal activities in the United States.<sup>2</sup>

Inclusions:

- Persons who are driving or traveling as a condition of employment for a work-related activity.

Examples:

- 1.) Truck driver driving for pay with or without cargo
- 2.) Salesperson driving to a customer's office for a sales call
- 3.) Sales trainee riding with the salesperson in Example 2
- 4.) Clerk driving own personal vehicle at request of supervisor to buy office supplies
- 5.) Self-employed construction worker hauling materials to job site
- 6.) A police vehicle patrolling or responding to an emergency
- 7.) Any person driving a company-owned vehicle from their home in a work-related activity

Exclusions:

- Persons who are commuting to or from work
- Persons driving or traveling for reasons not required by the person's employer for a work-related activity

Examples:

- 1.) Truck driver using employer's truck to do personal errands
- 2.) Salesperson driving home (commuting) after last sales call of the day
- 3.) Sales trainee driving to second job after last sales call of the day
- 4.) Clerk driving between home and office
- 5.) Self-employed construction worker hauling materials for use at his/her own home
- 6.) Any person driving a company-owned vehicle to or from their home in a non-work-related activity

## 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 traffic crash.

**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 suspected serious injury
- person with suspected minor injury
- person with possible injury

<sup>2</sup> This definition is adapted from the definition used in the Census of Fatal Occupational Injuries program at the Bureau of Labor Statistics.

- person with no apparent injury

**3.1.3 time of classification:** Injuries should be classified on the basis of conditions at the scene of the crash. The single exception to this rule applies to fatal injuries. If any injury results in death within a specified period after the road vehicle crash 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 crashes which occur within 12 months of those crashes, 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 crashes 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 crash or from information submitted on the crash 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 crash. 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 Association for the Advancement of 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 traffic crash.

**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

## **3.3 Crash/Accident Classification by Transport Vehicle Type**

**3.3.1 introduction:** The purpose of this classification is to describe the type of transport crash/accident.

**3.3.2 categories:** There are five mutually exclusive categories for classification of transport accidents and crashes that are listed according to precedence. The order of precedence determines which categorization will be used when a crash or accident involves transport vehicles from multiple categories. For example, a crash involving a motor vehicle and a plane making an emergency landing would be classified as an aircraft accident. The order of precedence is as follows:

- Aircraft accident
- Watercraft accident
- Motor vehicle crash
- Railway accident
- Other-road-vehicle crash

**3.3.3 basis for categories:** The five categories of transport crashes/accidents listed above are based upon those used for compilation of vital statistics. Current definitions for this purpose are given in the Centers for Disease Control and Prevention, International Classification of Diseases, Tenth Revision, Clinical Modification 2017.

### 3.4 *Crash Classification by Injury Severity*

**3.4.1 introduction:** The purpose of this classification is to describe the severity of a road vehicle traffic crash in terms of injuries received. The crash 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 crashes. (See 2.3.1-2.3.6.1; 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 crash categories, in order of precedence, are:

- Fatal injury crash (K)
- Suspected serious injury crash (A)
- Suspected minor injury crash (B)
- Possible injury crash (C)
- No apparent injury crash (O)

**3.4.2.2 three category set:** Road vehicle crash categories, in order of precedence, are:

- Fatal injury crash
- Nonfatal injury crash
- No apparent injury crash (also referred to as property damage only crash) (See 2.4.30)

**3.4.3 general:** The “no-apparent-injury crash” classification applies only to road vehicle crashes which result in damage but not injury.

### 3.5 *Crash Classification by Damage Severity*

**3.5.1 introduction:** The purpose of this classification is to describe the severity of a road vehicle traffic crash in terms of damage to property.

**3.5.2 categories:** There are five categories of damage severity for classification of motor vehicle traffic crashes (See 2.3.7-2.3.12; 3.5.2.1) or other-road-vehicle crashes (See 3.5.2.2).

**3.5.2.1 motor vehicle crashes:** Motor vehicle crash categories, in order of precedence, are:

- Disabling damage crash
- Functional damage crash
- Other motor vehicle damage crash
- Other property damage crash
- No damage crash

**3.5.2.2 other-road-vehicle crashes:** Other-road-vehicle crash categories, in order of precedence, are:

- Disabling damage crash
- Functional damage crash
- Other other-road-vehicle damage crash
- Other property damage crash
- No damage crash

**3.5.3 interpretation:** This classification does not actually describe or measure the severity of the whole road vehicle crash, but only the most serious damage to one road vehicle. A motor vehicle crash 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 crash; if there were neither damage nor injury there would be no crash (See 2.4.6).

### 3.6 *Crash Classification by Number of Vehicles*

**3.6.1 introduction:** The purpose of this classification is to describe a motor vehicle crash in terms of the number of motor vehicles in-transport which are involved, or other-road-vehicle crash 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 crashes by number of vehicles are:

- Single-vehicle crash
- Two-vehicle crash
- Three-vehicle crash
- 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 a crash (See 2.4.8). Noncontact vehicles may or may not be recorded on crash reports but should not be counted when classifying crashes 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 crashes:** Common types of single-vehicle crashes are noncollision crashes or crashes 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 crash, 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 crash or an other-road-vehicle crash, it is not counted.

## 3.7 *Crash Classification by First Harmful Event*

**3.7.1 introduction:** The purpose of this classification is to describe a road vehicle traffic crash in terms of the first harmful event that occurred.

**3.7.2 categories:** Under two broad classifications, there are eleven mutually exclusive categories for classification of road vehicle traffic crashes (See 3.7.2.1) and ten mutually exclusive categories for classification of other-road-vehicle traffic crashes (See 3.7.2.2).

**3.7.2.1 motor vehicle crashes:** Motor vehicle crash categories are:

- Collision crash
  - 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 crash

- Overturning crash
- Jackknife crash
- Other noncollision crash

**3.7.2.2 other-road-vehicle crashes:** Other-road-vehicle crash categories are:

- Collision crash
  - 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 crash
  - Overturning crash
  - Jackknife crash
  - Other noncollision crash

**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 crash statistics. For analytic purposes, it may be desirable to collect and use information about subsequent harmful events.

## 3.8 *Crash Classification 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 crash 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 crashes in terms of location with respect to roadways. These are:

- On-roadway crash (See 2.7.1)
- Off-roadway crash (See 2.7.2)

**3.8.1.3 inadequate information:** If there is insufficient information to determine clearly in which category a road

vehicle traffic crash belongs, classify the crash as an on-roadway crash.

### 3.8.2 junction-related location

**3.8.2.1 introduction:** The purpose of this classification is to describe a road vehicle traffic crash in terms of its location with respect to junctions.

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

- At-intersection crash (See 2.7.3)
- Driveway access crash (See 2.7.4)
- Intersection-related crash (See 2.7.5)
- Nonjunction crash (See 2.7.6)

### 3.8.3 administrative class of trafficway

**3.8.3.1 introduction:** The purpose of this classification is to describe a traffic crash 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 crashes by administrative class of trafficway. In order of precedence these are:

- Interstate highway crashes (See 2.5.4)
- Other U.S. route numbered highway crashes (See 2.5.5)
- Other state route numbered highway crashes (See 2.5.6)
- County road crashes (See 2.5.7)
- City street crashes (See 2.5.8)
- All other traffic crashes

**3.8.3.3 intersections or interchanges:** For traffic crashes within intersections or interchanges, assign the administrative class of trafficway as follows:

- In an at-intersection crash, assign the crash to the highest class of trafficway at the intersection.
- In an interchange crash, assign the crash to the highest class of trafficway in the interchange unless

the crash occurs on the lower class trafficway and does not occur at the connections of ramps and lower class roadways. Crashes 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 7) (See also 3.8.3.4).

**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 crash. When the first harmful event does not occur on a trafficway the traffic crash 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 crash should be assigned to the highest administrative system at the crash location.

**3.8.3.7 inadequate information:** In any case where there is a question as to which administrative class of trafficway a traffic crash 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 crash 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 crashes by access class of trafficway. These are:

- Fully controlled access highway crashes (See 2.5.15)
- Other traffic crashes

**3.8.4.3 guide to classification:** Classification of traffic crashes by access class of trafficway should be compatible with classification of crashes 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 traffic crash 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 crashes with respect to location by land use character. These categories are:

- Urban area crash (See 2.5.1)
- Rural area crash (See 2.5.2)

### 3.8.6 political subdivision

**3.8.6.1 introduction:** The purpose of this classification is to describe the location of a road vehicle crash 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 a road vehicle crash 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 crash location for purposes of classification of road vehicle crashes 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 crash 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 crashes in terms of location with respect to bikeways. These are:

- Bicycle trail (also known as shared use paths) crashes (See 2.2.44)
- Bicycle lane crashes (See 2.2.45)
- Shared road crashes (See 2.2.46)
- Non-bikeway crashes

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

## 3.9 Type of 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 crash.

**3.9.2 categories – motor vehicle type:** Categories for classification of motor vehicles by type include:

- Automobile (See 2.2.12)
  - van, passenger or cargo (See 2.2.14.1-2)
  - van-based motorhome (See 2.2.14.3)
  - other automobile
- Utility vehicle (See 2.2.11)
- Bus (See 2.2.10)
  - school (See 2.8)
  - van-based (See 2.2.14.4)
  - other
- Motorcycle (See 2.2.9)
  - moped (See 2.2.9.4)
  - auticycle (See 2.2.9.7)
- Single Unit Truck (See 2.2.19)
  - truck tractor (See 2.2.20)
- Truck combination (See 2.2.21)
  - single unit truck and full trailer
  - single unit truck and semitrailer
  - truck tractor and semitrailer
  - truck tractor, semitrailer and full trailer(s) (double or triple)
- Other Motor Vehicle
  - ATV
  - Low speed vehicle (See 2.2.7.1)
  - Golf cart
  - Snowmobile

Vehicles in each category can be further described by size, weight, or configuration.

**3.9.3 categories – trucks configuration:** Categories for classification of trucks by configuration include:

- Truck tractor (See 2.2.20)
- Truck (See 2.2.13; 3.13)
  - Single-unit (See 2.2.19)
    - van
    - other single-unit
    - truck
  - Truck combination (See 2.2.21)
    - single-unit truck and full trailer
    - single-unit truck and semitrailer
    - truck tractor and semitrailer
    - truck tractor, semitrailer and full trailer(s) (doubles, triples)

**3.9.4 categories – bus configuration:** Categories for classification of buses by configuration include:

- Bus (See 2.2.10)
  - van-based bus (See 2.2.14.4)
  - small bus (See 2.2.10.1)
  - large bus (See 2.2.10.2)
  - school bus (See 2.8)

**3.9.4.1 categories – bus use:** Categories for classification of buses by use include:

- School bus (See 2.8)
- Transit bus (See 2.2.10.3)
- Intercity bus (See 2.2.10.4)
- Charter bus (See 2.2.10.5)
- Other bus (See 2.2.10.6)

### **3.10 Automobile Classification by Size**

**3.10.1 introduction:** The purpose of this classification is to describe the sizes of automobiles involved in motor vehicle crashes.

**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:

Ultra small — wheelbase 89 inches (2.26 meters) or less

Mini-compact — 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 crash report forms. These data ordinarily may be obtained more economically and accurately by computer interpretation of vehicle identification numbers (VINs), 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 motor vehicle crashes.

**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 2,400 pounds (1,089 kilograms) or less

Midweight — curb weight 2,500 to 3,400 pounds (1,134 to 1,542 kilograms)

Heavy — curb weight 3,500 pounds (1,588 kilograms) or more

**3.11.2.2 seven-category set:** Secondary automobile weight categories are:

A — curb weight 1,400 pounds (635 kilograms) or less

B — curb weight 1,500 to 1,900 pounds (680 to 862 kilograms)

C — curb weight 2,000 to 2,400 pounds (907 to 1,089 kilograms)

D — curb weight 2,500 to 2,900 pounds (1,134 to 1,315 kilograms)

E — curb weight 3,000 to 3,400 pounds (1,361 to 1,542 kilograms)

F — curb weight 3,500 to 3,900 pounds (1,588 to 1,769 kilograms)

G — curb weight 4,000 pounds (1,814 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 crash report forms. These data ordinarily may be obtained more economically and accurately by computer interpretation of vehicle identification numbers (VINs), 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 crash.

**3.12.2 categories:** Categories of motorcycle include:

- Large motorcycle (See 2.2.9.2)
- Motor-driven cycle (See 2.2.9.1)
- Autocycle (See 2.2.9.7)
- Speed-limited motor-driven cycle (See 2.2.9.3)
  - Moped (See 2.2.9.4)
  - 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 crash 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 road vehicle traffic crashes.

**3.13.2 categories:** There are three mutually exclusive categories of trucks based on gross vehicle weight rating (GVWR). 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 (GVWR) 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 (VINs) 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.

### 3.14 *Classification of Persons by Work Status*

**3.14.1 introduction:** The purpose of this classification is to indicate, for each person involved in the motor vehicle crash, whether the person was at work or not at work.

**3.14.2 categories:** There are two mutually exclusive categories for classification of work status of a person involved in a motor vehicle crash. The categories are:

- At work (See 2.9.6)
- Not at work

### 3.15 *Classification of Crashes by Work Status*

**3.15.1 introduction:** The purpose of this classification is to indicate if a road vehicle traffic crash is work-related.

**3.15.2 categories:** There are two mutually exclusive categories for classification of work status of a motor vehicle crash. The categories are:

- Work-related
- Not work-related

**3.15.3 guide to classification:** A motor vehicle crash is work-related if any person involved in the crash is at work (See 3.14).

### 3.16 *Classification of Crashes by Level of Vehicle Autonomy*

**3.16.1 introduction:** The purpose of this classification is to indicate what type of assistive technology, if any, was

available to the driver of a vehicle involved in a crash. It is also meant to capture whether or not such technology was engaged at the time of the crash.

NOTE: Currently, information regarding the presence or use of such technology may not be available to law enforcement personnel who are investigating motor vehicle crashes. However, this classification will provide more valuable data on the impact of assistive technology on crashes, as the relevant data becomes more available over time.

**3.16.2 categories:** Categories, or levels, of autonomy are identified by the Society of Automotive Engineers. In levels 0, 1, and 2, the human driver monitors the driving environment, as follows:

- **Level 0 - No Automation.** All aspects of the dynamic driving task, even when enhanced by warning or intervention systems.
- **Level 1 - Driver Assistance.** The execution by a driver assistance system of either steering or acceleration / deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving tasks.
- **Level 2 - Partial Automation.** The execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task.

In levels 3, 4, and 5, the automated driving system monitors the driving environment:

- **Level 3 - Conditional Automation.** The performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene.
- **Level 4 - High Automation.** The performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene.
- **Level 5 - Full Automation.** The full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver.

### 3.17 *Classification of Crashes by Driver Distraction Involvement*

**3.17.1 introduction:** Driver or non-motorist distraction may influence driver or non-motorist performance, involving both an action taken by the driver/non-motorist and the source of the distraction.

**3.17.2 categories:** Distraction can be visual, manual, or cognitive. Common sources of distraction are:

- Mobile phone, hands-free
- Mobile phone, hand-held
- Other electronic device
- Vehicle-integrated device
- External distraction (outside the vehicle or non-motorist area)
- Passenger/other non-motorist
- Actions (talking/listening, texting, looking away from road)
- Other distraction (animal, food, grooming)

### 3.18 *Classification of Crashes by Vehicle Special Use / Function*

**3.18.1 introduction:** The purpose of this classification is to identify any special function or use being served by motor vehicles involved in crashes that would not necessarily be obvious from the vehicle make or model.

**3.18.2 categories:** The special uses or functions of vehicles are:

- Ambulance

- Police
- Fire fighting
- Military
- Taxi
- Vehicle used for electronic ride-hailing service
- Highway/maintenance
- Paratransit service, i.e., elderly or handicapped
- Non-transport emergency service vehicle
- Incident response-safety service patrols
- Farm vehicle
- Public utility
- Wrecker or tow (incident response)
- Bus
  - Charter
  - Intercity
  - School
  - Transit
  - Other
- Mail carrier
- Other incident response
- Vehicle used as a crash attenuator
- Rental truck (over 10,000 pounds)

## 4 Glossary

Section	Term	Definition
2.4.10	Aircraft Accident	An aircraft accident is a transport accident that involves an aircraft in-transport.
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.
2.1.9	Airway	An airway is a transport way reserved primarily for use by aircraft taking off, in flight, or landing.
2.5.12	At Grade Intersection	An at-grade intersection is an intersection where all roadways cross or join at the same level.
2.7.3	At-Intersection Crash	An at-intersection crash is a traffic crash in which the first harmful event occurs within the limits of an intersection.
2.9.6	At Work	A person is at work when engaged in duties, activities or tasks that produce a product or service; that are done in exchange for money, goods, services, profit or benefit; and that are legal activities in the United States. This definition is adapted from the definition used in the Census of Fatal Occupational Injuries program at the Bureau of Labor Statistics.
2.2.9.7	Autocycle	An autocycle is a large motorcycle with one rear wheel and two front wheels, with either a saddle and handlebars or seat(s) and a steering wheel, that can be fully enclosed, partially enclosed, or unenclosed.
2.2.12	Automobile	An automobile is a motor vehicle other than a motorcycle, utility vehicle or low speed vehicle consisting of a transport device typically designed for carrying eight 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.

Section	Term	Definition
2.2.45	Bicycle Lane	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
2.2.44	Bicycle Trail	A bicycle trail (also known as a shared use path) is a bikeway reserved for pedalcycles and separated from roadways by open space or barriers..
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).
2.2.10	Bus	A bus is a motor vehicle with seating for transporting nine or more persons, including the driver.
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.
2.4.5	Cataclysm	A cataclysm is an avalanche, landslide/mudslide, hurricane, cyclone, downburst, flood, torrential rain, cloudburst, lightning, tornado, tidal wave, earthquake or volcanic eruption (See 2.4.9 transport crash).
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.
2.2.10.5	Charter Bus	A charter bus is a bus providing contract service for a group tour or outing, usually on a round-trip basis.
2.5.8	City Street	A city street is a 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.
2.6.2	Collision Crash	A collision crash is a road vehicle crash other than an overturning crash in which the first harmful event is a collision of a road vehicle in-transport with another road vehicle, other property or pedestrians.

Section	Term	Definition
2.6.11	Collision involving Animal	A collision involving animal is a collision crash 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 crash 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 guardrails, bridge railings or abutments, construction barricades, impact attenuators, trees, embedded rocks, utility poles, ditches, steep earth or rock slopes, culverts, fences and buildings.
2.6.6	Collision involving Motor Vehicle in-Transport	A collision involving motor vehicle in-transport is a crash that is both a motor vehicle crash and a collision crash in which the first harmful event is the collision of two or more motor vehicles in-transport.
2.6.13	Collision involving Other Object	A collision involving other object is any collision crash 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.
2.6.7	Collision involving Other Road Vehicle in Transport	A collision involving other road vehicle in-transport is a crash that is both an other-road-vehicle crash and a collision crash 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 (See 2.2.34.2) is a crash in which the first harmful event is the striking of a motor vehicle not in-transport (See 2.2.34.1) by a road vehicle in-transport (See 2.2.34).
2.6.10	Collision involving Pedalcycle	A collision involving pedalcycle is a crash that is both a motor vehicle crash and a collision crash in which the first harmful event is the collision of a pedalcycle in-transport and a motor vehicle in-transport.

Section	Term	Definition
2.6.5	Collision involving Pedestrian Crash	A collision involving pedestrian is a collision crash in which the first harmful event is the collision of a pedestrian and a road vehicle in-transport.
2.6.9	Collision involving Railway Vehicle	A collision involving railway vehicle is a collision crash in which the first harmful event is the collision of a road vehicle in-transport and a railway vehicle.
2.9.1	Commerce	Commerce is any trade, traffic or transportation of commodities or persons for financial consideration or exchange, or in the furtherance of a business enterprise.
2.2.7.3	Commercial Motor Vehicle	A commercial motor vehicle is any motor vehicle used for the transportation of goods, property or people in interstate (See 2.9.2) or intrastate (2.9.3) commerce.
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 crash, or has a noncollision crash. A contact vehicle is directly involved in a crash. (See 2.6.2 Collision crash and 2.6.3 Noncollision crash.)
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.
2.4.6	Crash	A crash is an unstabilized situation which includes at least one harmful event.
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.
2.5.20	Curb Return	A curb return is the curved section of curb used at intersections in joining straight sections of curb.

Section	Term	Definition
2.3.7	Damage	Damage is harm to property that reduces the monetary value of that property.
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.
2.3.11	Disabling damage	Disabling damage is road vehicle damage which precludes departure of the vehicle from the scene of the crash in its usual operating manner by daylight after simple repairs.
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.
2.5.9.1	Driveway	A driveway is a private way which provides vehicular access to the public from a trafficway to property, parking or loading areas outside the boundaries of the trafficway, but is considered to be not open to the public for transportation purposes as a trafficway. A driveway is outside the trafficway and is typically not provided an official identification name or number.
2.5.9	Driveway Access	A driveway access is a portion of the trafficway at the end of a driveway (See 2.5.9.1), providing access to property adjacent to a trafficway.
2.7.4	Driveway access Crash	A driveway access crash is a traffic crash in which the first harmful event occurs on a driveway access (See 2.5.9) or involves a road vehicle entering or leaving another roadway by way of a driveway access (See Figure 4). This requires at least one traffic unit (vehicle, pedalcyclist or pedestrian) to be physically on the driveway access within the trafficway.
2.7.4.1	Driveway Access-Related Crash	A driveway access-related crash is a traffic crash that (1) occurs adjacent to a driveway, (2) is not a driveway access crash and (3) results from an activity, behavior or control related to the movement of traffic units onto or out of a driveway.

Section	Term	Definition
2.7.9	Entrance/Exit Ramp Crash	An Entrance/Exit ramp crash is a traffic crash in which the first harmful event occurs on an entrance or exit ramp roadway and is not the result of an activity, behavior or control related to the movement of traffic units through an intersection. This would include all the areas between the gore and termination of the entrance/exit ramp.
2.7.9.1	Entrance/Exit Ramp-related Crash	An Entrance/Exit Ramp-related crash is a traffic crash in which the first harmful event occurs off the entrance/exit ramp roadway, but is related to the use of or entry onto the ramp. If the first harmful event occurs in the intersection of a ramp and a surface roadway, then it would be classified under 2.7.3 – at-intersection crash.
2.4.27	Fatal Crash	A fatal crash is any injury crash that results in one or more fatal injuries.
2.3.2	Fatal Injury (K)	A fatal injury is any injury that results in death (See 3.1.3) within 30 days after the motor vehicle crash in which the injury occurred. If the person did not die at the scene but died within 30 days of the motor vehicle crash in which the injury occurred, the injury classification should be changed from the attribute previously assigned to the attribute "Fatal injury"
2.3.3	Fatality	A fatality is any death resulting from a fatal injury (See 3.1.3).
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.
2.2.18	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 tow bars, is

Section	Term	Definition
		sometimes used to convert a semitrailer to a full trailer. A semitrailer equipped with a converter dolly is considered to be a full trailer.
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.
2.3.12	Functional Damage	Functional damage is any road vehicle damage, other than disabling damage, which affects operation of the road vehicle or its parts.
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 shall 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.
2.5.14	Grade Separation	A grade separation is a crossing at different levels of two trafficways, or a trafficway and a railway.
2.2.23.1	Gross Combination Weight Rating (GCWR)	Gross combination weight rating is the value specified by the manufacturer(s) as the recommended maximum loaded weight of a combination (articulated) motor vehicle. This is for truck tractors and single-unit trucks pulling a trailer(s). GCWR is the sum of the gross vehicle weight ratings (GVWR) of all units; power unit and its trailer(s).
2.2.22	Gross Vehicle Weight (GVW)	Gross vehicle weight is the actual weight of a road vehicle including the weight of the road vehicle, its load of persons and property, and all added equipment.

Section	Term	Definition
2.2.23	Gross Vehicle Weight Rating (GVWR)	A gross vehicle weight rating is the value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle. This rating includes the maximum rated capacity of a vehicle, including the base vehicle, mounted equipment and any cargo and passengers. Most of the time, GVWR is the sum of the maximum rated capacity of the axles of the vehicle.
2.4.1	Harmful Event	A harmful event is an occurrence of injury or damage.
2.9.5	Hazardous Material	Hazardous material is a substance or material which has been designated by the U.S. Department of Transportation, or other authorizing entity, as capable of posing an unreasonable risk to health, safety and property when transported in commerce. Any motor vehicle transporting quantities of hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity, is required to display a hazardous materials placard.
2.9.5.1	Hazardous Materials Placard	A hazardous materials placard is a sign required to be affixed to any motor vehicle transporting quantities of hazardous materials in quantities above the thresholds established by the U.S. Department of Transportation, or other authorized entity. This placard identifies the hazard class division number, 4-digit hazardous material identification number, or name of the hazardous material being transported.
2.2.26	Heavy Truck	A heavy truck is a truck which has a gross vehicle weight rating (GVWR) of more than 26,000 pounds (11,793 kilograms).
2.3.1	Injury	An injury is bodily harm to a person.
2.4.26	Injury Crash	An injury crash is any road vehicle crash that results in one or more injuries.
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

Section	Term	Definition
		traffic between two or more roadways on different levels.
2.7.7	Interchange Crash	An interchange crash is a traffic crash 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 crashes may include at-intersection crashes, intersection-related crashes, driveway access crashes or nonjunction crashes.
2.2.10.4	Intercity Bus	An intercity bus is a bus used for long-distance passenger transportation between cities over fixed routes with regular schedules.
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.
2.7.5	Intersection-related Crash	An intersection-related crash is a traffic crash 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.
2.9.2	Interstate Commerce	Interstate commerce is commerce in the United States where the transit between the points of origin and termination does not occur entirely within the borders of the state of origin.
2.5.4	Interstate Highway	An Interstate highway is a trafficway on the Interstate System.
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.

Section	Term	Definition
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 on a roadway or in motion within or outside the trafficway. A transport vehicle which is also a working motor vehicle at the time of the unstabilized situation is not "in-transport." In roadway lanes used for travel during some periods and for parking during other periods, a parked motor vehicle should be considered to be in-transport during periods when parking is forbidden.
2.9.3	Intrastate Commerce	Intrastate commerce is commerce in any state where the transit between the points of origin and termination occurs entirely within the borders of the state of origin.
2.6.4	Jackknife Crash	A jackknife crash is a noncollision crash in which the first harmful event results from unintended contact between any two units of a multi-unit road vehicle such as a truck combination.
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.
2.1.7	Land Vehicle	A land vehicle is a transport vehicle which is neither an aircraft nor a 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.
2.2.10.2	Large Bus	A large bus is a bus with seating for sixteen or more persons, including the driver.
2.2.9.2	Large Motorcycle	A large motorcycle is any motorcycle other than a motor-driven cycle.
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.

Section	Term	Definition
2.2.24	Light Truck	A light truck is a truck which has a gross vehicle weight rating (GVWR) of 10,000 pounds (4,536 kilograms) or less
2.2.7.1	Low Speed Vehicle	A low speed vehicle (LSV) is a motor vehicle with four or more wheels whose top speed is greater than 20 miles per hour, but not greater than 25 miles per hour. LSVs are required to be equipped with basic items of safety equipment: headlamps, stop lamps, turn signal lamps, tail lamps, reflex reflectors, parking brake, windshields of either type AS-1 or AS-5 glazing, rearview mirrors, seat belts and vehicle identification numbers (VINs).
2.2.29	Median	A median is an area of a trafficway between parallel roads separating travel in opposite directions. A flush or painted median should be 4 or more feet wide between inside roadway edge lines. Medians fewer than 4 feet wide shall have a barrier to be considered a median. Continuous left-turn lanes are not considered painted medians.
2.2.25	Medium Truck	A medium truck is a truck which has a gross vehicle weight rating (GVWR) of more than 10,000 pounds and less than or equal to 26,000 pounds (4,536 to 11,793 kilograms).
2.2.9.4	Moped	A moped is a speed-limited motor-driven cycle which may be propelled by pedaling.
2.9.4	Motor Carrier	A motor carrier is the legal business entity, individual, partnership, corporation or organization that directs, controls and is responsible for the transportation of goods, property or people
2.2.7	Motor Vehicle	A motor vehicle is any motorized (mechanically or electrically powered) road vehicle not operated on rails (See 2.2.7.1, 2.2.7.2, 2.2.9 - 2.2.26).
2.4.12	Motor Vehicle Crash	A motor vehicle crash is a transport crash 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.

Section	Term	Definition
2.3.9	Motor Vehicle Damage	Motor vehicle damage is road vehicle damage to a motor vehicle.
2.4.23	Motor Vehicle Nontraffic Crash	A motor vehicle nontraffic crash is a motor vehicle crash which is a nontraffic crash.
2.4.22	Motor Vehicle Traffic Crash	A motor vehicle traffic crash is a motor vehicle crash which is a traffic crash.
2.2.34	Motor Vehicle In-transport	See In-transport
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.
2.2.9.5	Motorcycle Conversion Kit	A motorcycle conversion assembly makes it possible to convert a conventional two-wheel motorcycle into a motorcycle having the look and the stability of a tricycle-type vehicle, which improves stability and increases ease of operation.
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 5-brake horsepower or less.
2.2.40	Motorist	A motorist is any occupant of a motor vehicle in-transport
2.3.6.1	No Apparent Injury (O)	No apparent injury is a situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.
2.6.3	Noncollision Crash	A noncollision crash is any road vehicle crash other than a collision crash.
2.4.8	Non-contact Vehicle	A non-contact vehicle is any vehicle other than a contact vehicle. A noncontact vehicle is indirectly involved in a crash
2.4.28	Non-fatal Injury Crash	A non-fatal injury crash is any injury crash other than a fatal crash.

Section	Term	Definition
2.4.29	No Apparent Injury Crash	A no apparent injury crash is any road vehicle crash other than an injury crash. A no apparent injury crash is also called a property damage only crash.
2.7.6	Non-junction Crash	A non-junction crash is a road vehicle crash that is not an at-intersection crash, a driveway access crash or an intersection-related crash.
2.2.41	Non-motorist	A non-motorist is any person other than a motorist.
2.4.19	Non-traffic Crash	A non-traffic crash is a road vehicle crash which is not a traffic crash.
2.2.34.1	Not In-transport	Not in-transport means any transport vehicle which is not "in-transport."
2.2.35	Occupant	An occupant is any person who is part of a transport vehicle
2.7.2	Off-roadway Crash	An off-roadway crash is any road vehicle crash other than an on-roadway crash.
2.7.1	On-roadway Crash	An on-roadway crash is (1) a collision crash in which the initial point of contact between colliding units in the first harmful event is within a roadway or (2) a non-collision crash in which the road vehicle involved was partly or entirely on the roadway at the time of the first harmful event.
2.2.10.6	Other Bus	An other bus is any bus used for transportation purposes other than school bus, transit bus, intercity bus or charter bus.
2.4.14	Other-road-vehicle Crash	An other-road-vehicle crash is a transport crash that (1) involves an other road vehicle in-transport and (2) is not an aircraft accident, watercraft accident, motor vehicle crash or railway accident.
2.2.8	Other Road Vehicle	An other road vehicle is any road vehicle other than a motor vehicle.
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.

Section	Term	Definition
2.5.5	Other US 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.
2.3.10	Other-road-vehicle Damage	Other-road-vehicle damage is road vehicle damage to an other road vehicle.
2.4.25	Other-road-vehicle Nontraffic Crash	An other-road-vehicle nontraffic crash is an other-road-vehicle crash which is a nontraffic crash.
2.4.24	Other-road-vehicle Traffic Crash	An other-road-vehicle traffic crash is an other-road-vehicle crash which is a traffic crash.
2.6.1	Overturning Crash	An overturning crash is a road vehicle crash in which the first harmful event is the overturning of a road vehicle.
2.2.34.2	Parked Motor Vehicle	A parked motor vehicle is a motor vehicle not in-transport, other than a working motor vehicle, that is not in motion and not located on 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.
2.5.22.1	Parking Lot Way	Parking lot ways in parking lots open to the public are trafficways.
2.2.38	Passenger	A passenger is any occupant of a road vehicle other than its driver.
2.2.14.1	Passenger Van	A passenger van is any van where the area behind the driver or cab is designated for carrying passengers
2.2.27	Pedalcycle	A pedalcycle is a non-motorized other road vehicle propelled by pedaling.

Section	Term	Definition
2.4.16	Pedalcycle Crash	A pedalcycle crash is an other-road-vehicle crash that (1) involves a pedalcycle in-transport and (2) is not a streetcar crash.
2.2.39	Pedalcyclist	A pedalcyclist is any occupant of a pedalcycle in-transport.
2.2.36	Pedestrian	A pedestrian is any person who is not an occupant.
2.1.1	Person	A person is any living human. Within the context of this manual, a fetus is considered part of a pregnant woman rather than a separate individual. After death, a human body is not considered to be a person.
2.2.6.1	Personal Conveyance	A personal conveyance is a device, other than a transport device, used by a pedestrian (See 2.2.36) for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.
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.
2.4.3.1	Police Pursuit	A police pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop to a motorist the officer is attempting to contact, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. This notice needs to be either through the use of visual or audible emergency signals, including alternating flashing headlights, or a combination of emergency devices. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued.
2.3.6	Possible Injury (C)	A possible injury is any injury reported or claimed which is not a fatal, suspected serious,

Section	Term	Definition
		or suspected minor injury. Possible injuries are those that are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident, and includes: Momentary loss of consciousness or claim of injury, limping, or complaint of pain or nausea.
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 a trafficway.
2.1.2	Property	Property is any physical object other than a person.
2.4.30	Property Damage Only Crash	A property damage only crash is a no apparent injury crash.
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 crash.
2.2.5	Railway Train	A railway train is any motorized railway vehicle.
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.
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.
2.5.17	Ramp	A ramp is an auxiliary roadway used for entering or leaving through-traffic lanes.
2.2.33	Road	Road is that part of a trafficway which includes both the roadway and any shoulder alongside the roadway
2.2.6	Road Vehicle	A road vehicle is any land vehicle other than a railway vehicle.
2.4.17	Road Vehicle Crash	A road vehicle crash is a transport crash that is either a motor vehicle crash or an other-road-vehicle crash.

Section	Term	Definition
2.3.8	Road Vehicle Damage	Road vehicle damage is damage to a road vehicle.
2.4.21	Road Vehicle Nontraffic Crash	A road vehicle nontraffic crash is a nontraffic crash.
2.4.20	Road Vehicle Traffic Crash	A road vehicle traffic crash is a traffic crash.
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.
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 opposing directions of traffic or for trucks and automobiles
2.5.2	Rural Area	A rural area is any area which is not within urban areas.
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.
2.8.2	School Bus Crash	A school bus crash is (1) a motor vehicle crash in which a school bus, with or without a pupil on board, is involved directly as a contact vehicle, or (2) a motor vehicle crash or an other-road-vehicle crash in which a school bus, with or without a pupil on board, is involved indirectly as a noncontact vehicle.

Section	Term	Definition
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.
2.2.30	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.
2.2.46	Shared Road	A shared road is any bikeway which is part of a roadway, but not a bicycle lane.
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.
2.2.19	Single Unit Truck	A single-unit truck is a truck consisting primarily of a single motorized transport device designed for carrying property. When connected to a trailer, such a device may be part of a truck combination. (See 2.2.21)
2.2.10.1	Small bus	A small bus is a bus with seating for nine to fifteen persons, including the driver.
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 2-brake horsepower or less, and 3.) has a power drive system which does not require its operator to shift gears.
2.4.15	Streetcar Crash	A streetcar crash is an other-road-vehicle crash that involves a streetcar in-transport.
2.3.5	Suspected Minor Injury (B)	A suspected minor injury is any injury that is evident at the scene of the crash, other than fatal or serious injuries, including lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue / muscles).

Section	Term	Definition
2.3.4	Suspected Serious Injury (A)	A suspected serious injury is any injury other than fatal which results in one or more of the following: Severe laceration resulting in exposure of underlying tissues / muscle / organs or resulting in significant loss of blood; broken or distorted extremity (arm or leg); crush injuries; suspected skull, chest, or abdominal injury other than bruises or minor lacerations; significant burns (second and third degree burns over 10% or more of the body); unconsciousness when taken from the crash scene, or paralysis.
2.2.9.6	Three-wheeled motorcycle	A three-wheeled motorcycle is any motor vehicle having a seat or saddle for the use of its operator, and having three wheels in contact with the ground.
2.2.33.1	Total Lanes in Roadway	The total number of lanes in a roadway is collected for each vehicle, on the roadway on which that vehicle was traveling. Through lanes also includes shared through/turn lanes but excludes, turn-only lanes, auxiliary lanes, such as collector-distributor lanes, weaving lanes, frontage road lanes, parking lanes, acceleration/deceleration lanes, toll collection lanes and truck climbing lanes. Total lanes are collected in two parts as total through lanes and total auxiliary lanes.
2.4.18	Traffic Crash	A traffic crash is a road vehicle crash in which (1) the unstabilized situation originates on a trafficway or (2) a harmful event occurs on a trafficway.
2.2.42	Traffic Unit	A traffic unit is a land vehicle or a pedestrian.
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.
2.2.15	Trailer	A trailer is a road vehicle designed to be drawn by another road vehicle.
2.2.10.3	Transit Bus	A transit bus is a bus used for passenger transportation over fixed, scheduled routes within primarily urban geographical areas.

Section	Term	Definition
2.4.9	Transport Crash	A transport crash is a crash (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 where the timing is such that the cataclysm is occurring at the time of the accident or crash.
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 personal conveyance.
2.1.4	Transport Vehicle	A transport vehicle consists of one or more devices or animals and their load. Such devices or animals shall 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 person 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.
2.1.8	Transport Way	A transport way is any way or place reserved or commonly used for the operation of transport vehicles.
2.2.13	Truck	A truck is a motor vehicle designed primarily for carrying property.
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.
2.2.20	Truck Tractor	A truck tractor is a motor vehicle consisting of a single motorized transport device designed primarily for drawing trailers.
2.5.23	Turn Lane	A turn lane is a lane exclusively designated for vehicles turning from one trafficway to another

Section	Term	Definition
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.
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.
2.2.11	Utility Vehicle	A utility vehicle is a motor vehicle other than a motorcycle or large bus consisting primarily of a transport device designed for carrying persons, and generally considered a multi-purpose vehicle that is designed to have off-road capabilities. These vehicles are generally four-wheel-drive (4 x 4) and have increased ground clearance. A utility vehicle typically 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.
2.2.14	Van	A van is a motor vehicle consisting primarily of a transport device which has a gross vehicle weight rating (GVWR) 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.

Section	Term	Definition
2.2.14.4	Van-based Bus	A van-based bus is any passenger van designed for carrying nine or more persons, including the driver.
2.2.14.3	Van-based Motorhome	A van-based motorhome is any van where a frame-mounted recreational unit is added behind the driver or cab area.
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.
2.1.6	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.
2.1.10	Waterway	A waterway is a transport way reserved primarily for use by watercraft.
2.5.24	Work Zone	<p>A work zone is an area of a trafficway where construction, maintenance or utility work activities are identified by warning signs/ signals/ indicators, including those on transport devices (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs and arrow boards mounted on the vehicles in a mobile maintenance activity) that mark the beginning and end of a construction, maintenance or utility work activity. It extends from the first warning sign, signal or flashing lights to the END ROAD WORK sign or the last traffic control device pertinent for that work activity.</p> <p>Work zones also include roadway sections where there is ongoing, moving (mobile) work activity such as lane line painting or roadside mowing only if the beginning of the ongoing, moving (mobile) work activity is designated by warning signs or signals.</p>
2.7.8	Work Zone Crash	A work zone crash is a motor vehicle traffic crash in which the first harmful event occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior or control related to the movement of the traffic units through the work zone.

Section	Term	Definition
2.2.7.2	Working Motor Vehicle:	A working motor vehicle is a motor vehicle in the act of performing construction, maintenance or utility work related to the trafficway. This "work" may be located within open or closed portions of the trafficway and motor vehicles performing these activities can be within or outside of the trafficway boundaries.

## References

National Safety Council. Manual on Classification of Motor Vehicle Traffic Accidents, Seventh Edition (ANSI D16.1-2007). Chicago.

Centers for Disease Control and Prevention, International Classification of Diseases, Tenth Revision, Clinical Modification, 2017.

American Association of State Highway Transportation Officials. AASHTO Transportation Glossary, 11<sup>th</sup> ed. 2009.

United States Code, Title 23. Highways. Washington: U.S. Government Printing Office.

U.S. Department of Transportation, Federal Highway Administration. Manual on Uniform Traffic Control Devices with Revisions 1 and 2. May 2012.

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## Characteristics of Motor Vehicle Traffic Crashes

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

- 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 Cataclysm and 2.4.9 Transport crash)?
- 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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