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NHTSA Field Crash Investigation 2024 Nonmotorist Coding and Editing Manual

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16. Abstract NHTSA's field crash investigation-based data collection programs are the Crash Investigation Sampling System (CISS), Special Crash Investigations (SCI), and the Crash Injury Research & Engineering Network (CIREN). NHTSA investigation-based programs collect detailed crash data to help scientists and engineers analyze motor vehicle crashes and injuries. CISS collects data on a representative sample of minor, serious, and fatal crashes involving at least one passenger vehicle – cars, light trucks, SUVs, and vans – towed from the scene. This publication is the nonmotorist coding manual for CISS, SCI, and CIREN for 2024.			
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Introduction

On November 15, 2021, Congress passed the Bipartisan Infrastructure Law. Under § 24108(e) Congress authorizes the Secretary of Transportation to enhance the collection of crash data by upgrading the Crash Investigation Sampling System (CISS) to include (1) additional data collection sites; (2) an expanded scope that includes all crash types; and (3) on-scene investigation protocols.

The scope of CISS from 2016 to 2023 was police-reported motor vehicle crashes on a trafficway involving a passenger vehicle towed from the scene resulting in a police crash report (PCR). The expanded CISS scope beginning in 2024 will also include each police-reported crash initiating on a trafficway involving a nonmotorist with a K, A, or B injury¹ on the PCR. CISS excludes parking lot crashes and private property crashes occurring outside of the trafficway; those crashes are captured in NHTSA's Non-Traffic Surveillance system.

A nonmotorist crash in CISS involves a person who is not in a motor vehicle. It includes the following types of people.

- Occupant of a Non-Motor Vehicle Transport Device - refers to a person riding in an animal-drawn conveyance, on an animal, etc.
- Pedestrian - any pedestrian except for one in or on a personal conveyance including a person pushing a vehicle.
- Bicyclist - a person (operator or passenger) on a bicycle and a person being pulled by a bicycle (e.g., in a wagon or bike trailer).
- Other Cyclist - unicycles and tricycles.
- Person on Personal Conveyances - pedestrians using personal conveyances. A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling.
 - Includes motorized and nonmotorized wheelchairs.
 - Exclusions: 1. Golf cart, 2. Low-speed vehicle (LSV), 3. Go-cart, 4. Minibike, 5. "Pocket" motorcycle, 6. Motor scooter, 7. Moped.
- CISS excludes people in a train and inside a building (i.e., a vehicular event in a parking garage).

This *NHTSA Field Crash Investigation 2024 Nonmotorist Coding and Editing Manual* details the elements, attributes, and coding guidance for information collected on the Nonmotorist Crash and Nonmotorist forms in the CISSWeb software and displayed in the Crash Viewer.

Information regarding elements collected on other forms in the CISSWeb software and displayed in the Crash Viewer such as the General Vehicle, Exterior Vehicle, Interior Vehicle, Safety Systems, and Occupant forms are described in this *NHTSA Field Crash Investigation 2024 Manual*.

¹ The three most serious kinds of injury on the KABCO scale. See KABCO Injury Classification Scale and Definitions at <https://highways.dot.gov/media/20141> to see how each State uses the KABCO.

Vehicle Nonmotorist Crash Form

Nonmotorist Crash/Actions

Pre-Event Speed

Element Values

-40 to 160 kph

Codes	Attributes
-9999	Unknown

Remarks

Enter the crash technician or quality-control-determined pre-event speed of the striking vehicle before any braking or avoidance maneuvers. Sources for this information may include PCRs, witness statements, calculations, or estimates based on the posted speed limit. If an impact speed can be determined from reconstruction calculations, work backwards to the pre-event speed based on any known braking or avoidance maneuvers. If there is insufficient evidence to determine a reasonable pre-event speed, code "Unknown."

Accuracy of Pre-Event Speed**Element Values**

Codes	Attributes
0	No Speed Reconstruction
1	Less Than 2 kph
2	2-8 kph
3	9-16 kph
4	17-26 kph
9	Unknown

Remarks

Pre-event speed error range estimates are rounded up or down to the nearest whole kph. (e.g., 16.6 kph is rounded up to 17 kph).

00 (No Speed Reconstruction) -- used when there is no crash technician or quality control determined pre-event speed entered in the case.

01 (Less Than 2 kph) -- used when the crash technician or quality control determined a pre-event speed, and the error range is < 2 kph.

02 (2-8 kph) -- used when the pre-event speed, determined by the crash technician or quality control, has a 2 to 8 kph error range.

03 (9-16 kph) -- used when the pre-event speed, determined by the crash technician or quality control, has a 9 to 16 kph error range.

04 (17-26 kph) -- used when the pre-event speed, determined by the crash technician or quality control, has a 17 to 26 kph error range.

09 (Unknown) -- used when a pre-event speed is indicated, but due to certain crash parameters, the pre-event speed is solely an estimate based on known evidence or a police calculation, where the crash technician or quality control was not able to obtain the necessary inputs to allow the crash technician or quality control to calculate impact speed. This code is also used when Pre-Event Speed is "Unknown."

Case Vehicle Heading**Element Values**

0 to 359 Degrees

Codes	Attributes
-9999	Unknown

Remarks

Determine the heading of the striking vehicle's trajectory along their path to the point of conflict with the nonmotorist.

First Plane Nonmotorist Contacted**Element Values**

Codes	Attributes
1	Front
2	Right
3	Left
4	Undercarriage
5	Back
9	Unknown

Remarks

Determine the vehicle plane that first contacted the nonmotorist. For this variable, consider the vehicle to be shaped like a shoebox. If the first contact is with a side-view mirror, code either Right or Left for the corresponding side.

A-pillar and hood impacts are typically considered front plane impacts since that is the initial plane the nonmotorist passed through.

Nonmotorists lying in the roadway are typically undercarriage plane impacts.

Impact Speed**Element Values**

-40 to 160 kph

Codes	Attributes
-9999	Unknown

Remarks

Enter the crash-technician- or quality-control-determined speed of the striking vehicle at impact with the nonmotorist.

00(000 kph) -- used if the vehicle is traveling less than 0.5 kph.

16(159.5 kph and above) -- used if the vehicle's speed is calculated to be equal to or exceeding 159.5 kph.

99(Unknown) -- used if the impact speed is unknown or cannot be reasonably calculated.

Accuracy Range of Impact Speed**Element Values**

Codes	Attributes
0	No Speed Reconstruction
1	Less Than 2 kph
2	2-8 kph
3	9-16 kph
4	17-26 kph
9	Unknown

Remarks

Impact speed error range estimates are rounded up or down to the nearest kph.

00 (No Speed Reconstruction) -- used when there is no mathematically generated speed reconstruction in the case.

01 (Less Than 2 kph) -- used when the crash technician or quality control generated an impact speed, and the error range is < 2 kph.

02 (2-8 kph) -- used when the impact speed, calculated by the crash technician or quality control, has a 2 to 8 kph error range.

03 (9-16 kph) -- used when the impact speed, calculated by the crash technician or quality control, has a 9 to 16 kph error range.

04 (17-26 kph) -- used when the impact speed, calculated by the crash technician or quality control, has a 17 to 26 kph error range.

09 (Unknown) -- used when an impact speed is indicated, but due to certain crash parameters, the impact speed is solely an estimate based on known evidence or a police calculation, where the crash technician or quality control was not able to obtain the necessary inputs to allow the crash technician or quality control to calculate impact speed. This code is also used when Impact Speed is unknown.

Data Source of Impact Speed**Element Values**

Codes	Attributes
0	No Impact Speed Calculated or Estimated
1	NHTSA Calculation
2	Police Calculation
3	Driver/Witness/Police Estimates
4	EDR Image

Remarks

Code 1 takes precedence over code 2, and code 2 takes precedence over code 3. Code 4 (EDR Image) takes precedence over any other codes.

00 (No Impact Speed Calculated or Estimated) -- used when there is no speed or distances are estimated for this impact.

01 (NHTSA Calculation) -- used when physical evidence was present at the accident site and sufficiently documented so speeds and distances for the striking vehicle could be computed.

02 (Police Calculation) -- used when the police used physical evidence to estimate speeds and distances.

03 (Driver/Witness/Police Estimates) -- used either when there is no evidence present to determine speeds and distances, or there are mitigating circumstances so that a speed reconstruction is not possible. The only useable impact speed and distance estimates are those provided by the driver, an eyewitness, or police estimates. If more than one eyewitness provides estimated speeds and distances, code the average of the results.

04 (EDR image) -- used when EDR information was provided and used to estimated speed and distance calculations.

Vehicle Distance to Final Rest**Element Values**

0.0 to 999.9 Meters

Codes	Attributes
-9999	Unknown

Remarks

Measure the distance traveled by the striking vehicle from the position of initial impact with the nonmotorist to the vehicle's final rest position. If there is insufficient evidence to determine one or both positions, then code "Unknown."

Nonmotorist Crash/Actions/Distractions**Driver Fatigue****Element Values**

Codes	Attributes
1	Driver Fatigued
2	Driver Not Fatigued
7	No Driver Present
9	Unknown if Driver Fatigued

Remarks

This element value assesses driver fatigue at the time of the crash. The assessment is based on an evaluation of the driver's current and preceding sleep schedules, current and preceding work schedules, and a variety of other fatigue-related factors including recreational and non-work activities. This assessment reflects best judgment with respect to this issue and is based on all available information inputs.

01 (Driver Fatigued) -- used when available support information says that the driver has not received adequate sleep, is tired/fatigued due to extended work hours, is tired/fatigued due to strenuous recreational activities or strenuous non-work activities, or is tired/fatigued due to a combination of factors.

02 (Driver Not Fatigued) -- used when there is no information indicating that the driver exhibited symptoms of fatigue and support information says that rest and work intervals were within reasonable bounds.

07 (No Driver Present) -- used when there is no driver in the driver's seated position at the time of the crash.

09 (Unknown if Driver Fatigued) -- used when there is insufficient information to determine if the driver was fatigued at the time of the crash.

Driver's Vision Obscured by**Element Values**

(Select all that apply)

Codes	Attributes
0	No Obstruction Noted
1	Rain, Snow, Fog, Smoke, Sand, Dust
2	Reflected Glare, Bright Sunlight, Headlights
3	Curve, Hill, or Other Roadway Design Feature
4	Building, Billboard, Other Structure
5	Trees, Crops, Vegetation
6	In-Transport Motor Vehicle (including load)
7	Not In-Transport Motor Vehicle (parked, working)
8	Splash or Spray of Passing Vehicle
9	Inadequate Defrost or Defog System
10	Inadequate Vehicle Lighting System
11	Obstruction Inside the Vehicle
12	External Mirrors
13	Broken or Improperly Cleaned Windshield
14	Obstructing Angles on Vehicle
95	No Driver Present/Unknown if Driver Present
97	Vision Obscured - No Details
98	Other Visual Obstruction:
99	Reported as Unknown

Remarks

These “visual obstructions” can appear anywhere in the case material. Examples include a field on the PCR (e.g., “Contributing Factors”), in the narrative section, in the violations section, or in witness statements.

00 (No Obstruction Noted) -- used when the case material give no indication of a visual obstruction for this driver.

01 (Rain, Snow, Fog, Smoke, Sand, Dust) -- used when one or more of these conditions exist AND are noted to have obstructed the view of the driver. Do not use this attribute when only the vehicle windshield is described as “fogged.” (See 09 (Inadequate Defrost or Defog System) or 13 (Broken or Improperly Cleaned Windshield).)

02 (Reflected Glare, Bright Sunlight, Headlights) -- used when one or more of these conditions are noted to have obstructed the view of the driver.

03 (Curve, Hill, or Other Roadway Design Feature) -- used when any of these roadway features or design elements is noted to have obstructed the view of the driver (including embankment, sag, etc.).

04 (Building, Billboard, Other Structure) -- used when any of these manmade structures are noted to have obstructed the view of the driver (including traffic signs, poles, signals, etc.).

05 (Trees, Crops, Vegetation) -- used when any of these natural features are noted to have obstructed the view of the driver.

06 (In-Transport Motor Vehicle [including load]) -- used when a vehicle in motion or stopped on the roadway is noted to have obstructed the view of the driver. The vehicle may be but does not have to be a contact vehicle in the case.

07 (Not In-Transport Motor Vehicle [parked, working]) -- used when a vehicle that is parked in a designated parking area or space, stopped in an area off the roadway, or is a working motor vehicle is noted to have obstructed the view of the driver. The vehicle may be but does not have to be a contact vehicle in the case.

08 (Splash or Spray of Passing Vehicle) -- used when this condition is noted to have obstructed the view of the driver. The splash or spray can come from water or mud; however, this attribute does not require it to be raining at the time of the crash.

09 (Inadequate Defrost or Defog System) -- used when the presence of frost or fog on the windshield was noted as being due to an inadequate system. The case material must state specifically that the system was not operating properly. If the case material state the presence of frost or fog alone on the windshield, you should use 13 (Broken or Improperly Cleaned Windshield).

10 (Inadequate Vehicle Lighting System) -- used when the case material says this driver's vision was impaired because the exterior lighting system (including headlights, fog lights, etc.) of the driver's vehicle was deficient in some way. This would include being turned off or not operating properly. This response should not be used to describe inadequate lighting systems of other vehicles (e.g., oncoming motor vehicles) or for inadequate highway lighting.

11 (Obstruction Inside the Vehicle) -- used when the case material says this driver's vision was impaired because of a feature inside the vehicle (including head restraint, rearview mirror, window sticker, sunshade, ornament, windshield tinting).

12 (External Mirror) -- used when the case material says an exterior mirror on this driver's vehicle created a visual obstruction.

13 (Broken or Improperly Cleaned Windshield) -- used when this condition is noted as obstructing the driver's view. Frost or fog on the windshield would apply. For a "fogged" or "frosted" windshield due to an inadequate or inoperable system see 09 (Inadequate Defrost or Defog System).

14 (Obstructing Angles on Vehicle) -- used when the case material says the size or shape of a driver's own vehicle created a visual obstruction (including trailer, vehicle height, blind spot). Not to be confused with visual obstructions from other vehicles or a vehicle's interior components such as head restraint, sunshade, etc.

95 (No Driver Present/Unknown if Driver Present) -- used when there is no driver in this vehicle or when it is unknown if there is a driver at the time of the crash.

97 (Vision Obscured - No Details) -- used when the case material says that a vision impediment exists but does not clearly indicate the nature of the impediment.

98 (Other Visual Obstruction) -- used when case material says the nature of a vision impediment that cannot be attributed to one of the other attributes above. For example, an unattached trailer left on the road shoulder.

99 (Reported as Unknown) -- used when case material specifically says unknown

Driver Distracted By**Element Values**

Codes	Attributes
0	Not Distracted
16	No Driver Present/Unknown if Driver Present
99	Unknown if Distracted

Distractions (Select all that apply)

Codes	Attributes
3	By Other Occupant
4	By a Moving Object in Vehicle
5	While Talking or Listening to Mobile Phone
6	While Manipulating Mobile Phone
7	Adjusting Audio or Climate Controls
9	While Using Other Component/Controls Integral to Vehicle
10	While Using or Reaching for Device/Object Brought Into Vehicle
12	Distracted by Outside Person, Object or Event
13	Eating or Drinking
14	Smoking Related
15	Other Mobile-Phone-Related
17	Distraction/Inattention
18	Distraction/Careless
19	Careless/Inattentive
92	Distraction (distracted), Details Unknown
93	Inattention (inattentive), Details Unknown
97	Lost in Thought/Daydreaming
98	Other Distraction (Specify)

Remarks

This element identifies the attributes that best describe this driver's attention prior to realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. This element reports on the presence of any distractions that may or may not have contributed to the crash. Distraction from the primary task of driving occurs when drivers divert their attention from the driving task to some other activity. Also, NHTSA identifies driving while daydreaming or lost in thought as distractions. But NHTSA does not identify physical conditions or impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) as distractions.

Note: "Presence" is not the same as an activity associated with the person or item. The driver must be engaged in some activity associated with the thing causing a distraction. Just having a mobile phone, sandwich, passenger, etc., in the vehicle isn't a distraction. The distraction must divert the driver's attention from driving to using the phone, eating the sandwich, turning around to talk to a backseat passenger, etc. It doesn't have to be a contributing factor in the crash, but it must be in use, engaged, the person was doing it at the time, etc., for it to be a distraction.

Record the attributes that best describe this driver's attention to driving prior to realization of an impending critical event or just prior to impact if realization of an impending critical event does not occur. If this driver's vehicle has two critical crash envelopes, record the attributes that best describes the driver's attention prior to the first CRITICAL PRECRASH EVENT (i.e., prior to realization of the impending danger that the driver successfully avoided). Intoxication, illness, blackout, or fatigued are not considered distractions. This information is captured under the data element CONDITION (IMPAIRMENT) AT TIME OF CRASH.

DRIVER DISTRACTED BY is a "Select All That Apply" element. If the element values 00 (Not Distracted), 16 (No Driver Present), 17 (Distraction/ Inattention), 18 (Distraction/Careless), 19 (Careless/Inattentive), 92 (Distraction [Distracted], Details Unknown), 93 (Inattention [Inattentive], Details Unknown), or 99 (Reported as Unknown if Distracted) are selected, then only that one element value may be used.

00 (Not Distracted)

- When case material says the person was completely attentive to driving.
- When case material does not indicate a distraction in an available field, and not reporting a distraction in that field says 00 (Not Distracted).

16 (No Driver Present/Unknown if Driver Present) -- used when there is no driver in this vehicle or when it is unknown if there was a driver present in this vehicle at the time of the crash.

99 (Reported as Unknown if Distracted) -- used when case material specifically says unknown.

Distractions:

03 (By Other Occupant) -- used when the driver was distracted by another occupant (or more than one) in this driver's vehicle prior to realization of impending danger. Examples include conversing with or looking at another occupant (baby/child in back seat, rowdy teenager, argumentative spouse, etc.).

04 (By a Moving Object in Vehicle) -- used when the driver was distracted by a moving object in the vehicle prior to realization of impending danger. Examples include a dropped object, a moving pet, insect, or cargo.

05 (While Talking or Listening to Mobile Phone) -- used when the driver is talking or listening on a mobile phone. This attribute also includes talking or listening on a "hands-free" or Bluetooth-enabled phone.

06 (While Manipulating Mobile Phone) -- used when the driver is dialing or texting on a mobile phone. Any manual button/control actuation on the phone qualifies. This includes dialing or text messaging on any wireless email device.

15 (Other Mobile-Phone-Related) -- used when case material says the driver was distracted from the driving task due to mobile phone involvement, but none of the specified codes are applicable (reaching for mobile phone, etc.). This attribute is also applied when specific details regarding mobile phone distraction/usage are not provided (e.g., email, nonspecific mobile phone use).

07 (Adjusting Audio or Climate Controls) -- used when someone is distracted from the driving task while adjusting the air conditioner, heater, radio, cassette, using the radio, using the cassette, or CD mounted in the vehicle.

09 (While Using Other Component/Controls Integral to Vehicle) -- used when the driver is distracted while manipulating a control in the vehicle including adjusting headlamps or interior lights, controlling windows (power or manual), manipulating door locks (power or manual), adjusting rear view or side view mirrors (power or manual), adjusting seat (power or manual), adjusting steering wheel, adjusting seat belt, on-board navigational devices, etc. (original equipment).

10 (While Using or Reaching for Device/Object Brought into Vehicle) -- used when the driver is distracted while using or reaching for a device or object in the vehicle including a radar detector, water bottle, CDs, razors, music portable CD player, headphones, a navigational device, laptop, or tablet PC, etc. This attribute is also used when it cannot be determined if the device was original equipment manufacturer (OEM), brought into the vehicle, or a function of a mobile phone (i.e., GPS).

If it is unknown if the device or object was brought into the vehicle or was original equipment, default to brought into vehicle and use attribute 10 (While Using or Reaching for Device/Object Brought Into Vehicle).

12 (Distracted by Outside Person, Object, or Event) -- used when the driver was distracted by an outside person, object, or event prior to realization of impending danger. Examples include animals on the roadside, a previous crash, or non-traffic-related signs (advertisements, electronic billboards, etc.). Do not use this attribute for a person, object, or event that the driver has recognized and for which the driver has taken some action (e.g., avoiding a pedestrian on the roadway).

13 (Eating or Drinking) -- used when the driver is eating or drinking or in an activity related to these actions (picking food from carton on passenger seat, reaching to throw out used food wrapper, etc.).

14 (Smoking-Related) -- used when the driver is smoking or in an activity related to smoking, such as lighting a cigarette, putting ashes in the ash tray, vaping, etc. Any method of lighting the cigarette would be coded 14 (Smoking-Related). Chewing-tobacco-related distractions are coded under 98 (Other Distraction [Specify]).

17 (Distraction/Inattention) -- used exclusively when “Distraction/inattention” or “Inattention/distraction” are noted in case material as one combined attribute and it cannot be determined which DRIVER DISTRACTED BY attribute is intended, 92 (Distraction [Distracted], Details Unknown) or 93 (Inattention [Inattentive], Details Unknown).

18 (Distraction/Careless) -- used exclusively when “Distraction/careless” or “Careless/distraction” are noted in case material as one combined attribute and it cannot be determined which DRIVER DISTRACTED BY attribute applies.

19 (Careless/Inattentive) -- used exclusively when “Careless/Inattentive” or “Inattentive/Careless” are noted in case material as one combined attribute and it cannot be determined which DRIVER DISTRACTED BY attribute applies.

92 (Distraction [Distracted], Details Unknown) -- used when “distraction” or “distracted” are noted in case material, but specific distractions cannot be identified. For non-specific “inattention,” see attribute 93 (Inattention [inattentive], Details Unknown).

93 (Inattention [Inattentive], Details Unknown) -- used when “inattention” or “inattentive” are noted in case material, but it cannot be identified if this refers to a distractions.

97 (Lost in Thought/Daydreaming) -- used when the driver is not completely attentive to driving because he/she is thinking about items other than the driving task. For non-specific “distraction,” see 92 (Distraction [distracted], Details Unknown). For non-specific “inattention,” see 93 (Inattention [Inattentive], Details Unknown).

98 (Other Distraction [Specify])) -- used when details about this driver’s distraction are known but no specified codes are applicable (e.g., chewing-tobacco-related).

*Note: For attributes with a “Specify” designation, a fill-in text box will open in CISSWeb. This text box should be used to add additional detail about the attribute selection. Please include a specific reason for this selection.

Driver-Related Factors**Element Values**

Codes	Attributes
0	None
7	No Driver Present

(Select all that apply)

Physical/Mental Condition

Codes	Attributes
4	Reaction to or Failure to Take Drugs/Medication
6	Careless Driving, Inattentive Operation, Improper Driving, Driving Without Due Care
12	Mother of Dead Fetus/ Mother of Infant Born Post-Crash
13	Person with an Intellectual, Cognitive, or Developmental Disability

Miscellaneous Factors

Codes	Attributes
10	Looked But Did Not See
15	Seat Back Not in Normal Upright Position, Seat Back Reclined
16	Police or Law Enforcement Officer
18	Traveling on Prohibited Trafficways
19	Legally Driving But on Suspended or Revoked License
20	Leaving Vehicle Unattended With Engine Running. Leaving Vehicle Unattended in Roadway
21	Overloading or Improper Loading of Vehicle With Passengers or Cargo
22	Towing or Pushing Vehicle Improperly
23	Failing to Dim Lights or Turn Lights on When Required
24	Operating Without Required Equipment
26	Following Improperly
27	Improper or Erratic Lane Changing
28	Improper Lane Usage
29	Intentional Illegal Driving off the Roadway
30	Making Improper Entry to or Exit From Trafficway
31	Starting or Backing Improperly
32	Opening Closure Into Moving Traffic or While Vehicle Is in Motion
33	Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass

Codes	Attributes
34	Improper Passing Location
35	Passing With Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle
36	Operating the Vehicle in an Erratic, Reckless, or Negligent Manner
38	Failure to Yield Right-of-Way
39	Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers. Failure to Obey Safety Zone Traffic Laws
40	Passing Through or Around Barrier
41	Failure to Observe Warnings or Instructions on Vehicles Displaying Them
42	Failure to Signal Intentions
45	Driving Less Than Posted Minimum
47	Making Right Turn From Left-Turn Lane. Make Left Turn From Right-Turn Lane
48	Making Other Improper Turn
50	Driving Wrong Way on One-Way Trafficway
51	Driving on Wrong Side of Two-Way Trafficway (intentional or unintentional)
52	Operator Inexperience
53	Unfamiliar With Roadway
54	Stopped in Roadway (Vehicle Not Abandoned)
55	Improper Management of Vehicle Controls (Specify)
56	Object Interference with Vehicle Controls (Specify)
57	Driving With Tire-Related Problems
58	Overcorrecting
59	Getting off/out of a Vehicle
60	Alcohol and/or Drug Test Refused
73	Driver Has Not Complied With Learner's Permit or Intermediate Driver License Restrictions (GDL restrictions)
74	Driver Has Not Complied With Physical or Other Imposed Restrictions (not including GDL Restrictions)
91	Non-Traffic Violation Charged (manslaughter, homicide or other assault committed without malice)
94	Emergency Medical Service Personnel
95	Fire Personnel
96	Tow Operator
97	Transportation Worker (maintenance worker, safety service patrol operator, etc.)
100	Using a Belt-Positioning Device or Other
102	Aggressive Driving
103	Road Rage

Codes	Attributes
104	Police Pursuing This Driver
105	Police Officer in Pursuit

Special Circumstances:

Codes	Attributes
073	Driver Has Not Complied With Learner's Permit or Intermediate Driver License Restrictions (GDL Restrictions)
074	Driver Has Not Complied With Physical or Other Imposed Restrictions (not including GDL restrictions)
089	Driver Has a Driving Record or Driver License From More Than One State

Skidding, Swerving, Sliding Due to:

Codes	Attributes
077	Severe Crosswind
078	Wind From Passing Truck
079	Slippery or loose Surface
080	Tire Blowout or Flat
081	Debris or Objects in Road
082	Ruts, Holes, Bumps in Road
083	Live Animals in Road
084	Vehicle in Road
085	Phantom vehicle
086	Pedestrian, Pedalcyclist, or Other Nonmotorist
087	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road
088	Trailer Fishtailing or swaying
999	Reported as Unknown

Remarks

This is a nominal list only and does NOT imply a hierarchy.

000 (None Noted) -- used when no applicable related factors are noted in the case material. In the event that an officer gives an indication that circumstances in the crash are unknown and no other applicable related factors can be associated with the crash, use code 000 (None Noted).

Physical/Mental Condition:

004 (Reaction to or Failure to Take Drugs/Medication) -- used when the case material identifies driver had an allergic reaction to medication/drugs, a reaction to drug interaction (over the

counter and/or prescribed), or if there is information identifying that the driver failed to take required medication.

006 (Careless Driving, Inattentive Operation, Improper Driving, Driving Without Due Care) -- used when the case material includes a factor or notes a violation indicating careless driving.

Examples:

- Driving without due care.
- Operating a motor vehicle in a careless manner.
- Inattention.

012 (Mother of Dead Fetus/Mother of Infant Born Post-Crash)) -- used when the case material the driver is the mother of a fetus that died in or as a result of this crash or it is identified that this driver gave birth after the crash whether the child survives or not. Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate person and thus is not counted as a separate occupant in the crash.

013 (Person with an Intellectual, Cognitive, or Developmental Disability) -- used when the case material identifies this person has an intellectual, cognitive, or developmental disability.

Miscellaneous Factors:

010 (Looked But Did Not See) -- used when the driver is paying attention to driving (not distracted), but does not see the relevant vehicle, object, etc. This attribute should be used when a driver has an opportunity to take some action prior to impact, but takes no action, and no distractions apply under DRIVER DISTRACTED BY. This situation frequently occurs when an overtaking vehicle is in the driver's "blind spot" or at intersections when a crossing vehicle is not noticed.

015 (Seat Back Not in Normal Upright Position, Seat Back Reclined) -- used when the case material identifies that this driver's seat back was not in a normal, safe driving position prior to the crash.

016 (Police or Law Enforcement Officer) -- used when the case material identifies this driver was a Federal, State, or local law enforcement officer working at the time of the crash. If it is unclear whether or not the officer was on duty, default to using code 016. This attribute also includes military and park police, border patrol, and all other sworn law enforcement officers.

105 (Police Officer in Pursuit) -- used when the case material identifies this driver is a police officer engaged in an active pursuit at the time of crash. Identify the officer using factor 016 (Police or law enforcement officer). Also see RELATED FACTORS—CRASH LEVEL 020 (Police Pursuit Involved).

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

when the driver stops, or when the attempt to apprehend is discontinued by the officer, or at the direction of a competent authority.

018 (Traveling on Prohibited Trafficways) -- used when the case material identifies this driver was driving on an open trafficway that prohibited travel for the kind of vehicle they were operating. For example, driving a moped on an interstate, driving a truck where prohibited, or operating a vehicle with hazardous materials cargo where prohibited. For trucks or slower vehicles using the left lane when prohibited, use 028 (Improper Lane Usage).

019 (Legally Driving on Suspended or Revoked License) -- used when the case material identifies this driver's license was suspended/revoked but they were legally driving at the time of the crash. For example, occupational restricted licenses typically allow drivers to drive to work, school, community service, or certain other activities, with restrictions including the times of day, days of the week, and areas to which they may drive. Drivers whose licenses have been suspended or revoked for certain alcohol- or drug-related offenses can apply for ignition interlock restricted licenses. These licenses permit them to drive if they use an ignition interlock device installed in their car that tests breath for alcohol consumption.

020 (Leaving Vehicle Unattended With Engine Running. Leaving Vehicle Unattended in Roadway) -- used when the case material identifies this driver took improper actions where the vehicle was intentionally left in a location and the driver was not present.

Examples:

- Leaving the vehicle curbside or in a driveway with a running engine.
- Abandoning a non-running vehicle in the middle of traffic.
- Double-parked.
- Parked on a bridge or tunnel.
- Parking within an intersection.

021 (Overloading or Improper Loading of Vehicle With Passengers or Cargo) -- used when the case material identifies this driver improperly loaded the vehicle occupants or cargo into or on the vehicle.

Examples:

- More than three passengers in the front seat
- People riding on the exterior of the vehicle
- Person or people sitting or standing on the rails, pickup tailgate, or improperly sitting in the pickup bed
- More than one person secured in a seat belt
- An unsecured or uncovered load violation
- Trunk was open with extra-large cargo protruding
- The case material says the vehicle was overweight, over length, or illegally or improperly oversize

022 (Towing or Pushing Improperly) -- used when the case material identifies this driver was operating the vehicle that was towing another vehicle with an improper connection (e.g., by rope or cable) or was pushing another vehicle in a dangerous manner (e.g., bumper to bumper).

023 (Failing to Dim Lights or Turn Lights on When Required) -- used when the case material identifies this driver failed to use proper headlight beams, failed to reduce high beams for an approaching vehicle or when following another vehicle, or used fog lights when prohibited.

Examples:

- Headlamps adjusted improperly causing glare
- Failed to turn on headlights in a tunnel
- A motorcycle not using required lights

024 (Operating Without Required Equipment) -- used when the case material identifies this driver was operating the vehicle without a required piece of equipment or with required equipment being inoperable. For seat belts, child restraints, and motorcycle helmets, do not use this attribute when there is indication that an available restraint was not used (i.e., PCR Restraint Use box is marked as “Not Used”).

Examples:

- Defective or no lamps, brakes, mirrors, muffler, flares, wipers, horn, snow tires, chains, etc.
- A vehicle does not have extended side mirrors when required (e.g., when pulling a trailer).
- A vehicle driving in snow without snow tires when required.
- If the seat belts have been removed from the vehicle.
- If there was no child safety seats in the vehicle when required for the occupants.
- For a motorcycle rider that had no helmet with them when required by law.
- If the vehicle failed to have an air bag reinstalled after a prior crash.

026 (Following Improperly) -- used when the case material identifies this driver followed too closely.

Examples:

- Following a fire truck too closely
- Failure to maintain a safe passing distance between trucks
- Following another vehicle in a caravan too closely to allow entry by a merging vehicle
- Following too close, generally. Also, code for when case material documents the vehicle was following too closely for weather conditions

Note: 026 (Following Improperly) denotes “after or before the process of lane change” while

027 (Improper or Erratic Lane Changing) signifies “in the process.”

027 (Improper or Erratic Lane Changing) -- used when the case material identifies this driver was making unsafe lane changes or failed to obey a “no lane change” sign or pavement marking prohibiting lane change. This may also be used in cases where the officer states the vehicle was weaving in and out of traffic.

028 (Improper Lane Usage) -- used when the case material identifies this driver failed to properly keep their vehicle in the appropriate lane of travel. This attribute does not apply to vehicles that run off the roadway, cross the median, or exhibit control loss before crossing the

centerline. Also do not use for a vehicle that leaves its lane because of a previous impact, leaves its lane during an avoidance maneuver, or at the direction of a flagman or police officer. For situations where the vehicle is on the wrong side as a result of a passing maneuver, see 033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass). See 051 (Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional]) for Driving on Wrong Side of Road.

Examples:

- A vehicle that “drove left of center” striking an oncoming vehicle (includes both crossing a painted centerline and failing to maintain the proper side of a two-lane roadway with no painted centerline).
- A vehicle that goes straight in a turn lane.
- A vehicle that was using more than one lane on its side of a multi-lane highway.
- Trucks, buses, or slow vehicles failing to keep right for faster moving traffic.

029 (Intentional Illegal Driving Off the Roadway) -- used when the case material identifies this driver was intentionally illegally driving in a location off the roadway (shoulder, median, roadside, etc.). This attribute should not be used when the vehicle enters one of these locations as part of an avoidance maneuver or as a result of a critical or harmful event. Also do not use this value for a vehicle that leaves its lane at the direction of a flagman or police officer.

030 (Making Improper Entry to or Exit from Trafficway) -- used when the case material identifies this driver made an improper entry to or exit from the trafficway. For improper entry of the roadway from a parked or stopped position see 031 (Starting or Backing Improperly).

Examples:

- Driving onto or from a controlled access highway where prohibited.
- A vehicle entering a highway from a roadside location like a front yard, adjacent pasture, or field.
- A vehicle entering a highway on an exit ramp or exiting on an entrance ramp.

031 (Starting or Backing Improperly) -- used when the case material identifies this driver improperly entered the roadway from a parked or stopped position or improperly backed the vehicle in the roadway.

Examples:

- Making an unsafe start from a parked position
- Backing up on a one-way roadway
- Starting onto a highway from a parked position on the shoulder

032 (Opening Closure into Moving Traffic or While vehicle is in Motion) -- used when the case material identifies this driver improperly opened their door into moving traffic. This would include opening the trunk while the vehicle is in-transport.

033 (Passing where Prohibited by Posted Signs, Pavement Markings or School Bus Displaying Warning Not to Pass) -- used when the case material identifies this driver passed improperly by

executing a passing maneuver where prohibited as designated by traffic controls or rules of the road.

Examples:

- A vehicle passing a stopped school bus
- A vehicle crossing over the solid line to pass another vehicle
- Passing a vehicle stopped to allow a pedestrian movement.

034 (Improper Passing Location) -- used when the case material identifies this driver was passing in a prohibited location.

Examples:

- A vehicle passing on the right side where it is prohibited
- A vehicle passing on the right or left shoulder, emergency lane, or roadside
- A vehicle passing in the median
- A motorcycle passing on the left or right within the same lane as the vehicle it is passing (in a State where lane splitting, filtering, and/or sharing is not permitted) Note: If your State does not prohibit lane splitting, filtering, and/or sharing, do NOT use 034 (Improper Passing Location) for this situation.

035 (Passing with Insufficient Distance or Inadequate visibility or Failing to Yield to Overtaking vehicle) -- used when the case material identifies this driver exercised faulty judgment when passing or being passed.

Examples:

- A vehicle passing uphill or in a curve that limits visibility
- Cutting off the other vehicle while passing or being passed

036 (Operating the vehicle in an Erratic, Reckless or Negligent Manner) -- used when the case material identifies this driver was operating the vehicle in an erratic, reckless, or negligent manner. These are circumstances where the driver is engaged in a driving behavior with willful or wanton disregard for safety. This attribute can be used in conjunction with other factors but must be explicitly stated on the police record.

Examples:

- Driving erratically
- Erratic lane changing
- Suddenly changing speed
- Motorcyclist doing wheelies (aka "popping" wheelies)

104 (Police Pursuing This Driver) -- used when the case material identifies this driver was fleeing from or attempting to elude the police. Also see RELATED FACTORS—CRASH LEVEL 020 (Police Pursuit Involved).

Definition of Police Pursuit: A pursuit is an event that is initiated when a law enforcement officer operating an authorized emergency vehicle gives notice to stop (either through the use of visual or audible emergency signals or a combination of emergency devices) to a motorist who the

officer is attempting to apprehend, and that motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued by the officer, or at the direction of a competent authority.

038 (Failure to Yield Right-of-Way) -- used when the case material identifies this driver failed to yield the right-of-way. The officer does not have to choose an attribute in an available field or to make the specific statement "failed to yield."

Examples:

- Failure to yield to pedestrian in a crosswalk
- Failure to yield at an intersection or merge
- Failure to yield to emergency vehicles
- Failure to yield to streetcar already in intersection

039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws) -- used when the case material identifies this driver failed to obey an applicable traffic control device (sign or signal), traffic officer, or traffic safety zone laws. If this driver is in a police car, ambulance, or fire apparatus with active lights and/or sirens, this attribute does not apply. See if 016 (Police or law enforcement officer), 094 (Emergency Medical Services Personnel), 095 (Fire Personnel), and 105 (Police Officer in Pursuit) might be more appropriate. If a driver stops as required but then fails to yield, use code 038 (Failure to Yield Right-of-Way) and not 039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws).

Examples:

- Failure to obey flashing signal
- Violation of "No Turn on Red"
- Failure to obey lane use control signal
- Failure to obey stop signs
- Failure to obey yield sign (use both codes 038 (Failure to Yield Right-of-Way) and 039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws))
- Passing around railroad gates
- When vehicle does not stop when required by a traffic signal
- When a vehicle does not yield to an emergency vehicle (fire, EMS, police, etc.)

040 (Passing Through or Around Barrier) -- used when the case material identifies this driver was driving in a prohibited area (play street, construction, etc.). This would denote "demarcated" areas. For driving around a railroad gate, use 039 (Failure to Obey Actual Traffic Signs, Traffic Control Devices, or Traffic Officers, Failure to Obey Safety Zone Traffic Laws).

041 (Failure to observe Warnings or Instructions on vehicles Displaying Them) -- used when the case material identifies this driver failed to heed warnings or follow instructions displayed on other vehicles.

Examples:

- Construction instructions such as arrows directing traffic mounted on a vehicle
- Instructions on or warnings by emergency vehicles (ambulances, fire trucks, police cars)
- Failure to observe a wide-right-turn warning on trucks or buses
- Failure to heed hazard lights on a disabled vehicle or a school bus arm

042 (Failure to Signal Intentions) -- used when the case material identifies this driver failed to signal their intentions. This attribute includes a failure to signal by either lamp turn signal or hand.

045 (Driving Less Than Posted Minimum) -- used when the case material identifies this driver was driving too slowly, or to impede traffic.

047 (Making Right Turn from Left-Turn Lane, Left Turn from Right-Turn Lane) -- used when the case material identifies this driver was making an improper turn from a turn lane. To distinguish from 027 (Improper or Erratic Lane Changing) and 028 (Improper Lane Usage), the police officer must indicate the driver's intention to turn for this attribute to apply.

048 (Making Other improper Turn) -- used when the case material identifies this driver made a turn that was improper because it was unsafe, poorly executed, or in bad judgment. This attribute excludes turns that are improper because they are prohibited (e.g., No Right on Red, turning left in violation of a traffic signal). A roadway departure is not an indication of an improper turn in and of itself.

Examples:

- A "too wide" right or left turn
- An unsafe U-turn (from the shoulder, etc.)

050 (Driving Wrong Way on One-Way Trafficway) -- used when the case material identifies this driver was driving in the wrong direction on a one-way trafficway. If this is a divided highway, although each side is "one-way," driving against traffic should be coded as 051 (Driving on Wrong Side of Two-Way Trafficway [Intentional or Unintentional]). If the vehicle was going the wrong way on an entrance or exit ramp, also use 030 (Making improper Entry to or Exit from Trafficway).

051 (Driving on Wrong Side of Two-Way Trafficway (Intentional or Unintentional)) -- used when the case material identifies this driver was established in and driving on the wrong side of the highway. "Unintentional" means they may not be aware they are on the wrong side. For situations where a driver unintentionally crosses the centerline, see 028 (Improper Lane Usage). For situations where the vehicle is on the wrong side as a result of a passing maneuver, see 033 (Passing Where Prohibited by Posted Signs, Pavement Markings, or School Bus Displaying Warning Not to Pass) or 035 (Passing with Insufficient Distance, or Inadequate visibility, or Failing to Yield to Overtaking vehicle).

Examples:

- Driving the wrong way/on the wrong side of a divided trafficway
- Driving on the wrong side of an undivided trafficway
- Driving the wrong way on a Rotary Intersection

- Driving on the left half of approaching bridge or tunnel

052 (Operator Inexperience) -- used when the case material identifies this driver lacks experience operating the vehicle they were driving at the time of the crash. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or State of residence.

Examples:

- A novice driver
- A driver inexperienced in the operation of a large truck or bus (based on the judgment of the police officer)
- A person driving a rental car where they are unfamiliar with the vehicle

053 (Unfamiliar with Roadway) -- used when the case material identifies this driver is unfamiliar with the area/location where they were driving when the crash occurred. Should be expressed by officer, driver, or passenger and not presumed based on age, rental status, or State of residence.

Examples:

- A driver from out of State unfamiliar with area
- A driver operating on a new stretch of road or section of road altered because of construction and/or detour

054 (Stopped in Roadway (Vehicle Not Abandoned)) -- used when the case material identifies this driver stopped their vehicle in the roadway/travel lanes. It is intended to capture an unusual condition where a vehicle is stopped in the roadway with the driver present in or in close proximity to the vehicle. It includes both a vehicle in the process of stopping and “stopped” vehicles. It excludes typical “stopping” situations such as stopping in/for traffic, waiting to turn, or stopping for a traffic control.

Examples:

- A vehicle disabled in a prior crash
- A vehicle with a flat tire
- A vehicle that stops for debris in the roadway, etc.

055 (Improper Management of vehicle Controls (SPECIFY:)) -- used for driver errors related to accelerating/braking/gear selection, etc. (reverse instead of forward, forward instead of reverse, accelerator instead of brake, unspecified pedal error, etc.).

Note: For attributes with a “Specify:” designation, a fill-in text box will open in CISSWeb. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

056 (Object Interference with vehicle Controls (SPECIFY:)) -- used for items reported to have interfered with the driver’s operation of the vehicle controls (footwear interfered with pedals, floor mat interfered with pedals, loose cargo interfered with pedals, etc.).

Note: For attributes with a “Specify:” designation, a fill-in text box will open in CISSWeb. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

057 (Driving with Tire-Related Problems) -- used when the officer noted this driver was driving with a “donut”/spare tire, improperly sized tires, driving on run flats in an air-out situation, etc.

Examples:

- Improperly sized tires on the vehicle
- Tires are “run flat” tires and have been punctured but the Driver was still driving on them
- Bald tires, a “donut”, or spare tire on the vehicle

058 (Overcorrecting) -- used when the case material identifies this driver “overcorrected” based on the judgment of the police officer. This must be stated by the officer in the narrative or PCR field to be coded. Overcorrecting and Oversteering are technically different, but this attribute may be selected for a reported combination of the two (e.g., overcorrecting/oversteering) on the PCR.

059 (Getting Off/Out of a vehicle) -- used when the case material identifies this driver was attempting to exit the vehicle when involved in the crash. It applies for either moving or non-moving vehicles.

060 (Alcohol and/or Drug Test Refused) -- used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that after a refusal, the officer may have obtained a warrant or some other authorization to administer a test post-refusal. This includes when the person initially refuses and later consents. Because of this, it is possible to code 060 (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

094 (Emergency Medical Services Personnel) -- used when the case material identifies that this person was described as emergency medical services (EMS) personnel. This includes personnel located in the cab and in the treatment compartment of an ambulance.

095 (Fire Personnel) -- used when the case material identifies that this person was fire personnel.

096 (Tow Operator) -- used when the case material identifies that this person was an operator of a tow truck.

097 (Transportation (i.e., maintenance workers, safety service patrol operators, etc.)) -- used when the case material says this person was working to assist with detouring traffic, maintaining roadway damage, or a safety service patrol operator, etc.

100 (Using a Belt-Positioning Device or Other) -- used when this driver is using a belt-positioning device that works with a three-point harness.

102 (Aggressive Driving) -- used when the investigating officer says that this driver operated their vehicle aggressively. The officer must use the term “aggressive,” “hostile,” or similar language in describing a driver’s behavior. Aggressive driving can be indicated in the case material in a data element, as a violation/citation noting “aggressive” driving, or in the narrative. Aggressive driving behavior occurs when someone operates their vehicle with a disregard for safety and endangers themselves, other drivers, or property. The investigating officer may note several moving violation offenses associated with this behavior. Common violations include speeding, tailgating, suddenly changing lanes without warning, cutting off other drivers, and failing to yield the right of way.

103 (Road Rage) -- used when the investigating officer says that this driver exhibited road rage behaviors. The officer must use the term “road rage” in describing this driver’s behavior. Road rage can be indicated in the case material in a data element, as a violation/citation noting “road rage,” or in the narrative. Road rage is when a driver experiences extreme aggression or anger intending to cause harm to others. Note that a deliberate act that results in a harmful events is not considered an unstabilized situation and thus is not a crash. A crash must have both an unstabilized situation (unintended event) and a harmful events that is separate from or beyond what was intended by the deliberate act.

Examples of road rage driving behavior by a contact vehicle driver resulting in a motor vehicle traffic crash:

- One driver forces another driver off the roadway, and that deliberate act subsequently results in the two vehicles colliding and coming to rest in the roadway. Another vehicle not associated with the deliberate act comes upon the vehicles in the roadway and strikes both vehicles.
- A driver tailgating dangerously close intentionally nudges the bumper of the vehicle in front, resulting in this driver losing control, crossing the median, and striking a third vehicle in the opposing travel lanes.

Special Circumstances

073 (Driver Has Not Complied With Learner’s Permit or Intermediate Driver License Restrictions (GDL Restrictions)) -- used when the case material identifies this driver was a young driver and was not in compliance with a Learner’s Permit or Intermediate Driver License restriction under a State’s Graduated Driver’s License (GDL) program.

Examples:

- Nighttime driving restrictions (e.g., midnight until 6:00 a.m.)
- Unsupervised driving restrictions (e.g., the driver must have a passenger over the age of 21 to legally drive the vehicle)
- Passenger Restriction (e.g., the driver is only allowed one other passenger in the vehicle when driving)

This should not be used for restrictions for eyeglasses, lenses, equipment, or other physical restrictions (see 074 (Driver Has Not Complied With Physical or Other Imposed Restrictions (not including GDL Restrictions))).

074 (Driver Has Not Complied With Physical or Other Imposed Restrictions (not including GDL Restrictions)) -- used when the case material identifies this driver did not comply with physical or other imposed license restrictions.

Examples:

- Driving without corrective lenses when required
- Driving without required equipment (automatic transmission, adaptive controls, etc.)
- Violating special privileges on a suspended/revoked license for other than permitted activities (e.g., driving permitted only to and from work). Not to be used for general “driving on a suspended or revoked license”

- Driving vehicle without “Interlock System” when required

089 (Driver Has a Driving Record or Driver’s License From More Than One State) -- used when the case material identifies this driver had any combination of a State or record in more than one State. This is coded regardless of the status of the license or the driving privilege of the driver at the time of the crash.

Skidding, Swerving, Sliding Due to:

This set of attributes is applicable to the driver that attempted to avoid one of the following or whose ability to control the vehicle was affected by one of the following.

077 (Severe Crosswind) -- used when the case material identifies this driver’s ability to control the vehicle was affected by severe crosswinds.

078 (Wind From Passing Truck) -- used when the case material identifies this driver’s ability to control the vehicle was affected by winds produced by a passing truck.

079 (Slippery or loose Surface) -- used when the case material identifies this driver’s ability to control the vehicle was affected by the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice, or snow (see 087 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road)).

Examples:

- A slippery surface that is old or worn resulting in loose gravel on the roadway
- Blacktop that is slick as a newly paved surface

080 (Tire Blowout or Flat) -- used when the case material identifies this driver’s ability to control the vehicle was affected by a tire blowout or flat.

081 (Debris or Objects in Road) -- used when the case material identifies this driver attempted to avoid or lost control as a result of debris in the road. Examples would include nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

082 (Ruts, Holes, Bumps in Road) -- used when the case material identifies this driver attempted to avoid or lost control as a result of road surface anomalies such as ruts, holes, dips, or bumps.

083 (Live Animals in Road) -- used when the case material identifies this driver attempted to avoid or lost control as a result of a live animals that was in the road.

084 (Vehicle in Road) -- used when the case material identifies this driver attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that remain at the scene.

085 (Phantom vehicle) -- used when the case material identifies this driver attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

086 (Pedestrian, Pedalcyclist, or Other Nonmotorist) -- used when the case material identifies this driver attempted to avoid or lost control as a result of a pedestrian, a pedalcyclist, or other type of nonmotorist.

087 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road) -- used when the case material identifies this driver's ability to control the vehicle was affected by a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see 079 (Slippery or loose Surface).

088 (Trailer Fishtailing or Swaying) -- used when the case material identifies this driver's ability to control the vehicle was affected by a trailer fishtailing or swaying. This condition may or may not result in a jackknife.

Roadway-Related Factors

Element Values

(Select and enter up to two attributes)

Codes	Attributes
0	No Roadway Condition Factors
1	Traffic Signs/Signals Missing
2	Roadway View Obstructions Including Factors or Devices Like Signal Boxes
3	View Obstructed by Other Vehicle
4	Roadway Geometry (Crossover)
5	Roadway Geometry (Curve)
6	Road Sight Distance Insufficient
7	Lane Delineation Problem (Not Present, Worn, Etc.)
8	Narrow Shoulders
9	Narrow Road
10	Ramp Speed
11	Roadway Condition (Potholes, Deteriorated Road Edges, Etc.)
12	Slick Surface (Low-Friction Value Due to Icy Condition, Loose Debris, or Any Other Cause)
13	Road Under Water
14	Road Washed Out
97	No Driver Present
98	Other Roadway Problem (Specify):
99	Unknown

Remarks

This element value establishes the presence of roadway-related factors that may be relevant to crash occurrence. Select and enter up to two attributes.

“0 (No Roadway Condition Factors) -- used when there are no roadway-related factors relevant to this crash. This designation is also used to fill in unused coding clocks (i.e., less than four factors are coded).

“0 (Traffic Signs/Signals Missing) -- used when traffic signs/signals have been removed from this designated location and are not physically present. The removal can be associated with either a repair function or vandalism.

“0 (Roadway View Obstructions Including Factors or Devices Like Signal Boxes) -- used when there is a view obstruction associated with roadway design including such added devices as signal boxes, signal light support poles, guardrails, and crash cushions.

“0 (View Obstructed by Other Vehicle) -- used when the driver’s view is obstructed by an intervening vehicle.

“0 (Roadway Geometry [Crossover]) -- used when roadway geometry, in the form of a crossover, is relevant to this crash. In this circumstance record the median width and include shoulder width.

If element 04 [Roadway Geometry (Crossover)] is selected and crash site involves a crossover, record additional information on the Precrash Notes:

“05” [Roadway Geometry (Curve)] is used when roadway geometry, in the form of a curve, is relevant to this crash. If the crash site is located in a curve or is associated with a curve, record the radius of curvature. This value is determined as follows:

$$R = C^2/8m + m/2$$

Where R = Radius of curvature, C = chord length, and m = value of middle ordinate.

“0 (Road Sight Distance Insufficient) -- used when the measured sight distance on this roadway does not meet the standard specified in AASHTO. For reference purposes, material generated should be added to Precrash Notes

If element 06 (Road Sight Distance Insufficient) is selected, record the measured sight distance on the Precrash Notes.

Criteria for Measuring Sight Distance

Sight distance is the distance along a roadway that an object of a specified height is continuously visible to the driver. This distance is dependent on the height of the driver's eye above the road surface, the specified object height above the road surface, and the height of sight obstructions within the line of sight.

For sight distance measurements for passenger vehicles, the height of the driver's eye is considered to be 3.5 feet (1.07 m) above the road surface. For large trucks, the driver's eye height ranges from 6 to 8 feet (1.83 to 2.44 m) and is assumed to be 7.6 feet (2.32 m) for measurement purposes. For stopping sight distance measurements, the height of the object is assumed to be 2 feet (0.61 m).

As a general rule, check measurements to verify compliance with AASHTO recommendations with respect to braking sight distance will not be required. Visual verification that the site meets or exceeds AASHTO standards is sufficient. In this circumstance, researcher select element 2 (No), indicating that there is no sight distance restriction

Table 1. AASHTO Stopping Distance

Design Speed (MPH)	Stopping Sight Distance (Rounded for Design)	
	Feet	Meters
15	80	24.38
20	115	35.05
25	155	47.24
30	200	60.96

Design Speed (MPH)	Stopping Sight Distance (Rounded for Design)	
	Feet	Meters
35	250	76.20
40	305	92.96
45	360	109.72
50	425	129.54
55	495	150.88
60	570	173.74
65	645	196.60
70	730	222.50
75	820	249.93
80	910	277.37

Sight distance requirements in Table 1 assume level surfaces.

“0 (Lane Delineation Problem [Not Present, Worn, Etc.]) is used when this driver encounters difficulty as a result of lane delineation. The delineation markings in this circumstance may not be present, may be worn (i.e., reduced visibility), or may be covered in some manner (i.e., gravel, debris, etc.).

“0 (Narrow Shoulders) -- used when this driver experiences a problem as a result of the shoulder that is not sufficiently wide. While circumstances will vary depending on location, shoulder width should be less than 1.5 meters to qualify for this designation.

“0 (Narrow Road) -- used when this driver experiences a problem as a result of insufficient roadway width. While circumstances will vary depending on the type of roadway, two lane roadways should be less than 20 feet (6.1 meters) in width to qualify for this designation.

(Ramp Speed) -- used when the posted ramp entrance/exit speed is inappropriate. This includes circumstances where the posted speed is adequate for one class of vehicle but is too high for another class of vehicle (e.g., adequate for automobiles, but too high for large trucks).

1” (Roadway Condition (Potholes, Deteriorated Road Edges, Etc.)) -- used when the driver encounters a problem as a result of a roadway maintenance condition. Specific areas of concern include potholes, deteriorated/broken road edges, washboard areas, and depression where a localized area of the surface has sunk several inches or more.

2” (Slick Surface (Low Friction Value Due to Icy Condition, Loose Debris, or Any Other Cause)) is used when the driver encounters a low friction surface most commonly associated with an icy condition. There are several other circumstances that can also be associated with a pronounced reduction of friction values. These include loose gravel/sand spread over a paved

surface and oil build-ups. Typically, wet surfaces are not included in this designation unless the moisture adds to an existing condition such as an oil build-up.

(Road Under Water) is reserved for the circumstance where at least one travel lane is completely covered with water.

(Road Washed Out) -- used when a portion of the roadway collapses/washes away as a result of exposure to running water.

(No Driver Present) -- used when there is no driver in the driver's seated position at the time of the crash.

8" [Other Roadway Problem (Specify): _____] -- used when the driver encounters a roadway problem that is not described in preceding elements. Specify the nature of this problem.

(Unknown) -- used when there is insufficient information to determine if a roadway-related factor is relevant to this crash.

Weather-Related Factors**Element Values**

(Select all that apply)

Codes	Attributes
0	No Weather-Related Factors
1	Rain
2	Snow
3	Fog
4	Wind Gust
5	Hail
6	Sleet
7	No Driver Present
8	Other (Specify):
9	Unknown

Remarks

This element value establishes the presence of weather-related factors that may have had a bearing on crash occurrence. Select all attributes that apply.

00 (No Weather-Related Factors) -- used when there are no adverse weather conditions relevant to the crash. This designation is also used to fill unused coding spaces (i.e., less than four factors coded).

01 (Rain) -- used when it is raining at the time of the crash.

02 (Snow) -- used when it is snowing at the time of the crash.

03 (Fog) -- used when the driver is operating in fog at the time of the crash.

04 (Wind Gust) -- used when a wind gust occurs prior to the crash and has some relevance to the crash.

05 (Hail) -- used when the driver is operating in hail at the time of the crash.

06 (Sleet) -- used when the driver is operating in sleet at the time of the crash.

07 (No Driver Present) -- used when there is no driver in the driver's seated position at the time of the crash.

08 " [Other (Specify): _____] -- used when there is a relevant weather-related factor that is not described in preceding elements. Specify the nature of this factor.

09 (Unknown) -- used when there is insufficient information to determine if weather-related factors are relevant to the crash.

Other Environment-Related Factors**Element Values**

(Select all that apply)

Codes	Attributes
0	No Other Factors
1	Glare
2	Blowing Debris
3	Smoke
7	No Driver Present
8	Other Sudden Change in ambience (Specify):
9	Unknown

Remarks

This element value establishes the presence of a range of additional environmental factors that may have a bearing on crash occurrence. Select all attributes that apply.

00 (No Other Factors) -- used when there is no evidence that factors of this type are relevant to the crash. This designation is also used to fill unused coding spaces (i.e., less than for factors coded).

01 (Glare) -- used when glare in some form is relevant to this driver. Examples include headlight glare, sun glare, and reflected glare (i.e., sun reflecting off a windshield or other metal component).

02 (Blowing Debris) -- used when this driver is exposed to some form of blowing debris. Examples include paper, cardboard boxes, and tree limbs.

03 (Smoke) -- used when the driver's view is obscured by the presence of smoke (e.g., smoke from a grass fire, house fire, or forest fire).

07 (No Driver Present) -- used when there is no driver in the driver's seated position at the time of the crash.

08 " [Other Sudden Changes in Ambience (Specify): ____] -- used when this driver experiences a problem as a result of sudden change in ambience. Specify the nature of this factor.

09 (Unknown) -- used when there is insufficient information to determine if environmental factors of this type are relevant to the crash.

Traffic Flow Interruption Factors**Element Values**

(Select all that apply)

Codes	Attributes
0	No Traffic Flow Factors
1	Previous Crash Nearby
2	Construction Work Zone
3	Emergency Vehicle Approaching
4	Rush Hour Congestion
7	No Driver Present
8	Other (Specify):
9	Unknown

Remarks

This element value establishes the presence of traffic flow interruption factors which may have a bearing on driver performance/crash occurrence. Select all attributes that apply.

00 (No Traffic Flow Factors) -- used when there are no traffic flow factors relevant to the crash. This designation is also used to fill in unused coding spaces (i.e., less than four factors are coded).

01 (Previous Crash Nearby) -- used when traffic flow at the crash site is interrupted by a previous crash located near this site.

02 (Construction Work Zone) -- used when traffic flow is interrupted as a result of the crash site being located in a construction work zone.

03 (Emergency Vehicle Approaching) -- used when traffic flow at the crash site is interrupted as a result of an emergency vehicle approaching from either direction.

04 (Rush Hour Congestion) -- used when traffic flow at the crash site is interrupted as a result of rush hour traffic congestion.

08 " [Other (Specify): ____] -- used when traffic flow at the crash site is interrupted as a result of a factor not described in preceding elements. Describe the reason for the interruption.

09 (Unknown) -- used when there is insufficient information to determine if there is a traffic flow interruption that is relevant to this crash.

Driver Illness**Element Values**

(Select all that apply)

Codes	Attributes
0	No Illness
1	Heart Attack
2	Seizure (Epilepsy-Related)
3	Seizure (Other Source)
4	Blackout (Diabetes-Related)
5	Blackout (Other Source)
6	Severe Cold/Flu Symptoms
7	No Driver Present
8	Other (Specify):
9	Unknown

Remarks

This element value establishes the possibility of an illness influence on the driver's performance. Major medical problems (i.e., heart attack, seizure) should have medical verification. Select all attributes that apply.

00 (No Illness) -- used when the driver is not ill. This designation is also used to fill in unused spaces (i.e., there are less than three reportable factors).

01 (Heart Attack) -- used when the driver has a medically verified heart attack during the precrash phase.

02 (Seizure [Epilepsy-Related]) is used when the driver has a medically verified epileptic seizure during the precrash phase.

03 (Seizure [Other Source]) is used when the driver has a medically verified seizure, that is not related to epilepsy, during the precrash phase.

04 (Blackout [Diabetes-Related]) is used when the driver has a blackout during the precrash phase and this event can be traced to a medically diagnosed diabetic condition (e.g., driver blacks out as a result of insulin shock).

05 (Blackout [Other +]) is used when the driver has a blackout during the precrash phase, and this event is not related to a diabetic condition.

06 (Severe Cold/Flu Symptoms) -- used when the driver is experiencing severe cold/flu symptoms that influence his/her driving performance.

07 (No Driver Present) -- used when there is no driver in the driver's seated position at the time of the crash.

08 [Other (Specify): _____] -- used when the driver experiences an illness or physical symptoms that are not described in preceding elements. An annotation is required to specify the nature of the illness/symptoms.

09 (Unknown) -- used when there is insufficient information to determine if the driver experienced an illness during the precrash phase.

Nonmotorist Crash/Actions/Headlights**Vehicle Headlights****Element Values**

Codes	Attributes
0	Not on/Not Operational/None
1	Equipped With One Headlight on
2	Equipped With Two Headlights on – One Not Working
3	Equipped With Two Headlights on
4	Automatic Headlights, Unknown if Lights Illuminated
9	Unknown

Remarks

Determine the number of operational headlights at the time of the crash.

00 The vehicle provided no source of light

01 The vehicle illuminated the way ahead with the one equipped headlight

02 The vehicle illuminated the way ahead with the one of two equipped headlights

03 The vehicle illuminated the way ahead with two or more equipped headlights

99 Unknown

Headlight Beam**Element Values**

Codes	Attributes
0	Not on/Not Operational/None
1	Low Beam
2	High Beam
3	Adaptive Headlights – Beam Setting Not Determined
99	Unknown

Remarks

Determine the headlight beam setting at the time of the crash. If the vehicle has adaptive headlights, determine whether other vehicles were travelling in the opposite direction on any adjacent roadway at the time of the crash to establish the most probable setting.

00 Not on/ not operational/none means the vehicle provided no source of light

01 Low beam means the vehicle headlights set to low beam

02 High beam means the vehicle headlights set to high beam

03 Adaptive headlights – beam setting not determined

99 Unknown

Nonmotorist Crash/Actions/Propulsion Type**Propulsion Type****Element Values**

Codes	Attributes
1	Internal Combustion Engine (ICE)
2	Hybrid
3	Electric
9	Unknown

Remarks

1 Internal Combustion Engine (ICE) --Includes vehicles with auto start/stop

2 Hybrid -- Hybrid includes plug-in hybrid

3 Electric -- Includes hydrogen fuel cell

9 Unknown

Nonmotorist Crash/Characteristics/Hood**Hood Material****Element Values**

Codes	Attributes
1	Plastic
2	Fiberglass
3	Steel
4	Aluminum
5	Stainless steel
8	Other (Specify):
99	Unknown

Remarks

Indicate the predominant material the vehicle hood is made from.

01 (Plastic) -- used when the hood is made of a plastic that isn't also considered to be fiberglass.

02 (Fiberglass) -- used when the hood is made of fiberglass.

03 (Steel) -- used when the hood is made of steel but not stainless steel

04 (Aluminum) -- used when the hood is made of aluminum.

05 (Stainless steel) -- used when the hood is made of stainless steel.

08 (Other specify:) -- used when the hood is made from a different material than listed above.

99 (Unknown) -- used when the hood material cannot be determined.

Hood Original OEM**Element Values**

Codes	Attributes
1	OEM Factory-Installed Hood
2	OEM Replacement Hood
3	Non-OEM Replacement, Not Striking Portion/No Contact
4	Non-OEM Replacement, Striking Portion; Wrapped Onto Hood
99	Unknown

Remarks

Used for the vehicle hood at the time of the crash.

01 (OEM Factory-Installed Hood)

02 (OEM Replacement) --

03 (Non-OEM Replacement, Not Striking Portion/No Contact) -- used when the hood has been replaced with a Non-OEM hood and the hood is not the portion of the vehicle that struck a nonmotorist and was not contacted.

04 (Non-OEM Replacement, Not Striking Portion; Wrapped Onto Hood) -- used when the hood has been replaced with a Non-OEM hood and the hood is not the portion of the vehicle that struck a nonmotorist, but the nonmotorist wrapped over onto hood and contacted it.

99 (Unknown) -- used when the hood's replacement status is unknown.

Hood Length**Element Values**

0 to 179 cm

180 or more

-9999 Unknown

Remarks

Hood length is the undamaged flat plane distance from the front of the hood edge, at the grille area, to the trailing edge near the base of the windshield. The length is measured longitudinally, at the center of the vehicle to the nearest centimeter.

The hood length is a pre-crash (undamaged) measurement. If the hood is relatively undamaged it can be used to obtain this measurement.

(180 centimeters or more) -- used when the hood length is 180 cm or more.

-9999 (Unknown) -- used when the hood length cannot be determined.

Hood Width Forward Opening**Element Values**

0 to 209 cm

210 cm or more

-9999 Unknown

Remarks

The hood width measured parallel to the vehicle lateral axis at the forward hood opening.

This is a pre-crash (undamaged) measurement if the hood is relatively undamaged.

Hood width forward opening is measured to the nearest centimeter. If the width exceeds 210 cm, use 210 cm.

-999 (Unknown) -- used when the hood width at the forward hood opening cannot be determined.

Hood Width Midway**Element Values**

0 to 209 cm

210 cm or more

-9999 Unknown

Remarks

Hood width at the point midway between the forward hood opening and rear hood opening is the width of the hood measured parallel to the lateral axis of the vehicle at the point midway between the forward and rear hood opening.

The measurement obtained is a pre-crash (undamaged) measurement. If the hood is relatively undamaged, it can be used to obtain this measurement.

Hood width midway is measured to the nearest centimeter.

210 (210 centimeters or more) -- used when the hood width midway between the forward and rear hood opening is 210 centimeters or more.

Code "-999 (Unknown) -- used when the hood width midway between the forward and rear hood opening cannot be determined.

Hood Width Rear Opening**Element Values**

0 to 209 cm

210 cm or more

-9999 Unknown

Remarks

Hood width at the point of the rear hood opening is the width of the hood measured parallel to the lateral axis of the vehicle at the rear hood opening.

The measurement obtained is a pre-crash (undamaged) measurement. If the hood is relatively undamaged, it can be used to obtain this measurement.

Hood width rear is measured to the nearest centimeter.

210 (210 centimeters or more) -- used when the hood width midway between the forward and rear hood opening is 210 centimeters or more.

Code "-999 (Unknown) -- used when the hood width midway between the forward and rear hood opening cannot be determined.

Deployable Hood Available**Element Values**

Codes	Attributes
1	Yes
2	No
9	Unknown

Remarks

Code the presence of a deployable (pop-up) hood safety feature.

Deployable Hood Activated**Element Values**

Codes	Attributes
1	Yes
2	No
3	No (Disabled)
8	NA
9	Unknown

Remarks

Code the activation status of the deployable (pop-up) hood during the impact with the nonmotorist. If the vehicle is not outfitted with a deployable hood, code NA.

Hood Air Bag Available**Element Values**

Codes	Attributes
1	Yes
2	No
9	Unknown

Remarks

Code the presence of a deployable exterior hood air bag safety feature.

Hood Air Bag Activated**Element Values**

Codes	Attributes
1	Yes
2	No
3	No (Disabled)
8	NA
9	Unknown

Remarks

Code the activation status of the deployable exterior air bag during the impact with the nonmotorist. If the vehicle is not outfitted with an exterior hood air bag, code NA.

Nonmotorist Crash/Characteristics/Front Damage

Nonmotorist Contact to the Front Plane

Element Values

Codes	Attributes
1	Yes
2	No
9	Unknown

Remarks

The Front Damage sub-tab is coded for crashes where the nonmotorist is struck by the front of a vehicle. If there is no contact to the front plane of the vehicle, code “No” to the first data element, Nonmotorist Contact to the Front Plane, will auto-populate many of the remaining tab elements with “No Front Contact.”

01 “Yes” if there is any evidence of contact by the nonmotorist to the vehicle’s front plane (including bumper, grille, hood, windshield, a-pillars, etc.).

02 “No” if there is no evidence of contact by the nonmotorist to the vehicle’s front plane. The remaining variables in the Nonmotorist Crash/Characteristics/Front Damage tab will be auto coded with “No Front Contact.”

09 “Unknown” if it cannot be determined if there was contact to the vehicle’s front plane by the nonmotorist.

Hood/Fender Vertical/Lateral Crush From Nonmotorist**Element Values**

Codes	Attributes
0	Not Damaged
1	Surface Scratching Only, No Residual Crush
2	Minor Deformation (1-3 Centimeters)
3	Moderate Deformation (4-7 Centimeters)
4	Severe Deformation (= 8 Centimeters)
8	Damage Present; Unknown if From Nonmotorist Impact
99	Unknown

Remarks

This variable says residual damage to the hood or the fender of the vehicle from the nonmotorist. If the nonmotorist contacted the frontal plane, and subsequently damaged the hood, then measure the amount of vertical deformation to the hood. The depth of the deformation for any contact point where residual deformation is observed must be recorded.

If the nonmotorist contacted a side plane (fender area) then measure the amount of lateral deformation.

If the nonmotorist damaged both the fender and the hood, code this variable based on the surface with the greater amount of deformation.

Windshield Contact Damage From Nonmotorist Contact**Element Values**

Codes	Attributes
0	Not contacted by nonmotorist
1	Contacted by nonmotorist - not damaged
2	Contacted by nonmotorist - damaged
7	Unknown if contacted by nonmotorist - not damaged
8	Unknown if contacted by nonmotorist - damaged
9	Unknown if contacted by nonmotorist - unknown if damaged

Remarks

Damage to the vehicle's windshield from direct nonmotorist contact is recorded. Damage to the windshield from environmental objects (i.e., signs, poles, etc.) objects carried by the nonmotorist (i.e., briefcase, cane), or vehicle occupants, are not considered for this variable. Damage to the windshield not attributed to the nonmotorist must be annotated on the Exterior Vehicle sketch page.

00 (Not contacted by nonmotorist) -- used when the nonmotorist does not contact the windshield.

01 (Contacted by nonmotorist - not damaged) -- used when the nonmotorist contacts the windshield without causing damage (e.g., cracking).

02 (Contacted by nonmotorist - damaged) -- used when the nonmotorist contacts the windshield causing damage (e.g., cracking).

03 (Unknown if contacted by nonmotorist - not damaged) -- used when it is not known if the nonmotorist contacted the windshield, and the windshield is not damaged.

04 (Unknown if contacted by nonmotorist - damaged) -- used when it is not known if the nonmotorist contacted the windshield, but the vehicle's windshield sustained damage in the crash.

05 (Unknown if contacted by nonmotorist - unknown if damaged) -- used when it is not known if the nonmotorist contacted the windshield. It is also not known if the windshield was damaged.

99 (Unknown) when it is not known if there is damage to the windshield or not.

Front Bumper Cover Material**Element Values**

Codes	Attributes
0	No Front Contact
1	Plastic
2	Fiberglass
8	Other (Specify):
99	Unknown

Remarks

The bumper cover material is obtained when there is a nonmotorist contact to the front of the vehicle. It is the sheath that encompasses the reinforcement bar (Front Bumper Reinforcement Material). Bumper guard material is not to be considered for this variable.

Some bumpers have rubber strips along the face, for protection from minor scratches, this should not be considered as the bumper material.

00 (No Front Contact) -- used when there is no nonmotorist contact at the vehicle's plane front.

01 (Plastic) -- used when the bumper cover material is of a synthetic compound molded to cover the bumper.

02 (Fiberglass) -- used when the bumper cover material is made of fiberglass and attaches to the bumper.

08 (Other (Specify)) -- used when some other material is used, or a combination of materials are used. This code includes vehicles that do not have a bumper cover material (e.g., pickups and utility vehicles with steel bumpers). Brush guards would also be included in this attribute.

99 (Unknown) -- used when composition of the bumper cover material cannot be determined.

Front Bumper Reinforcement Material**Element Values**

Codes	Attributes
0	No Front Contact
1	Steel
2	Aluminum
8	Other (Specify):
99	Unknown

Remarks

The bumper reinforcement material is obtained when there is a nonmotorist contact at the vehicle's plane front. It is that which is attached to (or part of) the frame or structure of the vehicle.

00 (No Front Contact) -- used when there is no nonmotorist contact at the vehicle's plane front.

01 (Steel) -- used when the front reinforcement structure is made of steel including stainless steel.

02 (Aluminum) -- used when the front reinforcement structure is aluminum.

08 (Other (Specify)) -- used when the front reinforcement structure is made from other than steel or aluminum.

99 (Unknown) -- used when the front bumper reinforcement material cannot be determined.

Energy Absorbing Device Material Type**Element Values**

Codes	Attributes
0	No Front Contact
1	Expanded Foam
2	Honeycomb or Egg-Crate-Shaped Plastic
8	Other (Specify):
99	Unknown

Remarks

The bumper reinforcement material is obtained when there is a nonmotorist contact at the vehicle's plane front. It is attached to or part of the vehicle frame or structure.

00 (No Front Contact) -- used when there is no nonmotorist contact at the vehicle's plane front.

01 (Expanded foam) -- used when the front reinforcement structure is made of a closed cell foam.

02 (Honeycomb or Egg-Crate-Shaped Plastic) -- used when the front reinforcement structure is made of open-cell high-density polyethylene.

08 (Other (Specify)) -- used when the front reinforcement structure is made from a different structure than listed above. This code includes vehicles that do not have energy absorbing material (e.g., pickups and utility vehicles with steel bumpers).

99 (Unknown) -- used when the front bumper reinforcement material cannot be determined.

Front Bumper – Bottom Height**Element Values**

0 to 150 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

The bumper-bottom height is obtained when there is a nonmotorist contact at the vehicle's plane front. The vehicle's bumper-bottom height is a pre-crash (undamaged) measurement. If the front bumper is relatively undamaged (not grossly distorted from this crash) used it to find this measurement.

Measure from the bottom of the bumper face (reinforcement bar) to the ground. To find it, measure from the BOTTOM of the front bumper at the point of impact, to the ground. Include a calibrated instrument (contour gauge rod or 1 m scale) in the photographs of the vehicle's bumper height. Front bumper-bottom height is coded to the nearest centimeter.

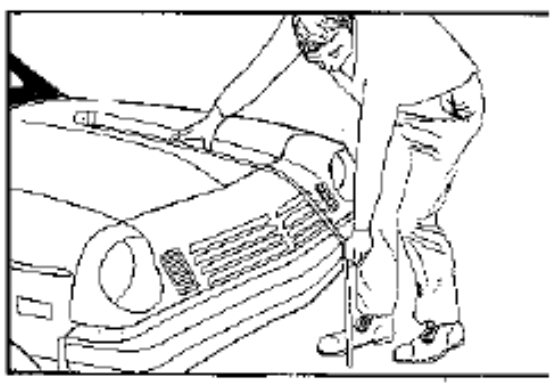


Figure 1. Bumper Height Measurement



Figure 2. Example Bumper Height Measurement

Front Bumper – Top Height**Element Values**

0 to 150 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

The bumper-top height is obtained when there is a nonmotorist contact at the vehicle's front plane. The measurement obtained for the vehicle's bumper-top height is a pre-crash (undamaged) measurement. If the front bumper is relatively undamaged (not grossly distorted from this crash) used it to find this measurement.

Measure from the top of the bumper face (reinforcement bar) to the ground. To find it, measure from the TOP of the front bumper at the point of impact, to the ground. Include a calibrated instrument (contour gauge rod or 1 m scale) in the photographs of the bumper height. Front bumper-top height is coded to the nearest centimeter.

Front Bumper Lead

Element Values

0 to 30 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

The bumper lead measurement is obtained when there is a nonmotorist contact at the vehicle's front plane.

Bumper lead is the longitudinal width of the bumper measured from the leading edge to where the horizontal structure ends, and the vertical structure begins (the base of the front grille or light assembly), taken at the point of impact. It is a pre-crash (undamaged) measurement. If the front bumper is relatively undamaged (not grossly distorted from this or any previous crash) it can be used to find this measurement.

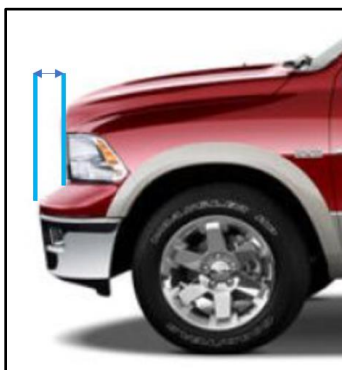


Figure 3. Example Bumper Lead, Large



Figure 4. Example Bumper Lead, Small

Ground to Forward Hood Opening**Element Values**

0 to 200 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

The forward hood opening height is found when there is a nonmotorist contact at the vehicle's front plane. The forward hood opening height is the undamaged vertical height from the ground to the front edge of the hood, at the point of impact.

Measure the continuous distance, following the contour of the vehicle along the vehicle's centerline, from the ground or road surface to the forward hood opening.

Ground to Front/Top Transition Point**Element Values**

0 to 180 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

The front/top transition point height is found when there is a nonmotorist contact at the front of the vehicle.

The front/top transition point is where the top hood plane transitions into the frontal structure. This could be (1) the point where the front of the hood curves downward (i.e., in the case of some vehicles where the hood edge is part of the front structure), (2) the hood edge, or (3) the top edge of the upper grille panel. The measurement is the vertical wrap-around distance from the ground to the front/top transition point, measured along the centerline. Examples of the Front/Top Transition Point (red) relative to the Forward Hood Opening Height (yellow) are shown below.



Figure 5. Front/Top Transition Point Above the Forward Hood Opening Height.



Figure 6. Front/Top Transition Point Equal to the Forward Hood Opening Height.



Figure 7. Front/Top Transition Point Below the Forward Hood Opening Height.

Ground to Rear Hood Opening**Element Values**

0 to 400 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

Measure the continuous distance, following the contour of the vehicle, along the vehicle's centerline, from the ground or road surface to the rear hood opening.

Ground to Base of Windshield**Element Values**

0 to 400 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

Measure the continuous distance, following the contour of the vehicle, along the vehicle's centerline, from the ground or road surface to the base of the windshield.

Ground to Top of Windshield**Element Values**

0 to 500 cm

Codes	Attributes
-9998	No Front Contact
-9999	Unknown

Remarks

Measure the continuous distance, following the contour of the vehicle, along the vehicle's centerline, from the ground or road surface to the top of the windshield.

Ground to Head Contact**Element Values**

0 to 800 cm

Codes	Attributes
-9998	No Front Contact
-9997	No Head Contact
-9999	Head Contact, Measurement Unknown

Remarks

Measure the continuous distance, following the contour of the vehicle, from the ground or road surface to the contact point of the nonmotorist's head. If there is more than one head contact, measure the distance associated with the first head contact. The value is recorded for front plane impacts only.

Front-End Profile Type

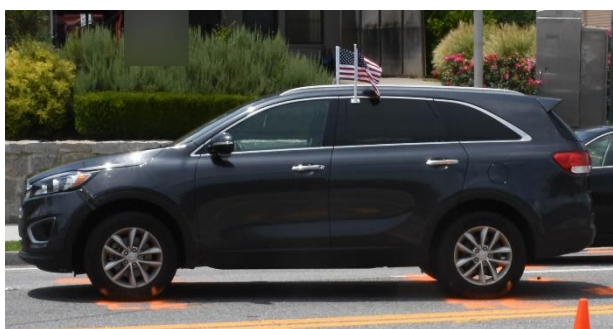
Element Values

Codes	Attributes
1	Overhang
2	Sloped
3	Flat
98	No Front Contact
99	Unknown

Remarks

Code the descriptor that best describes profile of the striking vehicle.

01 Overhang describes the front end where the vehicle has generally horizontal hood until the transition to the grille begins. This is typical of sedans and crossovers with lower grille heights.



02 Sloped is used when the slope of the hood at the rear hood opening is 20° or more. This is typical of vans and minivans with lower grille height and sloped hoods.



03 Flat is used when the angle between the face of the grille measured at the junction with the top plane of the bumper lead is 10° or less. This is typical of pickups and large SUVs with vertical grilles and high transitions to the hood.



Nonmotorist Crash/Characteristics/Side Damage**Nonmotorist Contact to the Side Plane****Element Values**

Codes	Attributes
1	Yes
2	No
9	Unknown

Remarks

The Side Damage sub-tab is coded for nonmotorist crashes where the nonmotorist is struck by the side of a vehicle. If there is no contact to the side plane of the vehicle, coding “No” to the first data element, Nonmotorist Contact to the Side Plane, will auto-populate the remaining tab elements with “No Side Contact.”

01 Code “Yes” if there is any evidence of contact by the nonmotorist to the vehicle’s side plane (including tires, fender, doors, pillars, window glazing, side view mirrors, etc.)

02 Code “No” if there is no evidence of contact by the nonmotorist to the vehicle’s side plane. The remaining variables in the Nonmotorist Crash/Characteristics/Side Damage tab will be auto coded with “No Side Contact.”

09 Code “Unknown” if it cannot be determined if there was contact to the vehicle’s side plane by the nonmotorist.

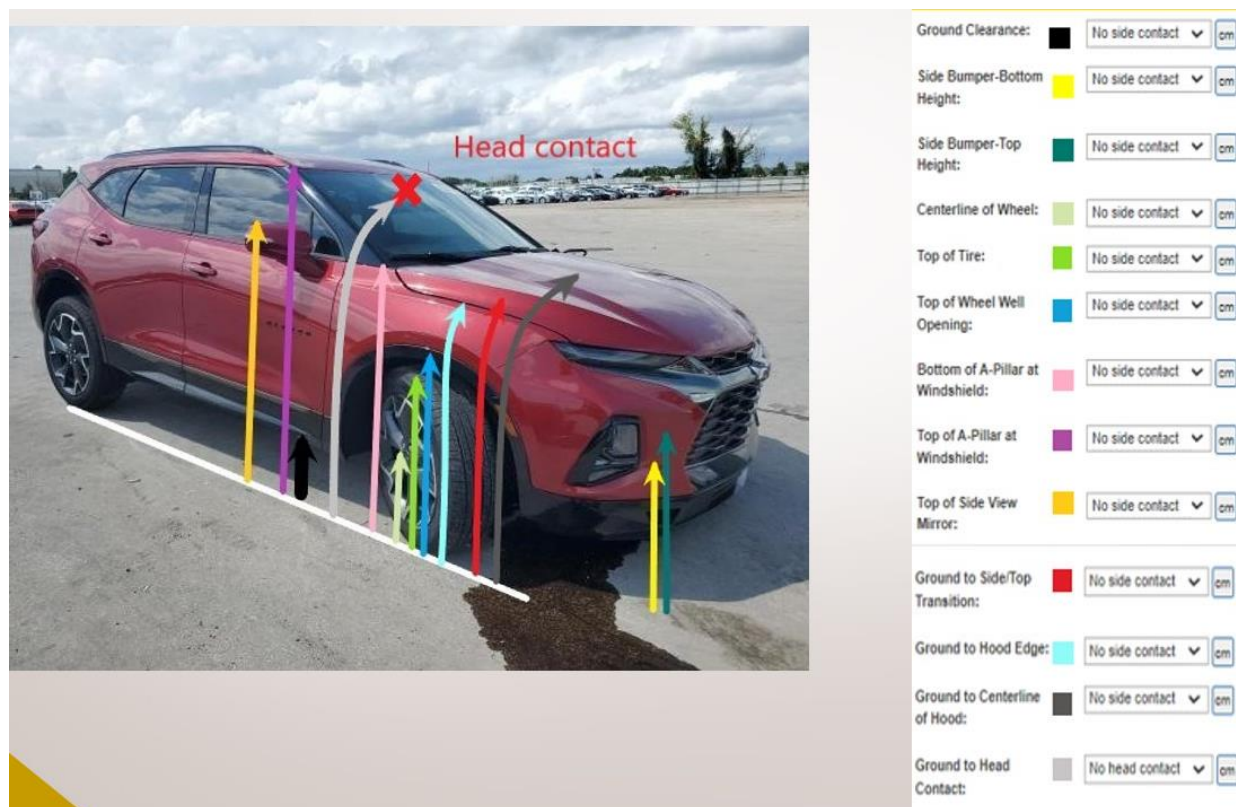


Figure 8. Side Measurement Locations

Ground Clearance

Element Values

0 to 150 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

The ground clearance is found when there is nonmotorist contact through the side plane of the vehicle and is a pre-crash (undamaged) measurement. If the side surface is relatively undamaged (not grossly distorted from this crash) it can be used to find this measurement.

To get the ground clearance height, measure the vertical distance from the ground to the bottom of the exterior side surface (excluding tires and wheels) at the center of the pedestrian impact.

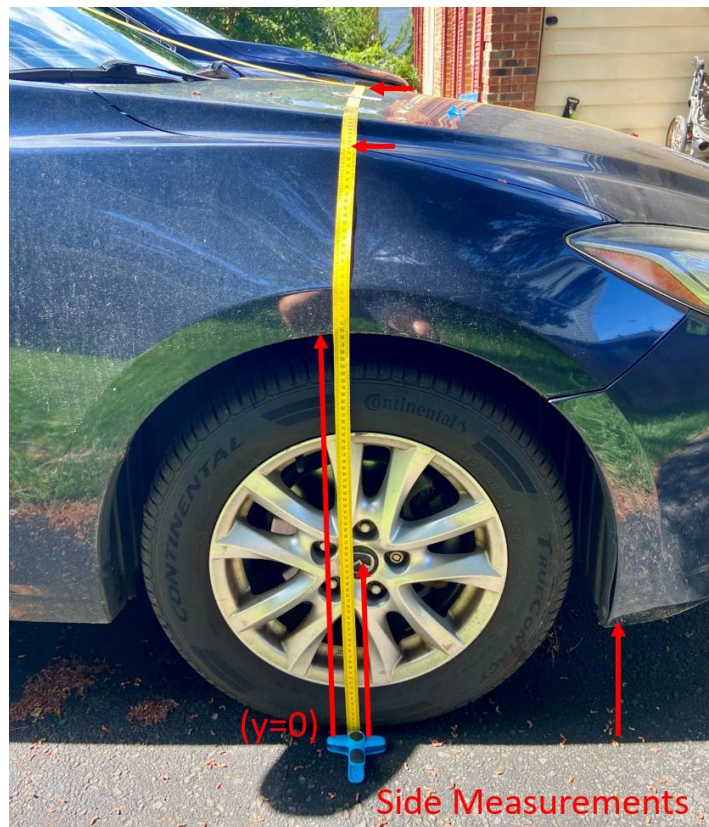


Figure 9. Ground Clearance

Side Bumper-Bottom Height**Element Values**

0 to 150 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

The side bumper-bottom height is obtained when there is a nonmotorist contact through the side plane of the vehicle. The height is a pre-crash (undamaged) measurement. If the front bumper is relatively undamaged (not grossly distorted from this crash) it can be used for this measurement.

To find the side bumper-bottom height, measure the vertical distance from the BOTTOM of the front bumper to the ground. This measurement is taken at the side plane of the front bumper on the side of the vehicle contacted by the nonmotorist.

Side Bumper-Top Height**Element Values**

0 to 150 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

The side bumper-top height is found when there is a nonmotorist contact through the side plane. It is a pre-crash (undamaged) measurement. If the front bumper is relatively undamaged (not grossly distorted from this crash) it can be used to find this measurement.

To get the side bumper-top height, measure the vertical distance from the TOP of the front bumper to the ground. This measurement is taken at the side plane of the front bumper on the side of the vehicle contacted by the nonmotorist.

Centerline of Wheel**Element Values**

0 to 150 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

The centerline of wheel measurement is found when there is a nonmotorist contact through the side plane of the vehicle. The centerline of wheel measurement is the undamaged vertical distance from the ground to the centerline of the undamaged front wheel/tire on the side contacted by the nonmotorist.

Top of Tire**Element Values**

0 to 200 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

The top of wheel measurement is found when there is a nonmotorist contact through the side plane of the vehicle. The top of wheel measurement is the undamaged vertical height from the ground to the top of the undamaged front tire on the side of the vehicle contacted by the nonmotorist.

Top of Wheel Well Opening**Element Values**

0 to 250 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

The top of wheel well opening measurement is found when there is a nonmotorist contact through the side plane of the vehicle.

The top of wheel well opening measurement is the vertical distance from the ground to the highest wheel well opening point, the wheel well opening is a pre-crash (undamaged) measurement. If the front wheel well opening is relatively undamaged (not grossly distorted from this crash) it can be used to take this measurement.

Bottom of A-Pillar at Windshield**Element Values**

0 to 250 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Measure the vertical distance from the ground to the bottom of the A-pillar at the windshield coded to the nearest centimeter.

Top of A-Pillar at Windshield**Element Values**

0 to 300 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Measure the vertical distance from the ground to the top of the A-pillar at the windshield coded to the nearest centimeter.

Top of Side View Mirror**Element Values**

0 to 300 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Measure the vertical distance from the ground to the top of the side view mirror coded to the nearest centimeter.

Centerline to A-Pillar at Bottom of Windshield**Element Values**

0 to 250 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Measure the lateral distance (parallel to both the ground and the lateral axis of the vehicle) from the longitudinal centerline of the vehicle to the CENTER of the A-pillar at the bottom of the windshield.

Centerline to A-Pillar at Top of Windshield**Element Values**

0 to 250 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Measure the lateral distance (parallel to both the ground and the lateral axis of the vehicle) from the longitudinal centerline of the vehicle to the CENTER of the A-pillar along the top of the windshield glass.

Centerline to Maximum Side View Mirror Protrusion**Element Values**

0 to 300 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Measure the lateral distance (parallel to both the ground and the lateral axis of the vehicle) distance from the longitudinal centerline of the vehicle to the maximum side view mirror protrusion.

Ground to Side/Top Transition**Element Values**

0 to 400 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Following the contour, measure the continuous distance from the ground or road surface, through the side plane of the vehicle, to the transition point between the side and top surfaces of the vehicle at the center of the nonmotorist impact area.

Ground to Hood Edge**Element Values**

0 to 400 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Following the contour, measure the continuous distance from the ground or road surface, through the side plane of the vehicle, to the hood edge taken at the center of the nonmotorist impact area.

Ground to Centerline of Hood**Element Values**

0 to 700 cm

Codes	Attributes
-9998	No Side Contact
-9999	Unknown

Remarks

Following the contour, measure the continuous distance from the ground or road surface to the longitudinal centerline of the hood at the center of the nonmotorist impact area.

Ground to Head Contact**Element Values**

0 to 800 cm

Codes	Attributes
-9998	No Side Contact
-9997	No Head Contact

Remarks

Following the contour, measure the continuous distance from the ground or road surface to the contact point of the nonmotorist's head. If there is more than one nonmotorist head contact through the side plane of the vehicle, measure the first head contact, coded to the nearest centimeter.

Nonmotorist Crash/Contacts/Contact

Contact

Element Values

A-Z (Auto-Generated)

Codes	Attributes
-9999	Unknown

Remarks

The Contacts tab is used to document evidence of nonmotorist contact with the striking vehicle and environment. To add a contact, click on the “+Add Contact” button that launches a pop-out window to enter the following data elements. Enter all contacts between the nonmotorist and the striking vehicle, other objects, and surrounding environment. For example: if the nonmotorist comes to rest on the ground after being struck by the vehicle, include a coded contact to the ground so that it will be selectable in other case tabs for kinematics and injury causation. The contact letter should be included on the contact sketches.

When a nonmotorist is riding a conveyance (i.e., bicycle, scooter, etc.) it may be difficult to determine if the contact on the vehicle was from the person or the conveyance. All contacts should be documented regardless of suspicion it was from the person or the pedalcycle/personal conveyance.

Damage sustained to a vehicle from vehicle-to-vehicle or vehicle-to-object impacts not associated with the nonmotorist or nonmotorist conveyance contact should be documented on the Exterior Vehicle form sketch page.

This element is auto generated for each contact, in the order that contacts are created.

Contact Area**Element Values**

Codes	Attributes
1	Front
2	Left
3	Right
4	Back
5	Top
6	Greenhouse
7	Tire/Wheel
8	Undercarriage
9	Accessory
10	Other Object
99	Unknown

Remarks

Choose the area of nonmotorist contact to the striking vehicle (1 to 9), or environment (10, Other Object) from the attribute list. The selection of Contact Area will determine which attributes are available to select for Contacted Component. The attribute “Greenhouse” includes the vehicle glazing, pillars, headers, and roof structure. The attribute “Other object” includes all contacts that are not to the striking vehicle, such as the ground, curb, tree, fence, etc.

The “Contact Area” codes include the following “Contacted Component” code options.

- 01 Front includes components 700 to 719.
- 02 Left includes components 720 to 739.
- 03 Right includes components 740 to 759.
- 04 Back includes components 760 to 769.
- 05 Top includes components 770, 772, 773, 774, 781, 787, 788, 789.
- 06 Greenhouse includes components 775, 776, 777, 778, 779, 780, 782, 783, 784, 784, 785.
- 07 Tire/Wheel includes components 790 to 799.
- 08 Undercarriage includes components 800 to 819.
- 09 Accessory includes components 820 to 828.
- 10 Other object includes components 41 to 89, 848, 849, 950.
- 99 Unknown – code if the location of a contact is unknown.

Contacted Component**Element Values**

Front

Codes	Attributes
700	Front Bumper
701	Front Lower Valance/Spoiler
702	Front Grille
703	Hood Edge And/Or Trim
706	Headlight
708	Turn Signal/Parking Lights
718	Other Front or Add on Object (Specify):
719	Unknown Front Object

Left

Codes	Attributes
720	Front Fender Left Side Surface
722	A-Pillar Left Side Surface
724	B-Pillar
725	C-Pillar
726	D-Pillar
728	Other Pillar (Specify):
729	Left Side Roof Rail
730	Left Door Surface
732	Left Side Mirror Fixed
733	Left Side Mirror Folding
734	Left Glazing Forward of B-Pillar
735	Left Glazing Rearward of B-Pillar
736	Left Side Back Fender or Quarter Panel
738	Other Left Side Object (Specify):
739	Unknown Left Side Component

Right

Codes	Attributes
740	Front Fender Right Side Surface
742	A-Pillar Right Side Surface
744	B-Pillar

Codes	Attributes
745	C-Pillar
746	D-Pillar
748	Other Pillar
749	Right Side Roof Rail
750	Right Door Surface
752	Right Side Mirror Fixed
753	Right Side Mirror Folding
754	Right Glazing Forward of B-Pillar
755	Right Glazing Rearward of B-Pillar
756	Right Side Back Fender or Quarter Panel
758	Other Right Side Object (Specify):
759	Unknown Right Side Component

Back

Codes	Attributes
760	Rear Bumper
761	Tailgate
762	Vertical Surface of Hatchback
768	Other Back Component (Specify):
769	Unknown Back Component

Top

Codes	Attributes
770	Hood Surface
772	Front Fender Top Surface
773	Cowl Area
774	Wiper Blades and Mountings
781	Rear Trunk Lid
787	Antenna
788	Other Top Component (Specify):
789	Unknown Top Component

Greenhouse

Codes	Attributes
775	Windshield Glazing
776	Front Header

Codes	Attributes
777	Roof Surface
778	Backlight Glazing
779	Rear Header
780	Hatchback
782	Sun/Moon Roof Glazing
783	Factory Roof Rack/Rail
784	A-Pillar Top Surface
785	Windshield Glazing (Perimeter)

Tire/Wheel

Codes	Attributes
790	LF Tire/Wheel
791	RF Tire/Wheel
792	LR Tire/Wheel
793	RR Tire/Wheel
798	Other Tire/Wheel (Specify):
799	Unknown Tire/Wheel

Undercarriage

Codes	Attributes
800	Front Crossmember
801	Steering Assembly/Front Suspension
802	Oil Pan
803	Exhaust System
804	Transmission
805	Drive Shaft
806	Catalytic Converter
807	Muffler
808	Floor Pan
809	Fuel Tank
810	Rear Suspension
818	Other Undercarriage Component (Specify):
819	Unknown Undercarriage Component

Accessory

Codes	Attributes
820	Air Scoop, Deflector
821	Cellular Antenna
822	Emergency Light Bar
823	Add-On Fog Lights
824	Luggage/Bike Rack
825	Cargo (Specify)
826	Spare Tire
827	Spotlight
828	Other Accessory (Specify):

Other Object

Codes	Attributes
41	Tree (<= 10 cm in diameter)
42	Tree (> 10 cm in diameter)
43	Shrubbery or Bush
44	Embankment
45	Breakaway Pole or Post (Any Diameter)
47	Cable Barrier Guardrail
48	Guardrail Face
49	Guardrail End
50	Nonbreakaway Pole or Post (<= 10 cm in diameter)
51	Nonbreakaway Pole or Post (> 10 cm but <= 30 cm in diameter)
52	Nonbreakaway Pole or Post (> 30 cm in diameter)
53	Nonbreakaway Pole or Post (diameter unknown)
54	Concrete traffic barrier
55	Impact attenuator
56	Other traffic barrier (Specify):
57	Fence
58	Wall
59	Building
60	Ditch or culvert
61	Ground
62	Fire hydrant
63	Curb
64	Bridge
68	Other Fixed Object (Specify):

Codes	Attributes
69	Unknown Fixed Object
72	Pedestrian
73	Cyclist or cycle
74	Other Nonmotorist or Conveyance (Specify)
75	Vehicle Occupant
76	Animal
77	Railway Vehicle
78	Trailer, Disconnected in-Transport
79	Object Fell From Vehicle in-Transport
88	Other Nonfixed Object (Specify):
848	Other Object in Environment
950	Other in-Transport Vehicle

Unknown

Codes	Attributes
849	Unknown Object in Environment
959	Unknown Object or Vehicle
99	Unknown Nonfixed Object

Remarks

Nonmotorist No.

Element Values

Remarks

Select the case nonmotorist from the list entered in the CISS crash.

Longitudinal Location X**Element Values**

0 to 999 cm

Codes	Attributes
-9998	Not Applicable
-9999	Unknown

Remarks

For each nonmotorist or nonmotorist conveyance contact to the vehicle, measure the longitudinal (X) wrap-around-distance (WAD) to the center of the contact starting at the ground. The X value will always be positive. “Other Object” contacts (ground, tree, guardrail) are coded with “Not Applicable.”

The nonmotorist contacts are collected for all front plane impacts. When the nonmotorist impact is to the side plane, the X and Y contact measurements are only collected when the left or right front of the vehicle is involved (F in column 4 of the CDC).

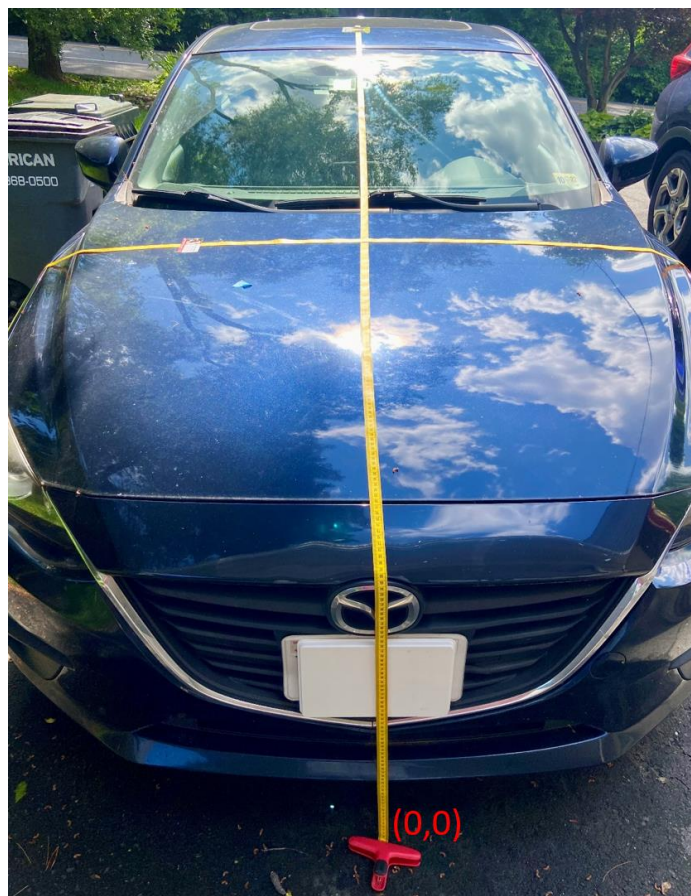


Figure 10. X-Value Wrap-Around Distance

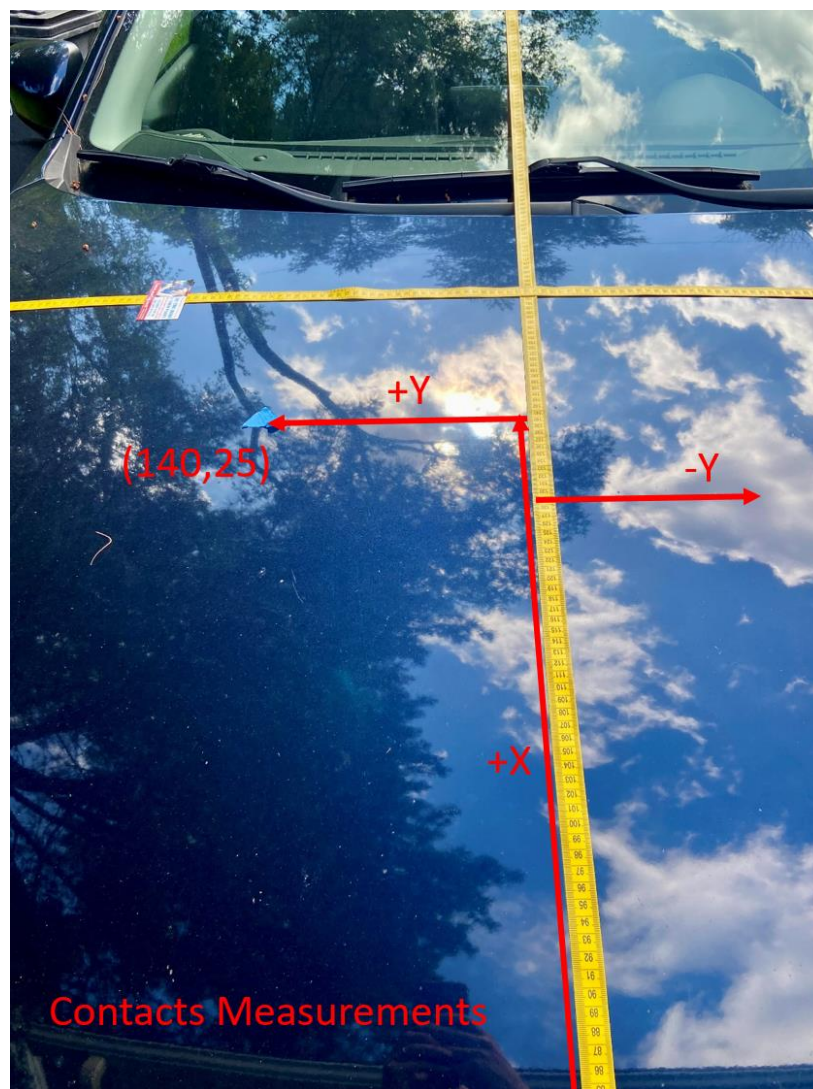


Figure 11. Y-Value Wrap-Around Distance

Lateral Location Y**Element Values**

-300 to +300 cm

Codes	Attributes
-9998	Not Applicable
-9999	Unknown

Remarks

For each nonmotorist or nonmotorist conveyance contact to the vehicle, measure the lateral (Y) distance from the centerline of the vehicle to the center of the contact. The vehicle centerline is Y=0, lateral values on the right-side of the vehicle centerline (from the driver's perspective) are positive, while lateral values on the left-side of the vehicle centerline are negative (see Figure 7). "Other Object" contacts are coded with "Not Applicable."

Crush**Element Values**

0 to 150 cm

Codes	Attributes
-9998	Not Applicable
-9999	Unknown

Remarks

Determine the maximum depth of crush to the contacted component in cm.

Did the Component Bottom Out**Element Values**

Codes	Attributes
1	Yes
0	No
9	Unknown
8	Not Applicable

Remarks

Determine if the contacted component crushed sufficiently from nonmotorist loading to bottomed out on an underlying structure. For example: if a coded contact to the hood was directly over an underlying engine compartment component, and the crush to the hood material was of sufficient depth to reach the underlying structure, then code “Yes.”

If there is no structure behind the contacted component (windshield, mirrors, roof, etc.) then code “Not Applicable.”

Body Region**Element Values**

Codes	Attributes
101	Head
201	Face
301	Neck
401	Chest
501	Abdomen
511	Flank - Left
512	Flank - Right
519	Flank - Unknown
521	Genitals
601	Back
711	Shoulder - Left
712	Shoulder - Right
719	Shoulder - Unknown
721	Upper Arm - Left
722	Upper Arm - Right
729	Upper Arm - Unknown
731	Elbow - Left
732	Elbow - Right
739	Elbow - Unknown
741	Lower Arm - Left
742	Lower Arm - Right
749	Lower Arm - Unknown
751	Wrist - Left
752	Wrist - Right
759	Wrist - Unknown
761	Hand - Left
762	Hand - Right
769	Hand - Unknown
811	Hip-Left
812	Hip - Right
813	Hips-Both
814	Pelvis
819	Hip - Unknown
821	Buttock - Left
822	Buttock - Right

Codes	Attributes
823	Buttock - Both
829	Buttock - Unknown
831	Thigh - Left
832	Thigh - Right
839	Thigh - Unknown
841	Knee - Left
842	Knee - Right
849	Knee - Unknown
851	Lower Leg - Left
852	Lower Leg - Right
859	Lower Leg - Unknown
861	Foot - Left
862	Foot - Right
869	Foot - Unknown
871	Ankle - Left
872	Ankle - Right
879	Ankle - Unknown
996	Combination (Specify)
999	Unknown

Remarks

Code the body region of the nonmotorist that contacted the selected component. Due to a requirement in injury causation coding, the assignment of Body Region contacted may require revision following review of the case. The use of a coded contact as supporting evidence in the causation coding requires that the coded contact's body region assignment match that determined by the injury review.

Physical Evidence**Element Values**

Codes	Attributes
1	Bent
2	Cracked
3	Scuffed
4	Transfer (Specify)
5	Deformed
6	Blood
7	Hair
8	Stretched
9	Scratched
10	Teeth Marks
11	Imprint
12	Spider Web
96	Combination (Specify)
98	Other (Specify)

Remarks

Code the nature of physical evidence documented on the contacted component.

Confidence Level**Element Values**

Codes	Attributes
1	Certain
2	Probable
3	Possible
9	Unknown

Remarks

This variable specifies the technician's level of confidence that the component was contacted by the nonmotorist, based on physical evidence collected during the vehicle inspection (or review of photos, video, or other available evidence).

01 Certain - coded when, based on visible physical evidence, it has been established beyond doubt or question that the component was contacted by a nonmotorist.

02 Probable - coded when, in all likelihood, a nonmotorist contacted the component, although the evidence is insufficient to be absolutely sure.

03 Possible - coded when there is more evidence for than against, however there is room for doubt, due to the lack of substantiating physical evidence.

09 Unknown - unknown whether the component listed as a contact point was contacted by a nonmotorist or some type of induced or post-crash damage.

Nonmotorist Crash/Contacts/Left Side**Element Values****Remarks**

Select the most appropriate vehicle type, size, and style from the available models.

Sketch the vehicle damage profile and nonmotorist contact on the model outlines such as dents, scrapes, scratches, buckling, or transfers.

Use cross hatches to indicate direct contact (XXXXX) and show induced damage and/or remote buckling with diagonal lines (/////).

The contact letter should be included on the contact sketches.

When a nonmotorist is riding a conveyance (bicycle, scooter, etc.) it may be difficult to determine if the contact was from the person or the conveyance. All contacts should be documented regardless of the suspicion whether it came from the person or the pedalcycle/personal conveyance.

Damage sustained to a vehicle from vehicle-to-vehicle or vehicle-to-object impacts not associated with the nonmotorist or nonmotorist conveyance contact should be documented on the Exterior Vehicle form sketch page.

Nonmotorist Crash/Contacts/Right Side

Element Values

Remarks

Select the most appropriate vehicle type, size, and style from the available models.

Sketch the vehicle damage profile and nonmotorist contact on the model outlines provided such as dents, scrapes, scratches, buckling, or transfers.

Use cross hatches to indicate direct contact (XXXXXX) and show induced damage and/or remote buckling with diagonal lines (/////).

The contact letter should be included on the contact sketches.

When a nonmotorist is riding a conveyance (bicycle, scooter, etc.) it may be difficult to determine if the contact on the vehicle was from the person or the conveyance they were riding. All contacts should be documented regardless of the suspicion whether it came from the person or the pedalcycle/personal conveyance they were riding.

Damage sustained to a vehicle from vehicle-to-vehicle or vehicle-to-object impacts not associated with the nonmotorist or nonmotorist conveyance contact should be documented on the Exterior Vehicle form sketch page.

Example contact sketch shown below.

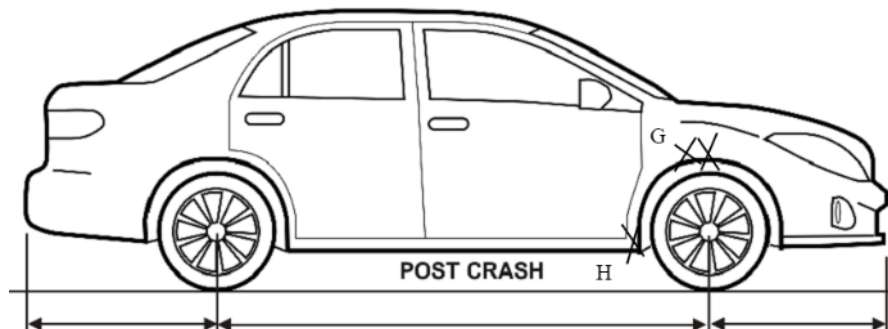


Figure 12. Side Contact Sketch Example.

Nonmotorist Crash/Contacts/Ends

Element Values

Remarks

Select the most appropriate vehicle type, size, and style from the available models.

Sketch the vehicle damage profile and nonmotorist contact on the model outlines provided such as dents, scrapes, scratches, buckling, or transfers.

Use cross hatches to indicate direct contact (XXXXXX) and show induced damage and/or remote buckling with diagonal lines (/////).

The contact letter should be included on the contact sketches.

When a nonmotorist is riding a conveyance (i.e., bicycle, scooter, etc.) it may be difficult to determine if the contact on the vehicle was from the person or the conveyance they were riding. All contacts should be documented regardless of the suspicion whether it came from the person or the pedalcycle/personal conveyance they were riding.

Damage sustained to a vehicle from vehicle-to-vehicle or vehicle-to-object impacts not associated with the nonmotorist or nonmotorist conveyance contact should be documented on the Exterior Vehicle form sketch page.

Example contact sketches shown below.

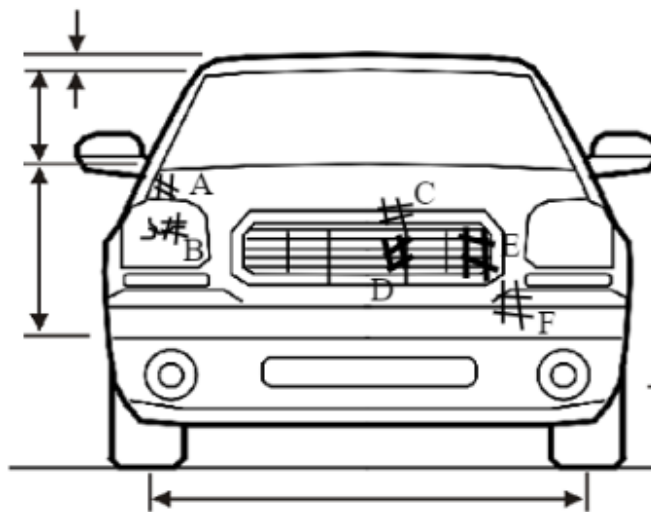


Figure 13. End Contact Sketch Example

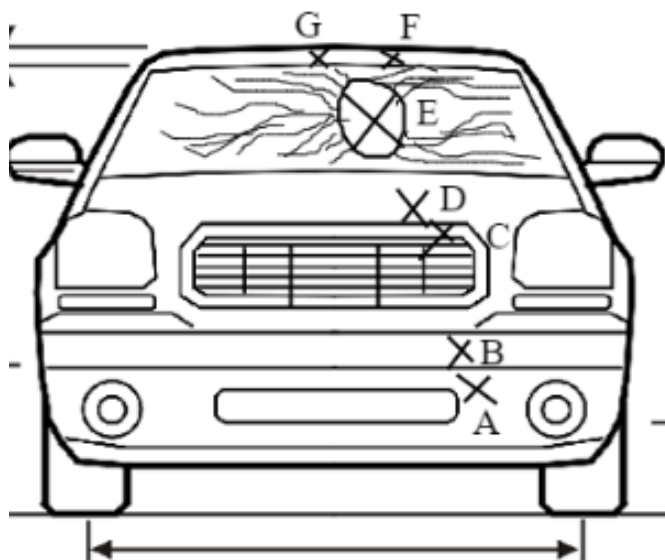


Figure 14. End Contact Sketch Example

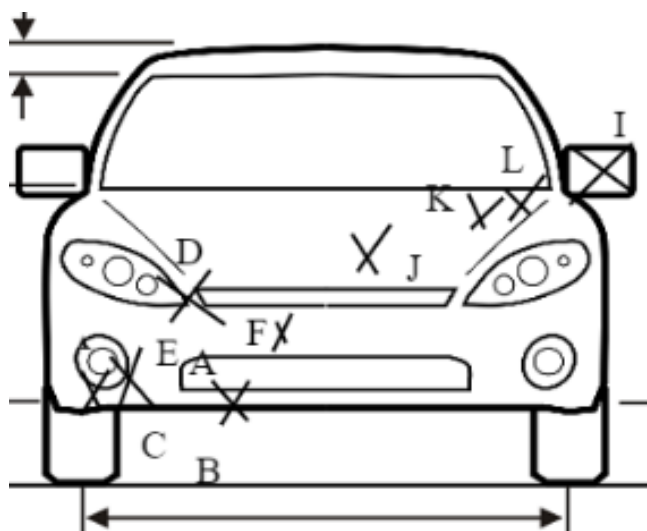


Figure 15. End contact example sketch

Nonmotorist Crash/Contacts/Top

Element Values

Remarks

Select the most appropriate vehicle type, size, and style from the available models.

Sketch the vehicle damage profile and nonmotorist contact on the model outlines provided such as dents, scrapes, scratches, buckling, or transfers.

Use cross hatches to indicate direct contact (XXXXX) and show induced damage and/or remote buckling with diagonal lines (/////).

The contact letter should be included on the contact sketches.

When a nonmotorist is riding a conveyance (i.e., bicycle, scooter, etc.) it may be difficult to determine if the contact on the vehicle was from the person or the conveyance they were riding. All contacts should be documented regardless of the suspicion whether it came from the person or the pedalcycle/personal conveyance they were riding.

Damage sustained to a vehicle from vehicle-to-vehicle or vehicle-to-object impacts not associated with the nonmotorist or nonmotorist conveyance contact should be documented on the Exterior Vehicle form sketch page.

Example contact sketches shown below.

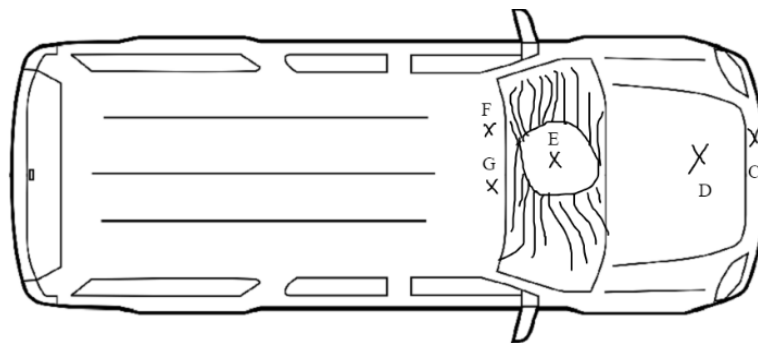


Figure 16. Top Contact Sketch Example

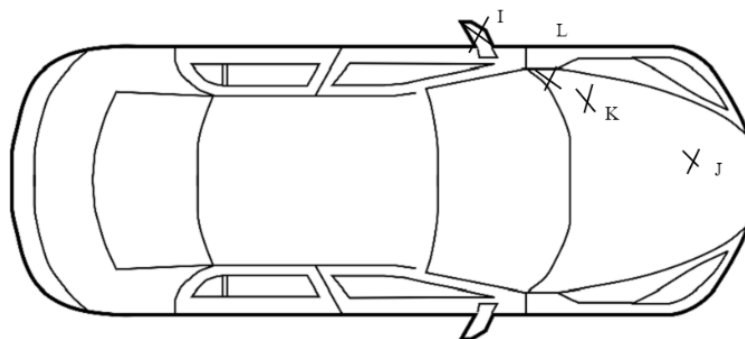


Figure 17. Top Contact Sketch Example

Nonmotorist Crash/Crash Analysis

Detection Distance From Nonmotorist

Element Values

0 to 500 Meters

Codes	Attributes
9998	Not Applicable
9999	Unknown

Remarks

The variable is the crash technician determined line-of-sight distance available to the driver (and/or vehicle sensors) at the moment when the nonmotorist could first be detected as a potential crash threat.

The nonmotorist is considered a crash threat when the person enters the case vehicle's travel lanes. For divided median roadways with more than two lanes, a nonmotorist becomes a threat when the person steps off the median into the travel lanes for the case vehicle's direction of travel, not during the time the person previously crossed the oncoming lanes. For non-divided roads, and two-lane roads, a nonmotorist becomes a threat when entering any of the travel lanes. A nonmotorist walking along the sidewalk would not be considered a threat until the person step off the curb into a travel lane. If the line-of-sight to the nonmotorist was obstructed by roadway geometry, a parked vehicle, or other fixed object, the detection distance would begin after the visual obstruction was cleared.

If the nonmotorist doesn't enter the roadway (i.e., vehicle departs the roadway and strikes nonmotorist on the sidewalk) or when no driver is present, all detection distance and reveal time variables should be coded Not Applicable.

Accuracy of Detection Distance From Nonmotorist**Element Values**

Codes	Attributes
0	0-5 Meters
1	5-10 Meters
2	10-15 Meters
3	15-20 Meters
4	20-30 Meters
5	Greater Than 30 Meters
7	Not Applicable
9	Unknown

Remarks

This element documents the error range of the Detection Distance calculation. Code the smaller of the two ranges if the calculated value falls between.

Example: The detection distance was determined to be 60 to 70 meters. The detection distance is coded as the middle of the range (65 m), and the range (10m) would be coded as 1 “5-10 Meters.”

Calculated Reveal Time**Element Values**

0.0 to 20.0 Seconds

Codes	Attributes
9998	Not Applicable
9999	Unknown

Remarks

This element is the time available determined by the crash technician to the driver (and/or vehicle automatic avoidance systems) from the initial point of detection of the nonmotorist as a threat until the point of contact with the vehicle.

In practice, this value will be equal to the Detection Distance divided by the Pre-Event Speed of the vehicle. The calculated reveal time does not factor in any avoidance braking performed by the driver, consider only a constant vehicle speed during approach to the impact.

Example: The detection distance was determined to be 65m, and the vehicle's pre-event speed was determined to be 48 kph (13.3 m/s). The calculated reveal time is 4.9 seconds.

If the nonmotorist doesn't enter the roadway, i.e., vehicle departs the roadway and strikes nonmotorist on the sidewalk, the detection distance and reveal time variables should be coded Not Applicable.

Accuracy of Calculated Reveal Time Estimate

Element Values

Codes	Attributes
0	0 - 0.5 Seconds
1	0.5 – 1.0 Seconds
2	1.0 – 1.5 Seconds
3	1.5 – 2.0 Seconds
4	2.0 – 2.5 Seconds
5	2.5 – 3.0 Seconds
6	3.0 – 3.5 Seconds
7	3.5 – 4.0 Seconds
8	4.0 – 4.5 Seconds
9	4.5 – 5.0 Seconds
10	Greater than 5.0 Seconds
98	Not Applicable
99	Unknown

Remarks

This variable documents the error range of the Reveal Time calculation. To determine this range, factor in the range of detection distance and the range of pre-event speed. Using the largest detection distance divided by slowest pre-event speed will provide the high end of the real time range, and using the shortest distance divided by fastest speed will provide the low end of the reveal time range. Code the smaller of the two ranges if the calculated value falls between.

Example: The detection distance range was determined to be between 60 and 70 meters. The vehicle's pre-crash speed was determined to be between 40 and 56 kph (11.1 and 15.5 m/s).

70 m divided by 11.1 m/s = 6.2 seconds.

60 m divided by 15.5 m/s = 3.9 seconds.

The accuracy range is then $6.2 - 3.9 = 2.3$ seconds. Coded as #4 (2.0 – 2.5 seconds).

Nonmotorist Form

Nonmotorist tab

Nonmotorist Number

Element Values

Pre-assigned by software

Remarks

To add a nonmotorist to the case, click on the green “+Add Nonmotorist” button, which will generate the nonmotorist form.

Nonmotorist numbers are assigned sequentially in the order they are entered.

Age**Element Values**

1 to 120 Years

Codes	Attributes
999	Unknown

Remarks

The nonmotorist's age at the time of the crash is recorded with respect to the last birthday.

Height**Element Values**

30 to 220 cm

Codes	Attributes
999	Unknown

Remarks

Enter actual height to nearest inch/cm (program automatically converts inches to cm). If the height is greater than 220 cm code as 220 cm and annotate the actual height.

Weight**Element Values**

2 to 275 kg

Codes	Attributes
999	Unknown

Remarks

Enter actual weight to nearest pound/kg. The appropriate units must be selected for the English or Metric system. If the weight is greater than 275 kg code as 275 kg and annotate the actual weight.

Sex**Element Values**

Codes	Attributes
1	Male
2	Female
3	Female, Pregnant - 1st Trimester (1st-3rd month)
4	Female, Pregnant - 2nd Trimester (4th-6th month)
5	Female, Pregnant - 3rd Trimester (7th-9th month)
6	Female, Pregnant - Trimester Unknown
9	Unknown

Remarks

Male

Female

This includes females who are not pregnant at the time of the crash or females with unknown pregnancy status.

Female — Pregnant - 1st Trimester (1st-3rd month)

Consists of women and girls who are reported to be pregnant and were in the first three months (weeks 1-12) of their pregnancy at the time of the crash.

Female — Pregnant - 2nd Trimester (4th-6th month)

Consists of women and girls who were reported to be pregnant and were in the second three months (weeks 13-27) of their pregnancy at the time of the crash.

Female — Pregnant - 3rd Trimester (7th-9th+ month)

Consists of women and girls who were reported to be pregnant and were in the final third of their pregnancy at the time of the crash. Pregnant females who were over nine months (weeks 28+) pregnant are also included.

Fetal Mortality**Element Values**

Codes	Attributes
0	No
1	Yes
8	Not Applicable

Remarks

A fetal fatality is indicated when fetal death occurs within 30 days of the crash. The death must have occurred as a consequence of the crash.

No

Used for a no response during the interview and when not reported. If the technician determines that it is unknown if there was a fetal fatality, then the correct response is No.

Yes

Used when a fetal death occurs within 30 days of the crash and as result of the crash.

N/A

Is a prefill when Sex is not equal to a pregnant female.

Race

Element Values

Codes	Attributes
1	White
2	Black or African American
3	Asian
4	Native Hawaiian or Other Pacific Islander
5	American Indian or Alaska Native
7	Other (Specify):
9	Unknown

Remarks

Note: Primary source is the interviewee; secondary sources include PCR, medical records, and other official documents. This variable is a “self-identification” by the occupant. Information can be obtained from various sources; however, it is not always an “official record.” When using secondary sources, the Race must be specifically mentioned in the document.

The concept of race as used by the U.S. Census Bureau reflects self-identification; it does not denote any clear-cut scientific definition of biological stock. Self-identification represents self-classification by people according to the race with which they identify themselves. For drivers with parents of different races who cannot provide a single response, use the race of the driver's mother; however, if a single response cannot be provided for the driver's mother, the first race reported by the driver is encoded.

Prioritization of data sources:

First, use interviewee data. Ask the interviewee what the driver considers their race to be. If the response does not clearly fit into one of the race categories, then use the information provided by the interviewee concerning the driver's nationality to select the correct element value.

Second, use the PCR. If race is given on the PCR and the PCR scheme is compatible with this variable, then use the PCR information.

In addition, the driver's name is not a reliable indicator of race and cannot be used when selecting the applicable element value for this variable.

Third, use official records (e.g., medical). If the data needed cannot be obtained from the interviewee and is not available or usable from the PCR, then use official records, if available, to determine the correct element attribute.

White

Is selected for drivers who consider themselves a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Black or African American

Is for drivers who consider themselves a person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

Asian

Is selected for drivers who consider themselves a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Native Hawaiian or Other Pacific Islander

Is selected for drivers who consider themselves a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

American Indian or Alaska Native

Is selected for drivers who consider themselves a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Other

Is selected for drivers who consider themselves to be of a race not described above. Use this attribute for descriptions such as: Eurasian, Cosmopolitan, inter-racial, etc.

Unknown

Is selected when the source available do not provide sufficient information to classify the driver's race.

Ethnicity

Element Values

Codes	Attributes
1	Hispanic or Latino
2	Not Hispanic or Latino
9	Unknown

Remarks

Note: Primary source is the interviewee; secondary sources include PCR, medical records, and other official documents. This variable is a “self-identification” by the occupant. Information can be obtained from various sources; however, it is not always an “official record.” When using secondary sources, the ethnicity must be specifically mentioned in the document.

The concept of ethnicity as used by the U.S. Census Bureau reflects self-identification; it does not denote any clear-cut scientific definition of biological stock. Self-identification represents self-classification by people according to the ethnicity with which they identify themselves. For drivers with parents of different ethnicity who cannot provide a single response, use the ethnicity of the driver's mother; however, if a single response cannot be provided for the driver's mother, the first ethnicity reported by the driver is encoded.

Prioritization of data sources:

First, use interviewee data. Ask the interviewee what the driver considers their ethnicity to be. If the response does not clearly fit into one of the ethnicity categories, then use the information provided by the interviewee concerning the driver's nationality/ethnic origin to select the correct element value.

Second, use the PCR. If ethnicity is given on the PCR and the PCR scheme is compatible with this variable, then use the PCR information.

If the PCR only says White/Caucasian, Black/Negro, or Other, then the PCR contains insufficient information for this variable. Additional information is required to determine the ethnicity. In addition, the driver's name is not a reliable indicator of ethnicity and cannot be used when selecting the applicable element value for this variable. For example, a name such as: Hector Smith, does not indicate the ethnicity (e.g., Hispanic, or Not Hispanic) since the person may or may not consider themselves to be of Hispanic descent.

Third, use official records (e.g., medical). If the data needed cannot be obtained from the interviewee and is not available or usable from the PCR, then use official records, if available, to determine the correct element attribute.

Hispanic or Latino

Is selected for drivers who consider themselves a person of Cuban, Mexican, Puerto Rico, South or Central American or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."

Not Hispanic or Latino

Is selected for drivers who consider themselves as not being of Cuban, Mexican, Puerto Rico, South or Central American or other Spanish culture or origin, regardless of race.

Unknown

Is selected when the source available do not provide sufficient information to classify the driver's ethnic origin.

Eyewear**Element Values**

Codes	Attributes
0	No
1	Eyeglasses/Sunglasses
2	Contact Lenses With Sunglasses
3	Contact Lenses
7	Other (Specify)
9	Unknown

Remarks

The nonmotorist must be wearing the glasses/lenses at the time of the crash.

No

No eyeglasses/sunglasses or contact lenses were worn by this nonmotorist.

Eyeglasses/sunglasses

If this nonmotorist was wearing eyeglasses or sunglasses at the time of impact.

Contact lenses

If this nonmotorist was wearing contact lenses at the time of impact.

Contact lenses with sunglasses

If the nonmotorist is wearing contact lenses with sunglasses at the time of impact.

Unknown

It is not known if the nonmotorist in this position was wearing eyewear at the time of impact.

Person Type

Element Values

Codes	Attributes
04	Occupant of a Nonmotor Vehicle Transport Device
05	Pedestrian
06	Bicyclist
07	Other Cyclist
10	Person in/on a Building
11	Person on Motorized Personal Conveyance
12	Person on Nonmotorized Personal Conveyance
13	Person on Motorized Personal Conveyance, Unknown if Motorized or Nonmotorized
19	Unknown Type of Nonmotorist

Remarks

A person in a crash must maintain PERSON TYPE during the crash. Once the unstabilized situation begins, a driver, passenger, or nonmotorist/non-occupant cannot change PERSON TYPE until the situation stabilizes.

If a person is entering or exiting a vehicle before the unstabilized situation begins, try to determine if the person has successfully changed type before control is lost. For example, a person attempting to get into a vehicle that begins to move would be classified as a pedestrian. Likewise, a passenger stepping off a bus as it begins to pull away would be classified as an occupant.

04 (Occupant of a Nonmotor vehicle Transport Device) -- nonmotorist occupant other than those using a pedalcycle or personal conveyance.

Examples include a person:

- in an animal-drawn conveyance (e.g., horse and carriage),
- riding on an animal (e.g., on horseback),
- on or in a trailer not attached to a motor vehicle, and
- riding in a railway vehicle (e.g., passenger train) or other road vehicle on rails (e.g., trolley).

05 (Pedestrian) -- person who is not an occupant of a transport device except for those in/on buildings (see 10 (Person in/on a Building) below). This includes pedestrians who are standing, walking, running, lying, etc. Also included here would be a person walking with the assistance of a cane, crutches, or other support device that requires at least one foot to be on the ground.

A person being carried by another person should be coded 05 (Pedestrian). A person pushing a transport device is also coded 05 (Pedestrian). If applicable, the person in/on the device being pushed is typed based on the device. For example, a person pushing another person in a

wheelchair would be a 05 (Pedestrian) and 08 (Person on Nonmotorized Personal Conveyance), respectively.

06 (Bicyclist) -- used for any nonmotorist occupant of a 2-wheeled vehicle propelled by pedaling. It includes bicycles solely propelled by human power and those that can also be propelled by a motor. This includes operator and passengers on bicycles and a person being pulled by a bicycle (e.g., in a wagon or bike trailer).

07 (Other Cyclist) -- used for any nonmotorist occupant of road vehicle propelled by pedaling other than a bicycle (unicycle, tricycle, pedal car, outdoor elliptical bike, handcycle, etc.). It includes pedalcycles solely propelled by human power and those that can be propelled by human power and/or a motor. This includes operator and passengers on the pedalcycle and a person being pulled by the pedalcycle (e.g., in a wagon or bike trailer).

Note: Occupants of motorized bicycles are coded here under 06 (Bicyclist) or 07 (Other Pedalcyclist); however, mopeds and motor scooter occupants are classified as motor vehicle occupants rather than nonmotorists. See vPIC BODY CLASS 104 (Motorcycle - Moped) and 012 (Motorcycle - Scooter), respectively.

08 (Person on a Personal Conveyance) -- used for any nonmotorist occupant of a device designed for low-speed transportation, personal mobility assistance, or recreation. These devices can be motorized or human powered, but not propelled by pedaling.

Examples include a person:

- standing or seated while riding a “kick” or e-scooter.
- riding on a skateboard or self-balancing board.
- using roller skates, inline skates, or powered skates.
- operating a wheelchair or mobility aid scooter.
- in, on, or using a rideable toy vehicle (car, wagon, motorcycle, etc.).
- on another recreational type of device such as skis, a sled, motorized cooler, etc.
- in or on a shopping cart.

NOTE: This excludes occupants of motor vehicles such as golf carts, low-speed vehicles (LSV), go-carts, small motorcycles (e.g., minibikes), motor scooters, and mopeds.

10 (Person in/on a Building) -- person inside of or on a building who is struck by a motor vehicle directly or by way of an object set in motion (e.g., crash debris as a vehicle penetrates a wall). 10 (Person in/on a Building) takes precedence over attributes “05-07 and 08.”

11 (Person on Motorized Personal Conveyance) -- used for any nonmotorist occupant of a device designed for low-speed transportation, personal mobility assistance, or recreation. These devices have a motor and, are not propelled by pedaling.

Examples include a person:

- standing or seated while riding a e-scooter.
- riding on a motorized skateboard or self-balancing board.
- using powered roller skates.
- operating a motorized wheelchair or mobility aid scooter.

- in, on, or using a motorized rideable toy vehicle (car, wagon, motorcycle, etc.).
- on another recreational type of device such as a motorized cooler, etc.

12 (Person on Nonmotorized Personal Conveyance) -- used for any nonmotorist occupant of a device designed for low-speed transportation, personal mobility assistance, or recreation. These devices do not have a motor and, are not propelled by pedaling.

Examples include a person:

- standing or seated while riding a nonmotorized “kick” scooter.
- riding on a nonmotorized skateboard or self-balancing board.
- using roller skates, or inline skates.
- operating a nonmotorized wheelchair or mobility aid scooter.
- in, on, or using a nonmotorized rideable toy vehicle (car, wagon, etc.).
- on another recreational type of nonmotorized device such as skis, a sled, etc.
- in or on a shopping cart.

13 (Person on Motorized Personal Conveyance, Unknown if Motorized or Nonmotorized) -- used when a personal conveyance as described in the preceding attributes is being used, however, it cannot be determined if the personal conveyance was motorized or not.

19 (Unknown Type of Nonmotorist) -- used when it cannot be determined which attribute describes the nonmotorist at the time they became involved in the crash. This would occur in situations where the details to make the determination are missing in the case material or are reported as unknown. An example would be if it is unknown if the person was on foot or on a skateboard at the time they were struck.

Housing Status**Element Values**

Codes	Attributes
01	Private Residence
02	Long Term Care Facility
03	Group Home
04	School or University Housing
05	Worker Housing
06	Homeless Shelter
07	Unsheltered (On street, in a vehicle, or other place not meant for habitation)
08	Drug Rehabilitation Facility
09	Correctional Facility
10	Psychiatric Facility
98	Other (Specify): _____
99	Unknown

Remarks

The address listed on the PCR or other official records (e.g., medical records) may be used to assist in housing status coding.

Nonmotorist Home ZIP Code**Element Values**

Five-Digit ZIP Code.

Codes	Attributes
2	Nonmotorist Not a Resident of U.S. or Territories
3	Unknown

Remarks

Range is a compilation of Sections 6 and 12 of the 2016 National 5-Digit ZIP Code & Post Office Directory, Volume 2, N-W.

Primary source is the PCR; secondary sources include interviewees, medical records, and other official documents.

Prioritization of data sources:

First, use the PCR. For the purposes of this variable, a nonmotorist is considered to reside at the address listed on the PCR. This address was most likely taken from the driver's license given to the police officer and/or from the licensing State's driver's license file.

Second, use official records (e.g., medical). If the driver's ZIP Code cannot be obtained from the PCR, then use official records, if available, to determine the correct ZIP Code.

Third, use internet. When part of an address is known, the internet can be utilized to search for a zip code.

During the process of obtaining the interview, or the associated medical records, technicians will discover, for some nonmotorists, a conflict between the address listed on the PCR and the current address. In conflict situations, always enter the ZIP Code for the address given on the PCR or on an official document before entering the ZIP Code from the information obtained during the interview.

2 Nonmotorist not a resident of U.S. or territories

Used when the address found on the PCR or obtained from medical records, or during the interview says that the nonmotorist resides at an address that has not been assigned a ZIP Code by the U.S. Post Office.

Crash Site ZIP Code**Element Values**

Five-Digit ZIP Code.

Codes	Attributes
-9999	Unknown

Remarks

Range is a compilation of Sections 6 and 12 of the 2016 National 5-Digit ZIP Code & Post Office Directory, Volume 2, N-W.

Enter the 5-digit ZIP Code of the location of the crash.

Nonmotorist-Related Factors**Element Values**

(Select all that apply)

Codes	Attributes
000	None Noted
008	Person With an Intellectual, Cognitive, or Developmental Disability
009	Construction/Maintenance/Utility Worker
010	Alcohol and/or Drug Test Refused
013	Motorized Wheelchair Rider
018	Mother of Dead Fetus/ Mother of Infant Born Post Crash
021	Overloading or Improper Loading of Vehicle With Passengers or Cargo
026	Following Improperly
037	Traveling on Prohibited Trafficways
040	Passing Through or Around Barrier
041	Failure to Observe Warnings or Instructions on Vehicles Displaying Them
042	Failure to Signal Intentions
051	Operator Inexperience
052	Unfamiliar With Roadway
053	Non-Motorist Previously Used a Motor Vehicle for Motion
054	Non-Motorist Attempting to Use a Motor Vehicle for Motion
055	Non-Motorist Attempting to Use or Previously Used a Motor Vehicle for Motion, Details Not Reported
056	Non-Motorist Flees Scene
057	Improper Tire Pressure
100	Using a Shared Micro Mobility Device

Vision Obscured By

Codes	Attributes
060	Rain, Snow, Fog, Smoke, Sand, Dust
061	Reflected Glare, Bright Sunlight, Headlights
062	Curve, Hill, or Other Design Features (including traffic signs, embankment)
063	Building, Billboard, Other Structures
064	Trees, Crops, Vegetation
065	Motor Vehicle (including load)
066	Parked Vehicle
067	Splash or Spray of Passing Vehicle
068	Inadequate Lighting System

Codes	Attributes
069	Obstructing Angles on Vehicle
070	Mirrors
072	Other Visual Obstruction

Skidding, Swerving, Sliding Due to to

Codes	Attributes
073	Severe Crosswind
074	Wind From Passing Truck
075	Slippery or loose Surface
076	Tire Blowout or Flat
077	Debris or Objects in Road
078	Ruts, Holes, Bumps in Road
080	Vehicle in Road
081	Phantom Vehicle
082	Pedestrian, Pedalcyclist, or Other Nonmotorist
083	Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road

Other Nonmotorist Factors:

Codes	Attributes
087	Police or Law Enforcement Officer
094	Emergency Medical Services Personnel
095	Fire Personnel
096	Tow Operator
097	Transportation (i.e., maintenance workers, safety service patrol operators, etc.)
090	Nonmotorist Pushing a Vehicle
091	Portable Electronic Devices
093	Nonmotorist Wearing Motorcycle Helmet
031	Default Code Used for Vehicle Numbering
101	Obstructed Sidewalk (for this person)
102	Motor Vehicle Occupant in Prior Crash
103	Road Rage

Remarks

Code information provided in the case material associated with this person.

The following lists those related factors that may be used for each PERSON TYPE:

Table 2. Valid Related Factors for each Person Type

Person Type	Valid Related Factors
04 (Occupant of a Nonmotor Vehicle Transport Device)	000, 008, 009, 010, 018, 021, 026, 031, 037, 040-042, 051, 052, 056, 057, 060-070, 072-078, 080-083, 087, 091, 093
05 (Pedestrian)	000, 008, 009, 010, 018, 031, 037, 041, 053-056, 060-067, 072, 087, 090, 091, 093-097, 101, 102, 103
06 (Bicyclist)	000, 008, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-068, 072-078, 080-083, 087, 091, 093, 100, 101, 103
07 (Other Pedalcyclist)	000, 008, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-068, 072-078, 080-083, 091, 093, 101, 103
10 (Person in/on a Building)	000, 008, 010, 013, 018, 026, 031, 087, 093
08 (Person on a Personal Conveyance)	000, 008, 010, 013, 018, 021, 026, 031, 037, 040-042, 051-057, 060-070, 072-078, 080-083, 087, 091, 093, 100, 101, 102, 103
19 (Unknown Type of Nonmotorist)	000, 008, 009, 010, 018, 021, 026, 031, 037, 040-042, 051-057, 060-068, 072-078, 080-083, 086, 087, 091, 093-097, 101

000 (None Noted) -- used when no applicable related factors are noted in the PCR for this person. If an officer gives an indication that circumstances in the crash are unknown, and no other applicable related factors can be associated with the nonmotorist, use code 000 (None Noted).

008 (Person With an Intellectual, Cognitive, or Developmental Disability) -- used when the case material identifies this person has an intellectual, cognitive, or developmental disability.

009 (Construction/Maintenance/Utility Worker) -- used when the case material identifies that this was a nonmotorist working with the highway department, a contractor, or a utility company at the time of the crash.

010 (Alcohol and/or Drug Test Refused) -- used when the officer notes that this person refused to take an alcohol and/or a drug test. Refusing a test does not necessarily mean that a test was not given. It is possible that the officer may have obtained a warrant or some other authorization to administer a test post-refusal. This includes when the person initially refuses and later consents. Because of this, it is possible to code 010 (Alcohol and/or Drug Test Refused) and also code an actual test with results for the same person.

013 (Motorized Wheelchair Rider) -- used when the case material identifies the nonmotorist is in a motorized wheelchair (personal conveyance). The PERSON TYPE for this person must be 08 (Person on a Personal Conveyance).

018 (Mother of Dead Fetus/Mother of Infant Born Post Crash) -- used when the case material identifies that this nonmotorist is the mother of a fetus that died in or as a result of this crash, or it is identified that this nonmotorist gave birth after the crash whether the child survives or not.

Note that for crash classification purposes, a fetus is considered to be part of a pregnant woman rather than a separate person and thus is not counted as a separate person in the crash.

021 (Overloading or Improper Loading of Vehicle with Passengers or Cargo) -- used when the case material describes more than one nonmotorist is occupying one seating position at the time of the crash. For example, overloading a bicycle with a passenger riding on the handlebars.

026 (Following Improperly) -- used when the case material identifies that this nonmotorist was following a bicyclist, motor vehicle, nonmotor vehicle transport device, or person on a personal conveyance too closely as to create a dangerous situation.

Examples:

- A nonmotorist (bicyclist, skateboard rider, rollerblader, etc.) who attempts to grab on to a motor vehicle that is in-transport.
- A bicyclist is following a vehicle so closely that as it passes or takes an avoidance maneuver around one vehicle going in the same direction as the bicyclist, the bicyclist strikes the rear of the vehicle it was attempting to pass or the rear of another vehicle in the adjacent lane also going the same direction.

037 (Traveling on Prohibited Trafficways) -- used when the case material identifies that this nonmotorist was traveling on an open trafficway that prohibited travel for their mode of transportation. This attribute can apply to any type of nonmotorist other than PERSON TYPE 10 (Person In/On a Building).

040 (Passing Through or Around Barrier) -- used when the case material identifies this nonmotorist was traveling through or around a “demarcated” area to be in a prohibited area (street closed for a parade, construction, sidewalk closed, etc.).

041 (Failure to Observe Warnings or Instructions on vehicles Displaying Them) -- used when the case material identifies this nonmotorist failed to heed warnings or follow instructions displayed on other vehicles.

Examples:

- A nonmotorist failed to follow construction instructions (e.g., arrows directing traffic mounted on a vehicle) or instructions on emergency vehicles (ambulances, fire trucks, police cars).
- A nonmotorist failed to observe right-turn warning on a truck or buses.
- A bicyclist failed to heed hazard lights on a disabled vehicle.
- A child failed to walk around the school bus arm that was extended into the travel lane that permitted the bus driver to see the child in the roadway.

042 (Failure to Signal Intentions) -- used when the case material identifies this nonmotorist failed to signal their intentions as required. This attribute includes a failure to signal by either lamp turn signal or hand.

051 (Operator Inexperience) -- used when the case material identifies this nonmotorist’s (horseback rider, skateboarder, bicyclist without training wheels, etc.) lack of experience contributed to their involvement. Should be expressed by officer and not presumed based on age.

052 (Unfamiliar With Roadway) -- used when the case material identifies this nonmotorist's (horseback rider, skateboarder, bicyclist without training wheels, etc.) lack of familiarity with the area/location where the crash occurred contributed to their involvement. Should be expressed by officer and not presumed based on age.

053 (NM Previously Used a Motor Vehicle for Motion) -- used when the case material identifies this nonmotorist was known to have been using a motor vehicle in-transport for the purpose of motion just prior to the onset of the unstabilized situation (e.g., "skitching"). This person may have been connected to the motor vehicle in-transport by any means (hand grasp, tow rope, etc.) and could be or could have been using a nonmotorist device (bicycle, skateboard, hoverboard, sled, etc.) while connected. It must be clear that the person was no longer connected at the onset of the unstabilized situation. Also see NONMOTORIST CONTRIBUTING CIRCUMSTANCES code 18 (Operating in Other Erratic, Reckless, Careless, or Negligent Manner) to see if it applies. Unintentionally losing connection to a motor vehicle must not be the onset of the unstabilized situation (see SEATING POSITION 56 [Appended to a Motor Vehicle for Motion]).

054 (NM Attempting to Use a Motor Vehicle for Motion) -- used when the case material identifies this nonmotorist was known to have been attempting to use a motor vehicle for the purpose of motion prior to the onset of the unstabilized situation (e.g., "skitching"). This person could have been attempting to connect to the motor vehicle in-transport by any means (hand grasp, tow rope, etc.) and could be or could have been using a nonmotorist device (bicycle, skateboard, hoverboard, sled, etc.) while attempting to make connection. It must be clear that the nonmotorist was attempting to connect and not already connected or previously connected at the onset of the unstabilized situation. Also see NONMOTORIST CONTRIBUTING CIRCUMSTANCES code 18 (Operating in Other Erratic, Reckless, Careless, or Negligent Manner) to see if it applies.

055 (NM Attempting to Use or Previously Used a Motor Vehicle for Motion, Details Not Reported) -- used when the case material identifies this nonmotorist was known to have been either previously using or attempting to use a motor vehicle in-transport for the purpose of motion prior to the onset of the unstabilized situation (Code 053 or Code 054); however, the case material do not provide enough information to specify one code or the other. It must be clear that the person was not connected to a motor vehicle in-transport at the onset of the unstabilized situation.

056 (Nonmotorist Flees Scene) -- used when the case material identifies this nonmotorist left the scene of a hit-and-run crash.

Examples:

- A bicyclist clipped by a vehicle that runs off the road and overturns, leaves the scene on their bike.
- A pedestrian is pushing an occupied wheelchair, which is struck by a motor vehicle. The pedestrian panics and flees the scene.

057 (Improper Tire Pressure) -- used when the case material identifies that improper tire pressure was present on one or more tires of a bicycle, nonmotor vehicle transport device, or personal conveyance in use by this nonmotorist. It signifies that improper tire pressure is not a defect, but rather the irresponsibility of this person.

100 (Using a Shared Micro Mobility Device) -- used when this nonmotorist was riding a device (bicycle, e-scooter, etc.) that was part of a micro mobility ride-share, transportation network company (TNC), mobility service provider (MSP), or similar, which connects paying customers seeking transportation with personal conveyances or bicycles via websites and mobile apps.

Vision Obscured By:

The following set of attributes identifies visual obstructions noted in the case material applicable to this nonmotorist.

060 (Rain, Snow, Fog, Smoke, Sand, Dust)

061 (Reflected Glare, Bright Sunlight or Headlights)

062 (Curve, Hill, or Other Design Features [including traffic signs, embankment])

063 (Building, Billboard or Other Structures) Utility poles and signs are included in this attribute.

064 (Trees, Crops or Vegetation)

065 (Motor Vehicle [including load])

Examples:

- A car stopped on the roadway.
- A tractor-trailer in-transport on the road.
- A school bus stopped for the purpose of loading and/or unloading children.

066 (Parked Vehicle)

067 (Splash or Spray of a Passing Vehicle)

068 (Inadequate Lighting System)

069 (Obstructing Angles on the Vehicle) -- used when the case material identifies obstructing angles on this person's vehicle. This attribute should not be confused with visual obstructions from other vehicles. (See 065 (Motor Vehicle [including load]) and 066 (Parked Vehicle).)

070 (Mirrors) -- used when the case material identifies that this nonmotorist's vision was obscured by any type of mirror.

072 (Other Visual Obstruction) -- used when the case material identifies that this nonmotorist's vision was obscured by something other than previously listed. For example, a trailer that has been left parked on the side of the road by a truck or vehicle.

Skidding, Swerving, Sliding Due to:

This set of attributes is applicable to a nonmotorist that attempted to avoid and/or lost control due to one of the following—and resulted in that nonmotorist's skidding, swerving, or sliding.

073 (Severe Crosswind) -- used when the case material identifies this nonmotorist's control loss was related to severe crosswinds.

074 (Wind from Passing Truck) -- used when the case material identifies this nonmotorist's control loss was related to winds produced by a passing truck.

075 (Slippery or Loose Surface) -- used when the case material identifies this nonmotorist's control loss was related to the surface composition of the roadway and/or the condition of that composition. Not to be used when the surface is slippery due to environment conditions such as rain, ice, or snow (see 083 (Ice, Snow, Slush, Water, Sand, Dirt, Oil or Wet Leaves on Road)).

Examples:

- A slippery surface that is old or worn resulting in loose gravel on the roadway.
- Blacktop that is slick as a newly paved surface.

076 (Tire Blowout or Flat) -- used when the case material identifies this nonmotorist's control loss was related to a tire blowout or flat.

077 (Debris or Objects in Road) -- used when the case material identifies this nonmotorist attempted to avoid or lost control as a result of debris in the road. Examples would include nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, barricades, etc.

078 (Ruts, Holes, Bumps in Road) -- used when the case material identifies this nonmotorist attempted to avoid or lost control as a result of a road surface anomalies such as ruts, holes, dips, or bumps.

080 (Vehicle in Road) -- used when the case material identifies this nonmotorist attempted to avoid or lost control as a result of another vehicle in the road. This includes both contact and non-contact vehicles that remain at the scene.

081 (Phantom Vehicle) -- used when the case material identifies this nonmotorist attempted to avoid or lost control as a result of a non-contact vehicle that left the scene as described by the police officer.

082 (Pedestrian, Pedalcyclist, or Other Nonmotorist) -- used when the case material identifies this nonmotorist attempted to avoid or lost control as a result of a pedestrian, a pedalcyclist, or other type of nonmotorist.

083 (Ice, Snow, Slush, Water, Sand, Dirt, Oil, Wet Leaves on Road) -- used when the case material identifies this nonmotorist's control loss was related to a substance on the roadway that caused the roadway to be slick, which may interfere with the traction of the vehicle. This attribute does not include part of the roadway composition. For cases involving roadway composition issues, see 075 (Slippery or loose Surface).

Other Nonmotorist Factors:

087 (Police or law enforcement officer) -- used when the case material identifies that this nonmotorist was a police or law enforcement officer working at the time of the crash. If it is unclear whether or not the officer was on duty, default to using code 087 (Police or law enforcement officer). The officer may be affiliated at the Federal, State, or local law enforcement level. This would also include military and park police, border patrol officers, and all other sworn law enforcement officers.

094 (Emergency Medical Services Personnel) -- used when the case material identifies that this person was described as emergency medical services (EMS) personnel.

095 (Fire Personnel) -- used when the case material identifies that this person was fire personnel.

096 (Tow Operator) -- used when the case material identifies that this person was an operator of a tow truck.

097 (Transportation (i.e., maintenance workers, safety service patrol operators, etc.)) -- used when the case material says this person was working to assist with detouring traffic, maintaining roadway damage, or a safety service patrol operator, etc.

090 (Nonmotorist Pushing a Vehicle) -- used when the case material identifies the nonmotorist was pushing a vehicle.

091 (Portable Electronic Devices) -- used when the case material identifies that this nonmotorist was using an electronic device (mobile phone, MP3 player, PDA, etc.) that was somehow related to the crash occurrence.

093 (Nonmotorist Wearing Motorcycle Helmet) -- used when the materials identify that this nonmotorist was wearing a motorcycle helmet. This can apply to a pedestrian, bicyclist, or other nonmotorist. For example, a pedestrian that previously was riding a motorcycle gets struck while still wearing their helmet.

031 (Default Code Used for Vehicle Numbering) -- used when it cannot be determined from the case material which vehicle hit the nonmotorist, and/or when it cannot be determined if debris is set in motion as the result of a vehicle-to-vehicle collision and subsequently produces a harmful event for this nonmotorist, and it cannot be determined from the case material which vehicle's debris hit this nonmotorist or which vehicle or debris caused the most significant injury.

101 (Obstructed Sidewalk (for this Person)) -- used when the case material says that a sidewalk was in the vicinity of the crash but was not available for use for this person because it was somehow obstructed. For example, the obstruction could be due to construction, snow or ice, people, or other objects preventing the use of the sidewalk.

102 (Motor Vehicle Occupant in Prior Crash) -- used when a pedestrian in this crash was a motor vehicle occupant in a prior crash.

Examples:

- A motorcycle rider stands in the roadway after having a crash. Another vehicle approaches the scene and strikes them in a second crash.
- A vehicle loses control and leaves the roadway, striking the guardrail. The driver exits the vehicle on the shoulder to evaluate the damage and is struck by a passing vehicle.

103 (Road Rage) -- used when the investigating officer says that this nonmotorist exhibited road rage behaviors. The officer must use the term "road rage" in describing this nonmotorist's behavior. Road rage can be indicated in the case material in a data element, as a violation/citation noting "road rage," or in the narrative.

Road rage is when a nonmotorist experiences extreme aggression or anger intending to cause harm to others. Note that a deliberate act that results in a harmful event is not considered an

unstabilized situation and thus is not a crash. A crash must have both an unstabilized situation (unintended event) and a harmful event that is separate from or beyond what was intended by the deliberate act. An example of road rage driving behavior by a nonmotorist resulting in a motor vehicle traffic crash includes:

- An angry driver gets out of their vehicle at a light with intent to injure another driver and gets struck accidentally by a third vehicle passing by.

Condition (Impairment) at Time of Crash**Element Values**

(Select all that apply)

Codes	Attributes
0	None/Apparently Normal
1	Ill, Blackout
2	Asleep or Fatigued
3	Walking With a Cane or Crutches, etc.
4	Paraplegic or in a Wheelchair
5	Impaired Due to Previous Injury
6	Deaf
7	Blind
8	Emotional (depressed, angry, disturbed, etc.)
9	Under the Influence of Alcohol, Drugs or Medication
10	Physical Impairment - No Details
96	Other Physical Impairment:
99	Unknown if Impaired

Remarks

This element attempts to identify any physical impairment to this nonmotorist who may have contributed to the cause of the crash.

00 (None/Apparently Normal) -- used when:

- When the case material make a positive statement that the person was apparently normal, or “none” was indicated on the PCR.
- When the case material do not indicate an impairment in an available field and not reporting an impairment in that field says 00 (None/Apparently Normal).
- When the investigating officer:
 - is limited in the number of factors that can be displayed, and
 - cannot select an impairment in addition to another factor relevant to the crash, and
 - some other factor is selected, and
 - no other indication of impairment exists in the case materials.

01 (Ill, Blackout) -- used when indicated in the case materials. Enter this attribute even if the source of the illness or loss of consciousness is alcohol or drug-related. Use this attribute if the driver or nonmotorist had fainted and/or seizures were identified.

02 (Asleep or Fatigued) -- used when indicated in the case materials. Also, use this attribute when the investigating officer says the person was drowsy or sleepy. Alcohol or other drugs may be the source of this impairment.

03 (Walking With a Cane or Crutches, etc.) -- used when the case material says that the driver or nonmotorist requires the assistance of a cane, walker, knee scooter, or crutches.

04 (Paraplegic or in a Wheelchair) -- used if this person is paraplegic or in a wheelchair. This includes motorized and nonmotorized wheelchairs and mobility aid scooters.

05 (Impaired Due to Previous Injury) -- used if the case material dictate this condition (e.g., if a person is in this crash subsequent to his/her involvement in a previous crash in which the person was injured). This attribute should be extremely rare.

06 (Deaf/Hard of Hearing) -- used when this person is deaf or hard of hearing. The case material may also use the term hearing-impaired.

07 (Blind/Low Vision) -- used when this person is blind or visually impaired.

08 (Emotional (Depressed, Angry, Disturbed, etc.)) -- used when the person is arguing with someone, is having a disagreement, is depressed, and/or is emotionally upset.

09 (Under the Influence of Alcohol, Drugs, or Medication) -- used when the investigating officer says that the person was under the influence of alcohol, drugs, or medication. This attribute excludes interpretation of test results by the Analyst/Coder.

10 (Physical Impairment - no details) -- used when the case material says a physical impairment existed but provide no further details about the impairment.

96 (Other Physical Impairment) -- used when the case material says that a physical impairment was involved but it isn't a listed attribute.

99 (Unknown if Impaired) -- used if the investigating officer states that the physical impairment of this person is unknown.

Police-Reported Alcohol Presence**Element Values**

Codes	Attributes
1	No Alcohol Present
4	Yes (alcohol present)
2	Not Reported
3	Unknown

Remarks

The phrase "alcohol present" means that the PCR says that the nonmotorist had consumed an alcoholic beverage. Presence is not an indication that alcohol was in any way a cause of the crash, even though it may have been. Finding opened or unopened alcoholic beverages in the vehicle does not by itself constitute presence.

No Alcohol Present

Used if the investigating officer's assessment (as reported on the PCR) is that no alcohol was present in the nonmotorist.

Yes alcohol present

Used if the police indicate alcohol presence in the nonmotorist via: (1) a specific data element on the PCR form, (2) the police charge the driver with DWI/DUI, (3) the police mention in the narrative section of the report that the nonmotorist had been drinking (or alcohol was present or in-volved), or (4) the PCR has a positive blood alcohol concentration (BAC) test result (BAC > .00).

Not reported

Used if no coded data block exists on the PCR and no other information is available. If a coded data block exists and left blank use this attribute.

Alcohol Test for Nonmotorist

Element Values

Codes	Attributes
1	Not Reported
2	Test Given
3	Test Not Given
4	Test Refused
5	Unknown if Tested
6	BAC Test Performed, Results Unknown

Remarks

No psychomotor (police observation of nonmotorist actions) test results are coded here. Also, be aware of preliminary test results. These preliminary tests, including an instrumented field screening test, indicate the presence of alcohol, but not necessarily the particular content level. Preliminary tests are designed to segregate candidates for further testing from those people where the suspected presence of alcohol is either nonexistent or too low for additional tests.

Test Performed

When a test for BAC is administered either by the police or at a treatment facility.

Test Refused

When the person refuses to voluntarily take a BAC test, and no subsequent test is given.

None Given

When no BAC test is administered.

BAC Test Performed, Results Unknown

When the BAC test has been administered, but the results are unknown. Selecting this attribute will automatically blank out the Test Result variable.

Unknown

Used when it is not known if a test was administered

Alcohol Test Results**Element Values**

Enter BAC

Codes	Attributes
3	None Given
4	Test Refused
6	Test Performed, Results Unknown
5	Unknown

Remarks

BAC measures, analytically, the mass of alcohol per unit volume of blood. The standard measure is expressed as the number of grams per deciliter (tenth of a liter) expressed as a decimal with no leading zero. (e.g., .05 = 50 mg/100 ml; .15 = 150 mg/100 ml = g/dL). A BAC test could be a blood, breath, or urine test. Note: Some States may report the BAC result as a percentage, such as .08 percent or .08%. If so, ignore the percentage and record as a g/dL number.

If the BAC was given on the PCR or subsequently added after the case was initiated, enter the reported value. In essence, if any BAC is obtained, enter the reported value. For example, a BAC of 117 mg/dl is coded as .117.

During autopsy, the medical examiner may draw vitreous humor that is fluid from the eye. Vitreous Humor is not considered blood and should not be used as measure for BAC level.

Source of Alcohol Test Result**Element Values**

Codes	Attributes
10	No BAC Test
0	No Alcohol Test Result
1	Police Reported
8	Not Applicable
3	Autopsy
5	Company Reported
4	Lay Coroner
2	Medical Record
7	Other (Specify)

Remarks

Enter source of data used to code the BAC. Examples include PCR and medical reports. Medical reports include autopsy report, ER report, discharge summary, nurse's notes, etc.

Police-reported

Used when the BAC information is obtained from any record associated with the police.

Medical Record

Used when the BAC information was obtained from any medical report (i.e., ER report, discharge summary, nurses' notes, etc.).

Other (Specify)

Used when the BAC information is obtained from some source other than those listed above. An example is a verbal BAC from an official source.

Police-Reported Other Drug Presence for Nonmotorist

Element Values

Codes	Attributes
1	No Other Drugs Present
3	Yes Other Drugs Present
7	Not Reported
2	Unknown

Remarks

These variables focus upon "other drugs." For these variables the word "drug" is defined in nonmedical terms. A "drug" is any chemical substance, natural or synthetic that, when taken into the human body, can impair the ability of the person to operate a motor vehicle safely. The word "other" in this phrase means all "drugs" except alcohol, nicotine, aspirin, and drugs administered post-crash. The term "drug" in the singular implies there may be more than one drug present.

No laboratory, no matter how modern its equipment or competent its staff, can identify all drugs that are currently abused. Add to this the fact that new drugs, both licit and illicit, become available every week, and it soon becomes evident that the capacity for drug abuse always stays ahead of the capacity for chemical drug detection. Even if the laboratory does have the capability of identifying a particular drug, it will require that the drug be present at a specific minimum concentration before it can conclude that a "real" chemical detection has occurred. This is referred to as the detection threshold, and it varies from drug to drug and from one chemical analytic method to another. Some analytic methods used by some laboratories to detect certain drugs do not actually seek to find the drug itself but look instead for a metabolite of the drug. A metabolite is a chemical breakdown product of the drug, and some drug metabolites can show up in as much as a week after use.

The phrase "other drug present" includes all prescription, over-the-counter medications, marijuana, as well as "illicit" substances (e.g., cocaine, heroin.). Also, "other drug present" means that the driver had ingested another drug prior to the crash, but it is not an indication that the drug usage was in any way the cause of the crash (or event), even though it may have been. Finding other drugs in the vehicle does not by itself constitute presence.

No other drug present

Used if the investigating officer's assessment (as reported on the PCR) is that no other drugs were present in the driver.

Yes other drug present

Used if the police indicate another drug presence in the driver via: (1) a specific data element on the PCR, or (2) the police mention in the narrative section of the report that the driver had ingested another drug.

Not reported

Used if no coded data block exists on the PCR and no other information is available. If a coded data block exists and left blank use this attribute.

Unknown

Used if other drug presence is indicated as unknown on the PCR. A growing number of police re-ports have blocks to check either positive or negative other drug presence. However, if a PCR has a provision for the investigating officer to respond "unknown presence," then use this attribute. In addition, use this attribute for hit-and-run drivers unless clear evidence to the contrary exists.

Note: The PCR must have a specific block on the PCR to report "Other Drug" presence, or it must be specifically mentioned in the narrative section. Some PCRs have a block labeled "Alcohol/Drugs." If "presence" is indicated, and it cannot be determined that was used (narrative, arrest/charged section, etc.), then assume alcohol presence. If the PCR says that a driver was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol-related or other drug-related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Other Drug Specimen Result for Nonmotorist

Element Values

Codes	Attributes
1	No Specimen Test Given
2	Drug Not Found =in Specimen
3	Drug Found in Specimen (Specify):
4	Specimen Test Given, Results Unknown or Not Obtained
5	Unknown if Tested

Remarks

If a medical, PCR, or other official source says that a certain drug was "screened for" or that it was "not detected", then you know that a specimen test was used. In addition, the presence of a measured quantity of an "other drug" means that a specimen test was given. The specimen used in the test that obtained the measurement could be blood, urine, or another specimen (e.g., nasal swab, saliva). Some drugs are tested using a particular type of specimen; others can be test-d in several ways. Technicians need to review toxicology (or other official) records carefully to determine which specimen or specimens were used for the driver's evaluation. Specimens are hierarchically ordered with a blood test taking preference over a urine test and urine over other.

Drug Not Found in Specimen

Used if it is known that the driver had at least one type of specimen tested for other drugs and the test results came back "negative."

Drug Found in Specimen, Specify

Used if it is known that the driver had at least one type of specimen tested for other drugs (excluding alcohol, nicotine, aspirin, and drugs administered post-crash) and that the driver had a positive test result. A positive test result is any measured quantity that exceeds the detection threshold of the laboratory that performed the test.

Specimen Test Given, Results Unknown or Not Obtained

Used if it is known that the driver had at least one type of specimen tested for other drugs, but the results of that test are unknown or not reported.

Unknown if Specimen Test Given

Used when it cannot be determined if the driver was administered a specimen test for other drugs. This attribute should also be selected if it is known that the driver received treatment at a medical facility, but the medical records have not been obtained.

Police Injury Severity (Police Rating)

Element Values

Codes	Attributes
0	O - No Injury
1	C- Possible Injury
2	B- Non-Incapacitating Injury
3	A- Incapacitating Injury
4	K - Killed
5	U -Injury, Severity Unknown
6	Died Prior to Crash
9	Unknown

Remarks

If the PCR contains a detailed description of the injuries but does not translate the injuries into the KABCO codes, use the police method for doing so. For example, injuries that are of an incapacitating nature are classified as "A," Non-incapacitating-evident injuries are classified as "B," and possible injuries are "C." Property damage only (i.e., no injury) is classified as "O." Injuries described in PCR narrative can NOT be used to supersede KABCOU.

Enter Injured, Severity Unknown if the PCR says a "U" or in any other way communicates the idea that the person was injured but the severity is unknown.

Enter Died Prior to Crash only if the police explicitly state the person died prior to the crash. This code is also used if the PCR says the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning. This code does not apply if the PCR specifically states that the cause of death is a result of crash-related injury, or that on-set occurred after the crash. Further clarification: this code applies if the PCR says that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, but is silent about the time of on-set and if on-set is the result of injuries sustained in the crash.

As a general rule, if the PCR is "blank" where the injury severity is assessed and the person was at the scene during the police investigation, enter No Injury (O). If the PCR is "blank" and the person was not present during the police investigation, enter Unknown. If the PCR does not provide enough information to apply this general rule, use the state-specific rules that follow to help determine an O or U coding.

U— Injury, Severity Unknown

Is used when the PCR says a "U" or in any other way communicates the idea that the person was injured but their severity is unknown.

Died Prior to Crash

Is only used if the police explicitly so indicate.

Police-Calculated Projected Speed at Impact**Element Values**

0 to 160 kph

Codes	Attributes
-9999	Unknown

Remarks

If the police determined a vehicle speed at impact, code the value to the nearest kph; otherwise, code unknown. Coded boxes on the PCR may be used.

Nonmotorist Device

Device Type

Element Values

Codes	Attributes
00	Not Applicable

Nonmotorist Vehicle Transport Devices

Codes	Attributes
01	Ridden Animal, Animal Drawn Conveyance, or Trailer

Pedalcycles

Codes	Attributes
03	Bicycle
04	Other Pedalcycle

Personal Conveyances

Codes	Attributes
05	Mobility Aid Device
06	Skates
07	Non-Self-Balancing Board (Skateboard)
08	Self-Balancing Board
09	Standing or Seated Scooter
97	Personal Conveyance, Other
98	Personal Conveyance, Unknown Type
99	Unknown Type of Nonmotorist

Remarks

This element describes the type of transport device operated by the nonmotorist.

A transport device is any device designed primarily for moving people 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. All devices included in the element are excluded from being motor vehicles and thus the occupants of these devices are nonmotorists.

00 (Not Applicable) is populated by the data entry system for the pedestrian types in PERSON TYPE of 05 (Pedestrian) and 10 (Person in/on a Building).

Nonmotor Vehicle Transport Devices

01 (Ridden Animal, Animal Drawn Conveyance, or Trailer) -- used for any type of animal being ridden at the time of the crash, any device being drawn by an animal (wagon, carriage, sleigh, etc.), or a person on or in a trailer not attached to a motor vehicle.

02 (Railway Vehicle or Road Vehicle on Rails) -- used for railway trains (e.g., passenger train) and road vehicles operated on rails (e.g., trolley, streetcar).

Pedalcycles

03 (Bicycle) -- 2-wheeled road vehicle propelled by pedaling. It includes bicycles solely propelled by a human power and those that may also have a motor.

04 (Other Pedalcycle) -- used for any road vehicle propelled by pedaling other than a bicycle (unicycle, tricycle, pedal car, outdoor elliptical bike, handcycle, etc.). It includes pedalcycles solely propelled by a human power and those that can be propelled by human power and/or a motor.

Personal Conveyances

05 (Mobility Aid Device) -- device designed to assist people with their independence and includes both human and motor-powered devices. Some resemble three-wheeled scooters; others small four-wheel carts; still others look like a typical human-powered wheelchair.

06 (Skates) -- wheeled device with separate units, one for each foot of the operator to stand on. These can be human powered or motorized. Examples include roller skates, inline skates, electric skates (e-skates).

07 (Non-Self-Balancing Board (Skateboard)) -- wheeled device without handlebars or center column where the operator can stand on a foot platform. These devices are statically stable, have two trucks and at least three wheels, and can be human powered or motorized.

08 (Self-Balancing Board) -- wheeled device that may or may not have a center column with a handlebar where the operator can stand on a foot platform or foot pegs and manipulate the device with controls on the center column or by weight distribution. These devices are not statically stable, have one or two wheels in parallel, and are motorized.

09 (Standing or Seated Scooter) -- wheeled device with a center column and handlebar where the operator can stand on a foot platform. These devices may or may not have a permanent or removable posted seat. These devices have two or three wheels and can be human powered or motorized.

97 (Personal Conveyance, Other) -- device other than the specific attributes above. Examples include skis, a sled, toy car, toy wagon, other rideable toy or novelty item, baby carriage, etc.

98 (Personal Conveyance, Unknown Type) -- used when it is known the device was a personal conveyance, but the specific type cannot be identified.

Unknown

99 (Unknown Type of Nonmotorist) is populated when PERSON TYPE is 19 (Unknown Type of Nonmotorist).

Nonmotorist Device Motorization

Element Values

Codes	Attributes
0	Not Applicable
1	Not Motorized
2	Motorized
3	Unknown if Motorized
9	Unknown Type of Nonmotorist

Remarks

This element describes the motorization of the device operated by the nonmotorist.

This element includes devices that rely on full motor engagement for propulsion or partial motor engagement in addition to human power and includes electrical, chemical, or combustion energy motors. This element identifies presence of a motor and not the motor's use for propulsion at the time of the crash.

It is collected for NONMOTORIST DEVICE TYPE element values 03 (Bicycle), 04 (Other Pedalcycle), 05 (Mobility Aid Device), 06 (Skates), 07 (Non-Self-Balancing Board (Skateboard)), 08 (Self-Balancing Board), 09 (Standing or Seated Scooter), 97 (Personal Conveyance, Other), and 98 (Personal Conveyance, Unknown Type).

0 (Not Applicable) is populated by the data entry system for the PERSON TYPE element values of 05 (Pedestrian), 10 (Person In/On a Building), and 04 (Occupant of a Nonmotor Vehicle Transport Device).

1 (Not Motorized) -- used when the case material identifies that an applicable device had no motor.

2 (Motorized) -- used when the case material identifies that an applicable device had a motor.

3 (Unknown/Not Reported if Motorized) -- used when case material lacks sufficient detail to be able to identify if an applicable device had a motor or not.

9 (Unknown Type of Nonmotorist) is populated when PERSON TYPE is 19 (Unknown Type of Nonmotorist).

Number of Wheels**Element Values**

Codes	Attributes
0	None
1	One
2	Two
3	Three
4	Four
5	Five
6	Six or more
9	Unknown

Remarks

Front Reflectors**Element Values**

(Select all that apply)

Codes	Attributes
0	None
1	Clear/White
2	Red
3	Amber
8	Other
9	Unknown

Remarks

Reflectors are objects that reflect light and is intended to show the nonmotorist's position to other road users.

This element includes only reflectors affixed to the transport device being used by the nonmotorist and NOT clothing or other reflective objects being worn or held by the nonmotorist. Reflective objects being worn or carried are captured in the Preventative Clothing element.

The plane of the reflector (front, rear, or side) is determined based on the plane the reflector is most visible from.

Examples:

- Reflectors in bicycle spokes or wheels are considered side reflectors
- Reflectors located on pedals are considered rear reflectors

Rear Reflectors**Element Values**

(Select all that apply)

Codes	Attributes
0	None
1	Clear/White
2	Red
3	Amber
8	Other
9	Unknown

Remarks

Reflectors are objects that reflect light and is intended to show the nonmotorist's position to other road users.

This element includes only reflectors affixed to the transport device being used by the Nonmotorist and NOT clothing or other reflective objects being worn or held by the nonmotorist. Reflective objects being worn or carried are captured in the Preventative Clothing element.

The plane of the reflector (front, rear, or side) is determined based on the plane the reflector is most visible from.

Examples:

- Reflectors in bicycle spokes or wheels are considered side reflectors
- Reflectors located on pedals are considered rear reflectors

Side Reflectors**Element Values**

(Select all that apply)

Codes	Attributes
0	None
1	Clear/White
2	Red
3	Amber
8	Other
9	Unknown

Remarks

Reflectors are objects that reflect light and is intended to show the nonmotorist's position to other road users.

This element includes only reflectors affixed to the transport device being used by the Nonmotorist and NOT clothing or other reflective objects being worn or held by the nonmotorist. Reflective objects being worn or carried are captured in the Preventative Clothing element.

The plane of the reflector (front, rear, or side) is determined based on the plane the reflector is most visible from.

Examples:

- Reflectors in bicycle spokes or wheels are considered side reflectors
- Reflectors located on pedals are considered rear reflectors

Front Lighting**Element Values**

(Select all that apply)

Codes	Attributes
0	None
1	Clear/White
2	Red
3	Amber
8	Other
9	Unknown

Remarks

Lighting is illumination affixed to nonmotorist transport devices whose main purpose is to improve visibility to other road users.

This element includes only lighting affixed to the transport device being used by the nonmotorist and NOT lights on clothing or other objects (i.e., flashlights) being worn or held by the nonmotorist. Lights being worn or held by the nonmotorist are captured in the Preventive Lighting element.

The plane of the lighting (front or rear) is determined based on the plane the lighting is most visible from.

Rear Lighting**Element Values**

(Select all that apply)

Codes	Attributes
0	None
1	Clear/White
2	Red
3	Amber
8	Other
9	Unknown

Remarks

Lighting is illumination affixed to nonmotorist transport devices whose main purpose is to improve visibility to other road users.

This element includes only lighting affixed to the transport device being used by the nonmotorist and NOT lights on clothing or other objects (i.e., flashlights) being worn or held by the nonmotorist. Lights being worn or held by the nonmotorist are captured in the Preventive Lighting element.

The plane of the lighting (front or rear) is determined based on the plane the lighting is most visible from.

Lights Flashing**Element Values**

Codes	Attributes
0	None
1	Front
2	Rear
3	Front and Rear
9	Unknown

Remarks

Flashing lights work by emitting short bursts of high-intensity light.

The plane of the lighting (front or rear) is determined based on the plane the lighting is most visible from.

Pedestrian Bicyclist Crash Typing Overview

The development of effective countermeasures to prevent pedestrian and bicyclist crashes is often hindered by State crash files that contain insufficient details about these types of crashes. To remedy this issue, Pedestrian and Bicycle Crash Typing was developed to describe the pre-crash actions of the parties to better define the sequence of events and precipitating actions leading to crashes between motor vehicles and pedestrians or bicyclists. In 2010 NHTSA adopted parts of a stand-alone crash typing application called Pedestrian and Bicycle Crash Analysis Tool (PBCAT) into its two records-based data collection systems, the Fatality Analysis Reporting System (FARS) and the National Automotive Sampling System (NASS) General Estimates System (GES). In 2016 the Crash Report Sampling System (CRSS) replaced the legacy NASS-GES. The investigation-based studies followed suit and used PBCAT in the CIREN Pedestrian Pilot Study (2019-2020) and the Vulnerable Road User In-Depth Crash Investigation Study (VICIS) (2022-2023). The Crash Investigation Sampling System began using PBCAT when nonmotorist crashes were added to the sample design in 2024. PBCAT was developed by the Federal Highway Administration's contractor, the University of North Carolina Highway Safety Research Center (UNC-HSRC).

Pedestrian and bicycle crash typing is accomplished through a software application referred to as the Ped/Bike Wizard. The wizard is embedded within the electronic data entry system among a larger set of elements collected for nonmotorists. The wizard is automatically presented when entering data for a nonmotorist with a certain person type from the set of seven nonmotorist person types collected. The Ped/Bike Wizard application is only presented for the following person types:

- Pedestrian
- Bicyclist
- Other Cyclist
- Person on Motorized Personal Conveyance
- Person on Nonmotorized Personal Conveyance
- Person on Motorized Personal Conveyance, Unknown if Motorized or Nonmotorized

In this data entry process, one must analyze each crash and recognize the appropriate selection in the hierarchy established by the sequence of screens in the wizard. Entry of the data elements and attributes in this manual is structured in the Ped/Bike Wizard such that the selections available on each successive entry screen are limited by the prior choices. Consequently, while all data elements collected by the Ped/Bike Wizard are defined in this manual, the wizard entry screens are limited by the previous selection at each step through the application.

Pedestrian Crash Type Wizard

Pedestrian Crash Type

Element Values

Crash Group 100 (Unusual Circumstances)

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

Crash Group 200 (Backing Vehicle)

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

Crash Group 310 (Working or Playing in Roadway)

Codes	Attributes
311	Working in Roadway
312	Playing in Roadway

Crash Group 350 (Unique Midblock)

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

Crash Group 340 (Bus Stop-Related)

Codes	Attributes
341	Transit Bus Stop-Related
342	School Bus Stop-Related

Crash Group 400 (Walking/Running Along Roadway)

Codes	Attributes
410	Walking/Running Along Roadway With Traffic - From Behind
420	Walking/Running Along Roadway With Traffic - From Front
430	Walking/Running Along Roadway Against Traffic - From Behind
440	Walking/Running Along Roadway Against Traffic - From Front
459	Walking/Running Along Roadway - Direction/Position Unknown

Crash Group 460 (Driveway Access/Driveway-Access-Related)

Codes	Attributes
461	Motorist Entering Driveway
465	Motorist Exiting Driveway or Alley
469	Driveway Crossing - Other/Unknown

Crash Group 500 (Waiting to Cross)

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

Crash Group 600 (Pedestrian in Roadway - Circumstances Unknown)

Codes	Attributes
610	Standing in Roadway
620	Walking in Roadway
313	Lying in Roadway

Crash Group 720 (Multi-Threat/Trapped)

Codes	Attributes
710	Multi-Threat
730	Trapped

Crash Group 740 (Dash - Run, No Visual Obstruction Noted/Dart-Out - Visual Obstruction Noted)

Codes	Attributes
741	Dash – Run, No Visual Obstruction Noted
742	Dart-Out – Visual Obstruction Noted

Crash Group 750 (Crossing Roadway - Vehicle Not Turning)

Codes	Attributes
760	Pedestrian Failed to Yield
770	Motorist Failed to Yield

Crash Group 790 (Crossing Roadway - Vehicle Turning)

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

Crash Group 800 (Non-Trafficway)

Codes	Attributes
830	Non-Trafficway - Parking Lot
890	Non-Trafficway - Other/Unknown

Crash Group 910 (Crossing Expressway)

Codes	Attributes
910	Crossing an Expressway

Crash Group 990 (Other/Unknown - Insufficient Details)

Codes	Attributes
900	Other - Unknown Location
680	Not at Intersection - Other/Unknown
690	At Intersection - Unknown/Other

Crash Group 100 (Unusual Circumstances)

CRASH GROUP: 100 (Unusual Circumstances) -- used when the crash a disabled vehicle, emergency vehicle, vehicle in pursuit, play vehicle, driverless vehicle, or collision with a vehicle that was in a prior vehicle-into-vehicle impact; the pedestrian/vehicle impact was dispute-related; the pedestrian was leaning against or pushing a vehicle; the pedestrian lost control; the vehicle lost control; or the pedestrian was in a collision as a result of other unusual circumstances (e.g., the pedestrian collided with an object set in motion by an in-transport motor vehicle).

If the crash involves any unusual crash circumstance types 120, 130, 140, 150, or 190, select the first one that applies. If this crash involves any of the unusual vehicle types or vehicle actions (e.g., Type 220, 230, 240, or 250) select the first one that applies in this order: 240 (Emergency Vehicle-Related), 230 (Disabled Vehicle-Related), 220 (Driverless Vehicle), 250 (Play Vehicle-Related).

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

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

140 (Vehicle into Vehicle or Vehicle into Object) -- used when the pedestrian was in the crash as a result of a vehicle-into-vehicle or vehicle-into-object event.

Examples:

- Vehicle 1 strikes Vehicle 2 that is parked against a curb. This impact propels the parked vehicle into a pedestrian on a sidewalk.
- Vehicle 1 is disabled in the roadway as part of a previous crash. Pedestrians are standing around Vehicle 1. Vehicle 2 strikes one end of the disabled Vehicle 1, which causes Vehicle 1 to strike a pedestrian in the roadway.
- Vehicle 1 strikes a deer in the roadway. The deer is propelled into a jogger on the shoulder.

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

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

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

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

230 (Disabled Vehicle-Related) -- used when the pedestrian was in a collision with a vehicle while near, next to, or pushing a disabled or inoperative vehicle (including a vehicle that had been in a previous crash). For vehicles in a previous crash, it is not necessary to know the damage severity. Note: Crashes involving pedestrians standing near tow trucks responding to the disabled vehicle are also included in this crash type.

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

250 (Play Vehicle-Related) -- used when the pedestrian was in a collision with a vehicle while riding a play vehicle that was not a bicycle (skates, scooter, wagon, sled, etc.). Excludes people in handicap scooters or wheelchairs.

Crash Group 200 (Backing Vehicle)

CRASH GROUP: 200 (Backing Vehicle) -- used when the pedestrian was in a collision with a vehicle that was backing up with a driver at the controls at any type of location.

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

212 (Backing Vehicle - Driveway Access) -- used when the pedestrian was within the trafficway on a sidewalk, shared-use path, or driveway access and was in a collision with a vehicle that was backing with a driver at the controls. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access.

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

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

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

Crash Group 310 (Working or Playing in Roadway)

CRASH GROUP: 310 (Working or Playing in Roadway) -- used when the pedestrian was working or playing in the roadway.

311 (Working in Roadway) -- used when the pedestrian is working in the roadway when in a collision with a vehicle. This includes work activities associated with the construction and

maintenance for the trafficway, utility work within the roadway, enforcement work (e.g., directing traffic), or other activities that require the pedestrian to be present in the roadway (e.g., refuse worker). It does not include pedestrians (such as a package/mail delivery worker) who are entering/exiting a vehicle in the roadway or crossing the roadway.

312 (Playing in Roadway) -- used when the pedestrian is playing in the roadway when in a collision with a vehicle. For this attribute to apply, the pedestrian should be playing in the roadway prior to vehicle's appearance. This does not include a pedestrian on a play vehicle [see 250 (Play Vehicle-Related)] and does not include a pedestrian that enters the roadway into the path of the vehicle (e.g., to retrieve a ball). See 741 (Dash - Run, No Visual Obstruction Noted) and 742 (Dart-Out - Visual Obstruction Noted).

Crash Group 340 (Bus Stop-Related)

CRASH GROUP: 340 (Bus Stop-Related) -- used when the pedestrian was in a collision with a vehicle while crossing/walking to a bus or a bus stop or while waiting at a bus stop. This Crash Group also applies to pedestrians that are struck by buses or other vehicles or with any movement, activity, or interaction that is related to the bus stop. The pedestrian does not have to intend to be a passenger on the bus or have previously been a passenger on the bus.

341 (Transit Bus Stop-Related) -- used when there is a transit bus (city bus) present at a marked transit bus stop at the time of the crash. This attribute applies to the pedestrian's interaction that is related to the transit bus stop with a collision occurring as a result of that interaction. Examples may include a pedestrian that is struck by an oncoming vehicle while crossing in front of a stopped transit bus, going to/from a marked transit bus stop, or while waiting at a marked transit bus stop.

342 (School Bus Stop-Related) -- used when the pedestrian's interaction is related to a school bus stop with a collision occurring as a result of that interaction. This attribute can be used whether a school bus is present or not. Examples may include a pedestrian that is struck by an oncoming vehicle while crossing in front of a stopped school bus, going to/from a school bus stop, or while waiting at a school bus stop.

Crash Group 350 (Unique Midblock)

CRASH GROUP: 350 (Unique Midblock) -- used when the crash was associated with a vendor truck, mailbox, or other roadside pedestrian "destination" that was not a bus, or the pedestrian was in a collision with a vehicle while entering or exiting a parked vehicle.

320 (Entering/Exiting Parked or Stopped Vehicle) -- used when the pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. Note: This does not include crashes involving a disabled vehicle [see 230 (Disabled Vehicle-Related)] or pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.

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

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

Crash Group 400 (Walking/Running Along Roadway)

CRASH GROUP: 400 (Walking/Running Along Roadway) -- used when the pedestrian was walking or running in or adjacent to the roadway (travel lane) within the trafficway boundaries. This also includes situations where the person's action/intent was walking or running along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on cell phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, or median but excludes a person in a driveway access-related crash [see Crash Group 460 (Driveway Access/Driveway Access Related)].

410 (Walking/Running Along Roadway with Traffic - From Behind) -- used when the pedestrian was walking/running in or adjacent to the roadway (travel lane) within the trafficway boundaries, facing in the same direction as the flow of traffic, and was in a collision where the vehicle was coming from behind the pedestrian.

420 (Walking/Running Along Roadway with Traffic - From Front) -- used when the pedestrian was walking/running in or adjacent to the roadway (travel lane) within the trafficway boundaries, facing in the same direction as the flow of traffic, and was in a collision where the vehicle was coming from the front of the pedestrian.

430 (Walking/Running Along Roadway Against Traffic - From Behind) -- used when the pedestrian was walking/running in or adjacent to the roadway (travel lane) within the trafficway boundaries, facing in the opposite direction from the flow of traffic, and was in a collision where the vehicle was coming from behind the pedestrian.

440 (Walking/Running Along Roadway Against Traffic - From Front) -- used when the pedestrian was walking/running in or adjacent to the roadway (travel lane) within the trafficway boundaries, facing in the opposite direction from the flow of traffic, and was in a collision where the vehicle was coming from the front of the pedestrian.

459 (Walking/Running Along Roadway - Direction/Position Unknown) is used when the pedestrian was walking/running in or adjacent to the roadway (travel lane) within the trafficway boundaries, but there is insufficient information to determine whether the pedestrian was in the roadway or adjacent to the roadway or traveling with or against the flow of traffic at the time of the crash.

Crash Group 460 (Driveway Access/Driveway-Access-Related)

CRASH GROUP: 460 (Driveway Access/Driveway-Access-Related) -- used when the pedestrian was crossing or in a driveway access. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access. This also applies when the pedestrian is crossing or standing at the edge of the travel lane in front of the driveway access or is next to the driveway access when in a collision with a vehicle either entering or exiting the driveway.

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

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

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

Crash Group 500 (Waiting to Cross)

CRASH GROUP: 500 (Waiting to Cross) -- used when the pedestrian was standing on the curb or near the roadway edge waiting to cross the roadway when in a collision with a vehicle. If the pedestrian began to cross the roadway, stopped, and then was in a collision with a vehicle, see Crash Groups 720 (Multi-Threat/Trapped), 740 (Dash - Run, No Visual Obstruction Noted /Dart-Out - Visual Obstruction Noted), 750 (Crossing Roadway - Vehicle Not Turning), 790 (Crossing Roadway - Vehicle Turning).

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

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

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

Crash Group 600 (Pedestrian in Roadway - Circumstances Unknown)

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

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

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

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

Crash Group 720 (Multi-Threat/Trapped)

CRASH GROUP: 720 (Multi-Threat/Trapped) -- used when the pedestrian entered the roadway in front of standing or slowing traffic, the traffic started moving then the pedestrian was in a collision with a vehicle traveling in the same direction as the stopped traffic (Multi-Threat).

Note: Multi-Threats may occur at non-signalized locations. This also applies when the pedestrian entered the roadway on a green signal and was trapped when the signal changed (trapped).

710 (Multi-Threat) -- used when the pedestrian entered the traffic lane in front of stopped or slowing traffic and was in a collision with a vehicle traveling in the same direction as the stopped or slowing traffic. If there is a traffic signal present and the light changes while the person is crossing, see 730 (Trapped).

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

Crash Group 740 (Dash - Run, No Visual Obstruction Noted/Dart-Out - Visual Obstruction Noted)

CRASH GROUP: 740 (Dash - Run, No Visual Obstruction Noted/Dart-Out - Visual Obstruction Noted) -- used when the pedestrian either ran into the roadway in front of a motorist whose view of the pedestrian was not obstructed or walked or ran into the road and was in a collision with a vehicle where the driver's view of the pedestrian was blocked until an instant before impact.

741 (Dash - Run, No Visual Obstruction Noted) -- used when the pedestrian ran into the roadway and was in a collision with a vehicle and there is no mention in the case material that the driver's view of the pedestrian was obstructed. The case material should state that the pedestrian ran.

742 (Dart-Out - Visual Obstruction Noted) -- used when the pedestrian walked or ran into the roadway and was in a collision with a vehicle where the driver's view of the pedestrian was blocked until an instant before impact. A dart-out can only occur if there is some documented visual obstruction (e.g., parked vehicle, building, or vegetation).

Crash Group 750 (Crossing Roadway - Vehicle Not Turning)

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

At Intersection

760 (Pedestrian Failed to Yield) -- used when the pedestrian was in a collision with a vehicle while crossing the roadway (not an expressway). The motorist had the right-of-way and was traveling or intending to travel straight through. The officer does not have to make the specific statement "failed to yield." This code should not be used if any of the following apply: 710 (Multi-Threat), 730 (Trapped), 741 (Dash - Run, No visual obstruction noted), or 742 (Dart-Out - visual obstruction noted). If it is NOT apparent which party had the right-of-way, then select "Other/Unknown."

770 (Motorist Failed to Yield) -- used when the pedestrian had the right-of-way and was in a collision while crossing the roadway (not an expressway) with a vehicle that was traveling or intending to travel straight through. This code should not be used if any of the following apply: 710 (Multi-Threat), 730 (Trapped), 741 (Dash - Run, No visual obstruction noted), or 742 (Dart-Out - visual obstruction noted). If it is NOT apparent which party had the right-of-way, then select "Other/Unknown."

Not at Intersection

760 (Pedestrian Failed to Yield) -- used when the pedestrian was in a collision with a vehicle while crossing the roadway (not an expressway). The vehicle was traveling or intending to travel straight through, and the officer identified that the pedestrian failed to yield. The officer does not have to make the specific statement "failed to yield." For example, a person crossing in the path

of a vehicle outside of an intersection and not in a crosswalk would be failing to yield. The motorist would have the right-of-way in this circumstance.

770 (Motorist Failed to Yield) -- used when the pedestrian was in a collision with a vehicle while crossing the roadway (not an expressway). The vehicle was traveling or intending to travel straight through, and the officer identified that the motorist failed to yield. The officer does not have to make the specific statement “failed to yield.” For example, a person crossing in a mid-block crosswalk has the right-of-way unless the crossing is signalized, and the officer identifies that the motorist had the right-of-way.

Crash Group 790 (Crossing Roadway - Vehicle Turning)

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

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

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

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

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

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

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

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

Crash Group 800 (Non-Trafficway)

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

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

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

Crash Group 910 (Crossing Expressway)

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

Crash Group 990 (Other/Unknown - Insufficient Details)

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

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

680 (Not at Intersection - Other/Unknown) -- used when the crash occurred at a Not at Intersection location, but the actions of the pedestrian prior to the collision with the vehicle do not otherwise fit any previously described circumstances or it cannot be determined.

690 (At Intersection - Other/Unknown) -- used when the pedestrian/vehicle collision occurred at an intersection, but the actions of the pedestrian prior to the collision cannot be determined, do not otherwise fit any previously described circumstances, or it cannot be determined who failed to yield.

Pedestrian Crash Group

Element Values

Codes	Attributes
100	Unusual Circumstances
200	Backing Vehicle
310	Working or Playing in Roadway
340	Bus Stop-Related
350	Unique Midblock
400	Walking/Running Along Roadway
460	Driveway Access/Driveway-Access-Related
500	Waiting to Cross
600	Pedestrian in Roadway - Circumstances Unknown
720	Multi-Threat/Trapped
740	Dash – Run, No Visual Obstruction Noted/Dart-Out – Visual Obstruction Noted
750	Crossing Roadway - Vehicle Not Turning
790	Crossing Roadway - Vehicle Turning
800	Non-Trafficway
910	Crossing Expressway
990	Other/Unknown - Insufficient Details

Remarks

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

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

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

340 (Bus Stop-Related) -- used when the pedestrian was in a collision with a vehicle while crossing/walking to a bus or a bus stop or while waiting at a bus stop. This Crash Group also applies to pedestrians that are struck by buses or other vehicles, or with any movement, activity, or interaction that is related to the bus stop. The pedestrian does not have to intend to be a passenger on the bus or have previously been a passenger on the bus.

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

400 (Walking/Running Along Roadway) -- used when the pedestrian was standing, walking, or running in or adjacent to the roadway (travel lane) within the trafficway boundaries. This also includes situations where the person’s action/intent was walking or running along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on cell phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, or median but excludes a person in a driveway access-related crash [see 460 (Driveway Access/Driveway-Access-Related)].

460 (Driveway Access/Driveway-Access-Related) -- used when the pedestrian was crossing or in a driveway access. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access. This also applies when the pedestrian is crossing in front of the driveway access at the edge of the travel lane.

500 (Waiting to Cross) -- used when the pedestrian was standing on the curb or near the roadway edge waiting to cross the roadway when in a collision with a vehicle. If the pedestrian began to cross the roadway, stopped, and then was in a collision with a vehicle, see Crash Groups 720 (Multi-Threat/Trapped), 740 (Dash - Run, No visual obstruction noted/Dart-Out - visual obstruction noted), 750 (Crossing Roadway - Vehicle Not Turning), 790 (Crossing Roadway - Vehicle Turning).

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

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

740 (Dash - Run, No Visual Obstruction Noted/Dart-Out - Visual Obstruction Noted) -- used when the pedestrian either ran into the roadway in front of a motorist whose view of the pedestrian was not obstructed or walked or ran into the road and was in a collision with a vehicle where the driver's view of the pedestrian was blocked until an instant before impact.

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

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

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

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

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

Pedestrian Crash Location

Element Values

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

Remarks

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

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

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

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

9 (Unknown/Insufficient Information) -- used when there is insufficient information to determine where the person was located. See Pedestrian Crash Location Flowchart Unknown/Insufficient Information.

Pedestrian Position

Element Values

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

Remarks

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

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

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

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

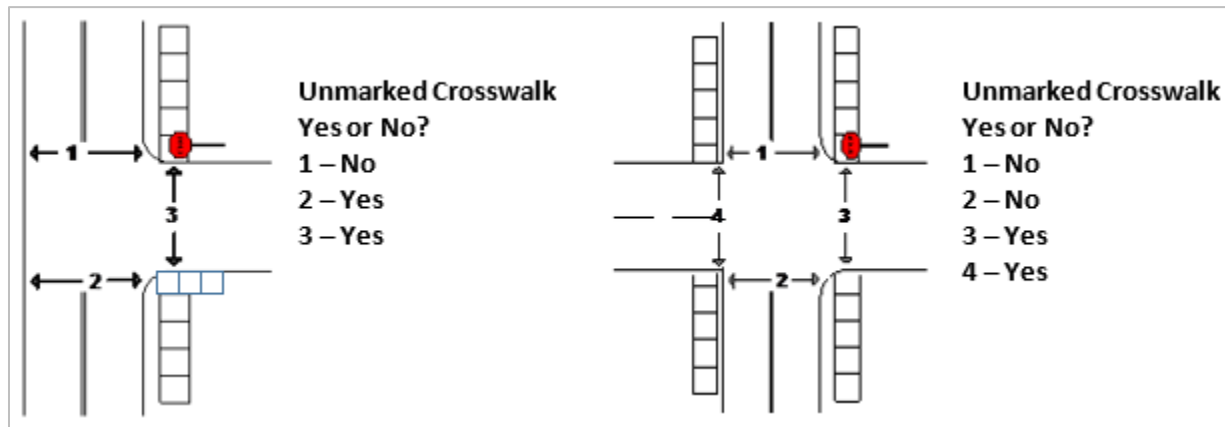


Figure 18. Unmarked Crosswalk Example A and B

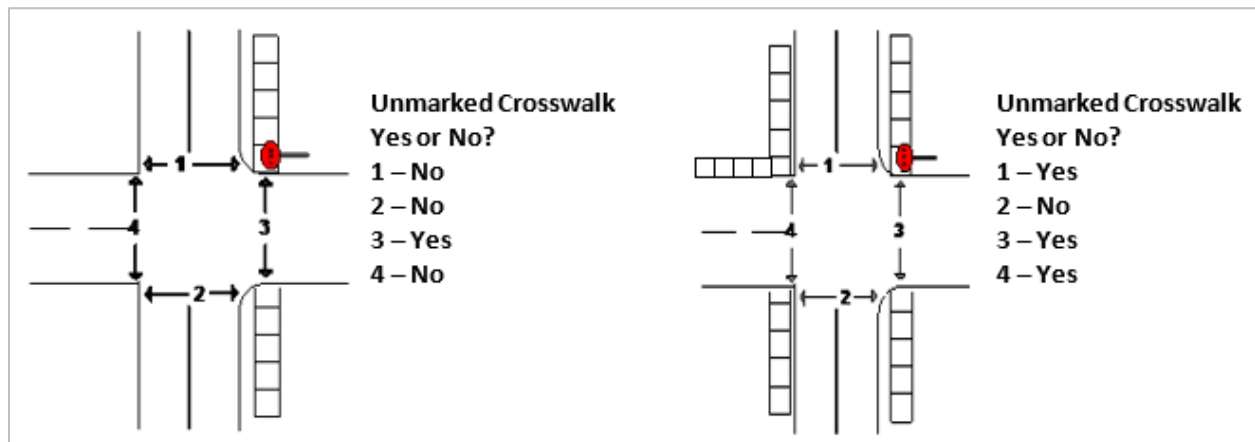


Figure 19. Unmarked Crosswalk Example C and D

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

4 (Paved Shoulder/Bicycle Lane/Parking Lane) -- used when the person is on the paved shoulder, bicycle lane, or parking lane parts of a trafficway. A bicycle lane is a bikeway adjacent to travel lanes that has been designated for preferential or exclusive use by pedalcyclists through striping, signage, or pavement markings. This attribute excludes pedestrians and people on a personal conveyance in a bicycle lane in an intersection (i.e., use 1 (Intersection Area)). For shoulders, if it is unknown if the shoulder was paved or unpaved, then default to 9 (Other/Unknown).

5 (Sidewalk/Shared-Use Path/Driveway Access) -- used when person is within the trafficway on a sidewalk, shared-use path, or driveway access. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access.

6 (Unpaved Right-of-Way) -- used when the person is in an area within the trafficway where there is no improved surface (e.g., no pavement). Examples include grass medians, unpaved shoulders, and roadside locations like the space between the curb and the sidewalk. See 9

(Other/Unknown) for paved medians. If it is unknown if the location was paved or unpaved, then default to 9 (Other/Unknown).

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

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

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

Pedestrian Initial Direction of Travel**Element Values**

Codes	Attributes
1	Northbound
2	Eastbound
3	Southbound
4	Westbound
9	Not Derived/Unknown Initial Direction of Travel

Remarks

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

This data element is not applicable when - Crash Location - Pedestrian equals 3 (Not at Intersection), 4 (Non-Trafficway Location), or 9 (Unknown/Insufficient Information).

9 (Not Derived/Unknown Initial Direction of Travel) is applicable when the pedestrian is at or near an intersection (- Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)). This value is applied by the system when - Pedestrian Scenario equals 99 (Unknown/Insufficient Information), any of “d - other” scenarios are selected, or any of the “c - Approach Direction Unknown” scenarios are selected. This value is applied because the pedestrian is not approaching or traveling (standing, working, playing lying, etc.); the pedestrian is traveling/approaching from a known direction, but the travel/approach direction is something other than the possible attributes (e.g., Northeast), or the travel direction of the pedestrian relative to the vehicle is unknown.

Motorist Initial Direction of Travel**Element Values**

Codes	Attributes
1	Northbound
2	Eastbound
3	Southbound
4	Westbound
9	Unknown Initial Direction of Travel

Remarks

This data element is not applicable when Crash Location - Pedestrian equals 3 (Not at Intersection), 4 (Non-Trafficway Location), or 9 (Unknown/Insufficient Information).

9 (Unknown Initial Direction of Travel) is applicable when the pedestrian is at or near an intersection (Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)) and used when the motorist's initial direction of travel is unknown (i.e., unknown if northbound, southbound, eastbound, westbound).

Motorist Maneuver**Element Values**

Codes	Attributes
1	Left Turn
2	Right Turn
3	Straight through
9	Unknown Motorist Maneuver

Remarks

This data element is not applicable when Crash Location - Pedestrian equals 3 (Not at Intersection), 4 (Non-Trafficway Location), or 9 (Unknown/Insufficient Information).

9 (Unknown Motorist Maneuver) is applicable when the pedestrian is at or near an intersection Crash Location - Pedestrian equals 1 (At Intersection) or 2 (Intersection-Related)) and used when the motorist's maneuver is unknown (i.e., unknown if motorist traveling straight through, motorist turning right, or motorist turning left).

Leg Intersection**Element Values**

Codes	Attributes
1	Nearside
2	Far Side
9	Unknown/None of the Above

Remarks

Requires the user to select the correct leg of the intersection where the crash occurred. The choices regardless of the motorist's maneuver will always be "Nearside" and "Far side."

This data element is not applicable when Crash Location - Pedestrian equals 3 (Not at Intersection), 4 (Non-Trafficway Location), or 9 (Unknown/Insufficient Information).

1 (Nearside) -- used when the crash occurred as the motorist was approaching or entering the intersection.

2 (Far Side) -- used when the crash occurred as the motorist was exiting or leaving the intersection.

9 (Unknown/None of the Above) -- used when it is unknown if the crash occurred as the motorist was approaching or entering the intersection (Nearside) or exiting or leaving the intersection (far side).

Pedestrian Scenario**Element Values**

Codes	Attributes
1a	Pedestrian Within Crosswalk Area, Traveled From Motorist's left.
1b	Pedestrian Within Crosswalk Area, Traveled From Motorist's right.
1c	Pedestrian Within Crosswalk Area, Approach Direction Unknown.
1d	Pedestrian Within Crosswalk Area, Other
2a	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Left.
2b	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Right.
2c	Pedestrian Outside Crosswalk Area, Approach Direction Unknown.
2d	Pedestrian Outside Crosswalk Area, Other
3a	Pedestrian Within Crosswalk Area, Within Crosswalk Area, Traveled From Motorist's Left.
3b	Pedestrian Within Crosswalk Area, Within Crosswalk Area, Traveled From Motorist's Right.
3c	Pedestrian Within Crosswalk Area, Approach Direction Unknown.
3d	Pedestrian Within Crosswalk Area, Other
4a	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Left.
4b	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Right.
4c	Pedestrian Outside Crosswalk Area, Approach Direction Unknown.
4d	Pedestrian Outside Crosswalk Area, Other
5a	Pedestrian Within Crosswalk Area, Within Crosswalk Area, Traveled From Motorist's Left.
5b	Pedestrian Within Crosswalk Area, Within Crosswalk Area, Traveled From Motorist's Right.
5c	Pedestrian Within Crosswalk Area, Approach Direction Unknown.
5d	Pedestrian Within Crosswalk Area, Other
6a	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Left.
6b	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Right.
6c	Pedestrian Outside Crosswalk Area, Approach Direction Unknown.
6d	Pedestrian Outside Crosswalk Area, Other
7a	Pedestrian Within Crosswalk Area, Approach Direction Same as Motorists.
7b	Pedestrian Within Crosswalk Area, Approach Direction Opposite Motorists.
7c	Pedestrian Within Crosswalk Area, Approach Direction Unknown.
7d	Pedestrian Within Crosswalk Area, Other
8a	Pedestrian Outside Crosswalk Area, Approach Direction Same as Motorists.
8b	Pedestrian Outside Crosswalk Area, Approach Direction Opposite Motorists.
8c	Pedestrian Outside Crosswalk Area, Approach Direction Unknown.
8d	Pedestrian Outside Crosswalk Area, Other

Codes	Attributes
9a	Pedestrian Within Crosswalk Area, Within Crosswalk Area, Traveled From Motorist's left.
9b	Pedestrian Within Crosswalk Area, Within Crosswalk Area, Traveled From Motorist's right.
9c	Pedestrian Within Crosswalk Area, Approach Direction Unknown.
9d	Pedestrian Within Crosswalk Area, Other
10a	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Left.
10b	Pedestrian Outside Crosswalk Area, Traveled From Motorist's Right.
10c	Pedestrian Outside Crosswalk Area, Approach Direction Unknown.
10d	Pedestrian Outside Crosswalk Area, Other
11a	Pedestrian Within Crosswalk Area, Approach Direction Same as Motorists.
11b	Pedestrian Within Crosswalk Area, Approach Direction Opposite Motorists.
11c	Pedestrian Within Crosswalk Area, Approach Direction Unknown.
11d	Pedestrian Within Crosswalk Area, Other
12a	Pedestrian Outside Crosswalk Area, Approach Direction Same as Motorists.
12b	Pedestrian Outside Crosswalk Area, Approach Direction Opposite Motorists.
12c	Pedestrian Outside Crosswalk Area, Approach Direction Unknown.
12d	Pedestrian Outside Crosswalk Area, Other
99	Unknown/Insufficient Information

Remarks

This data element is not applicable when Crash Location - Pedestrian equals 3 (Not at Intersection), 4 (Non-Trafficway Location), or 9 (Unknown/Insufficient Information).

(See Scenario Diagrams on following pages)

99 (Unknown/Insufficient Information) is populated in this element when Motorist Initial Direction of Travel, Motorist Maneuver, or Intersection Leg is coded as "unknown." This represents circumstances where it is unknown or there is insufficient information to establish the travel direction of the vehicle (i.e., Northbound, Southbound, Eastbound, Westbound), the movement of the vehicle (i.e., motorist traveling straight through, motorist turning right, or motorist turning left), or to establish if the crash occurred on the near (approach) side or far side of the intersection.

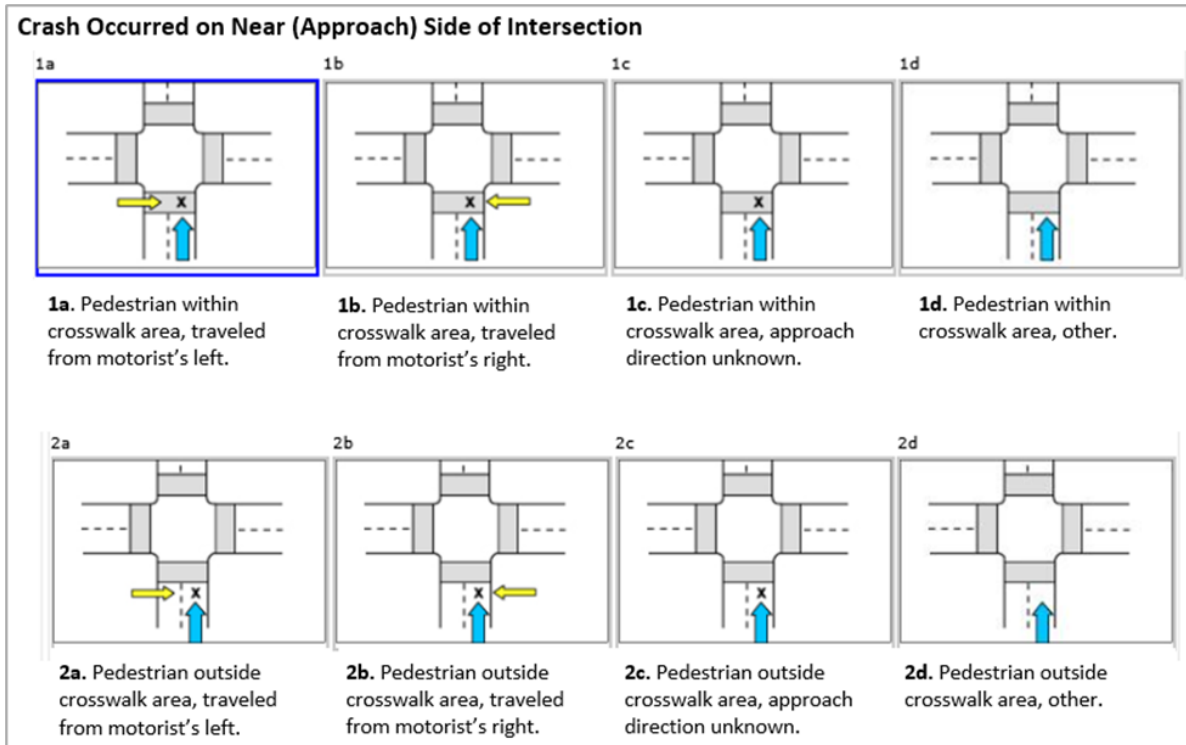


Figure 20. Pedestrian Crash Types 1a-2d

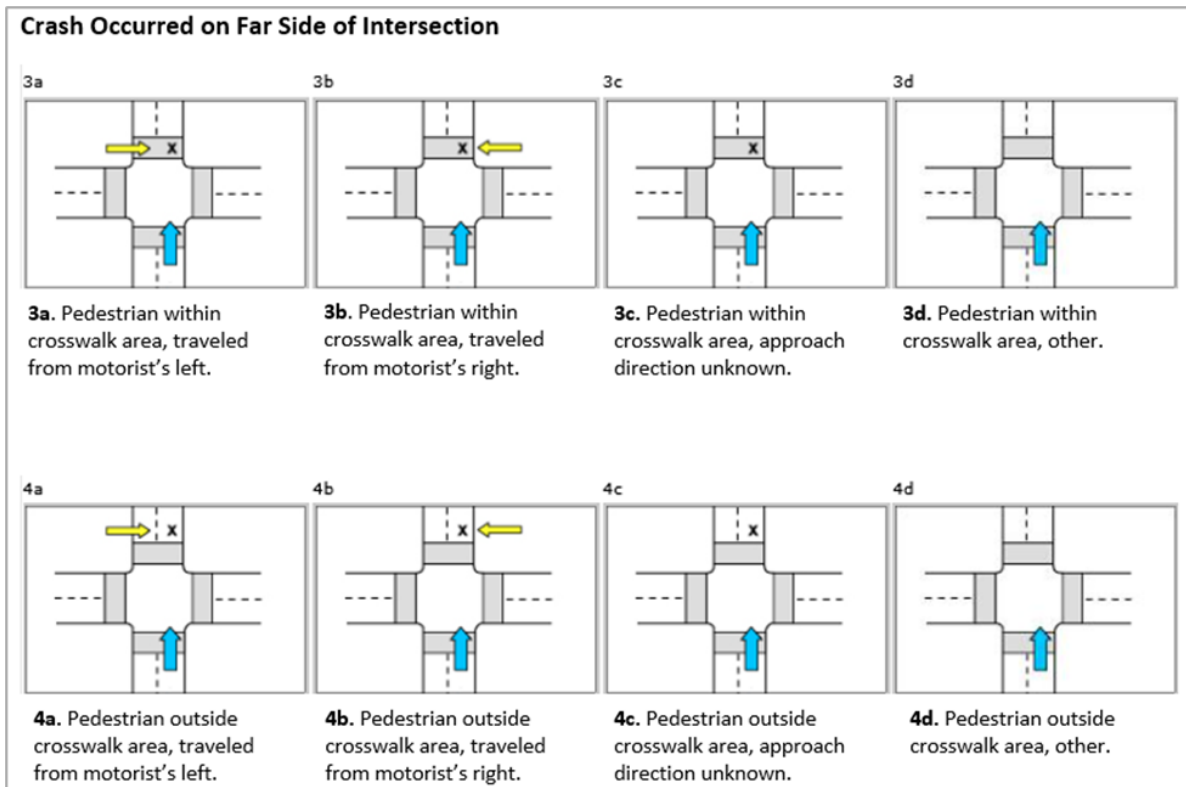


Figure 21. Pedestrian Crash Types 3a-4d

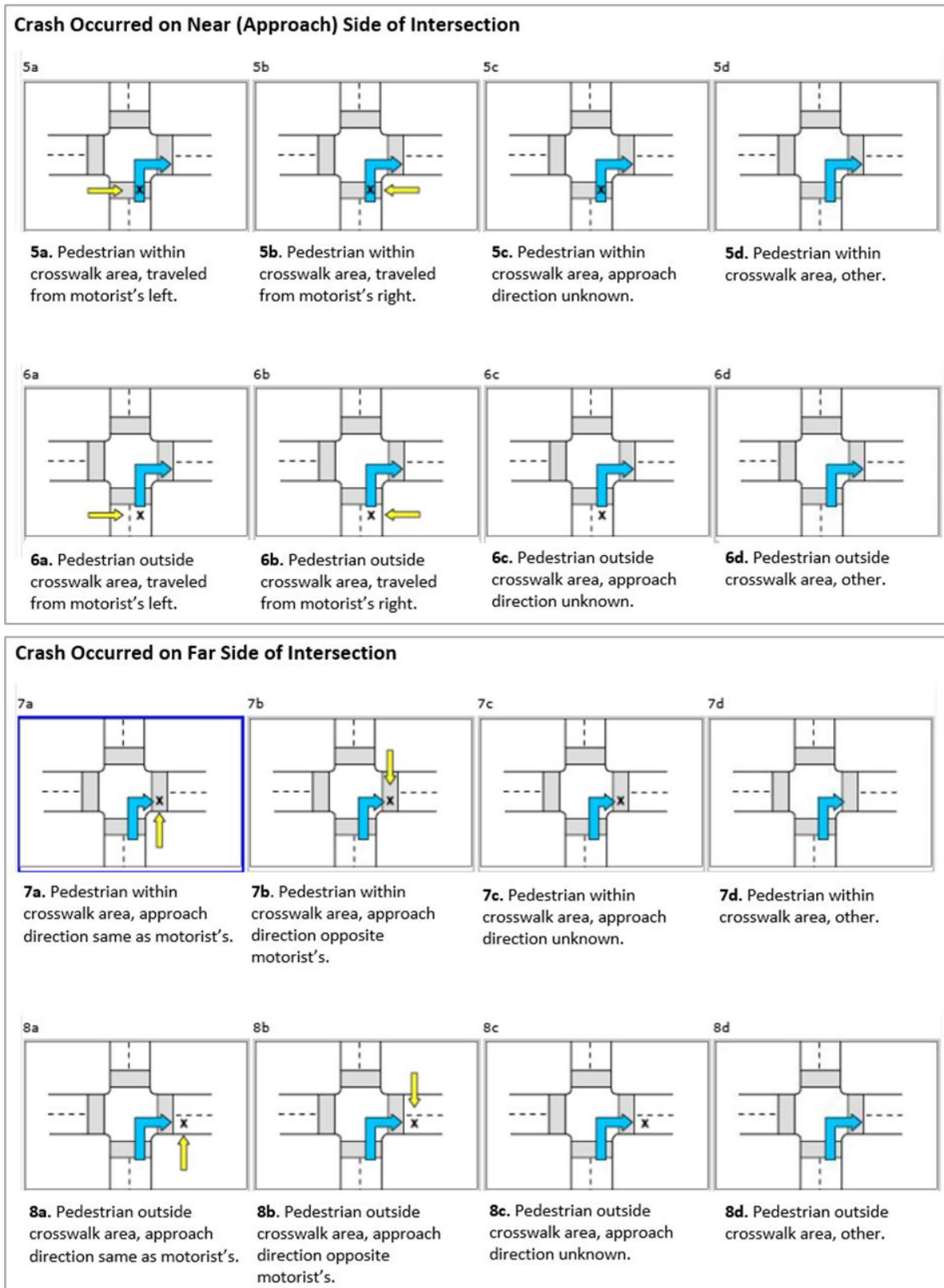


Figure 22. Pedestrian Crash Types 5a-8d

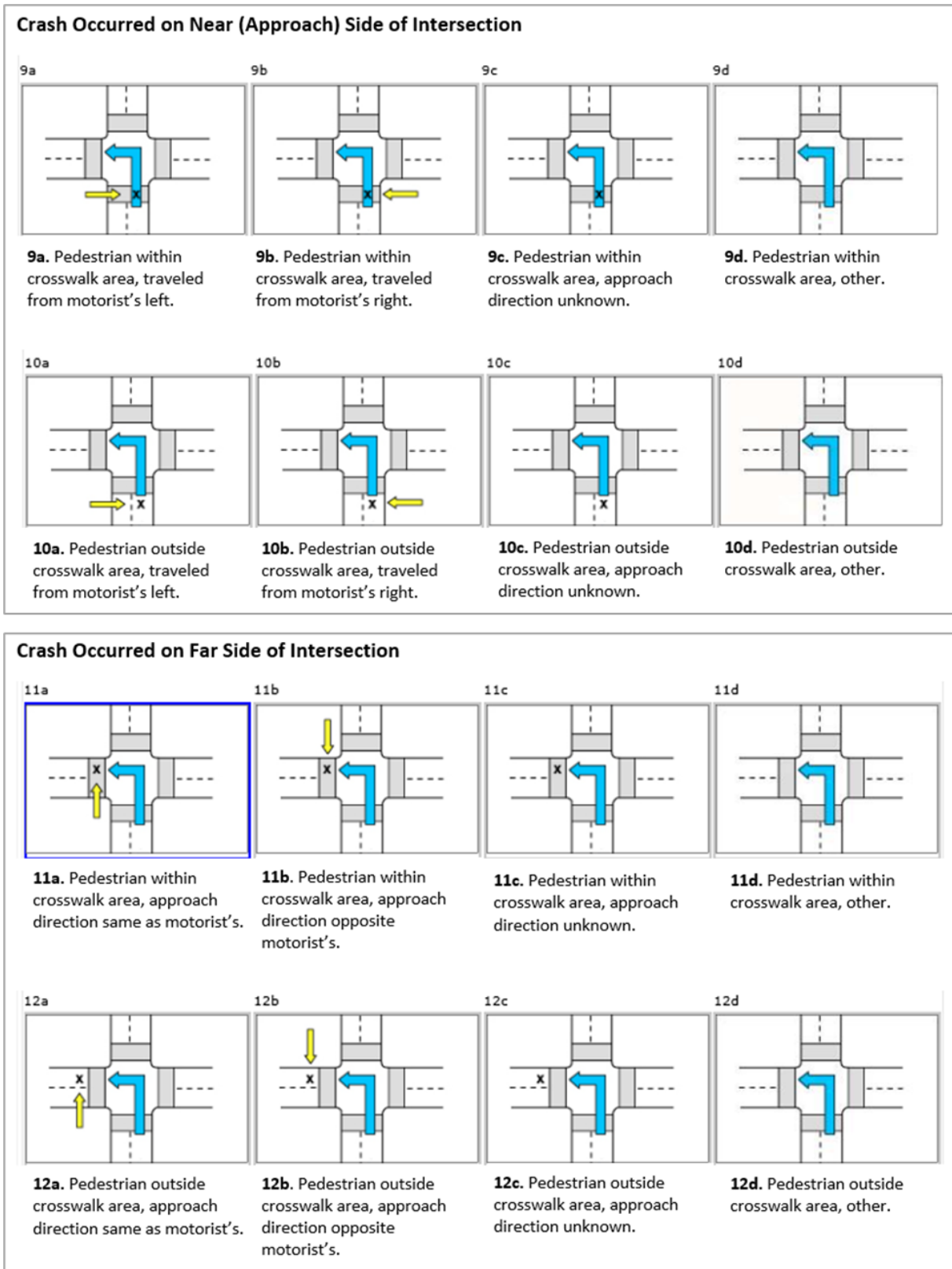


Figure 23. Pedestrian Crash Types 9a-12d

Bicycle Crash Type Wizard

Bicycle Crash Type

Element Values

Initial Approach Path - Crossing Paths or Parallel Paths

CRASH GROUP: Loss of Control/Turning Error (110)

Loss of Control

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

Initial Approach Path - Crossing Paths

CRASH GROUP: Loss of Control/Turning Error (110)

Turning Error

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

Drive/Ride-Out/Through

CRASH GROUP: Motorist Failed to Yield - Sign-Controlled Intersection (140)

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

CRASH GROUP: Bicyclist Failed to Yield - Sign-Controlled Intersection (145)

Codes	Attributes
142	Bicyclist Ride-Out - Sign-Controlled Intersection
144	Bicyclist Ride-Through - Sign-Controlled Intersection
147	Multi-Threat - Sign-Controlled Intersection

CRASH GROUP: Motorist Failed to Yield - Signalized Intersection (150)

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

CRASH GROUP: Bicyclist Failed to Yield - Signalized Intersection (158)

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

Subgroup: Bicyclist Failed to Clear

Codes	Attributes
156	Bicyclist Failed to Clear - Trapped
157	Bicyclist Failed to Clear - Multi-Threat
159	Bicyclist Failed to Clear - Unknown

CRASH GROUP: Crossing Paths - Other Circumstances (190)

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

Initial Approach Path - Parallel Paths

Motorist Turned or Merged

CRASH GROUP: Motorist Left Turn/Merge (210)

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

CRASH GROUP: Motorist Right Turn/Merge (215)

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

CRASH GROUP: Parking/Bus-Related (219)

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

Bicyclist Turned or Merged

CRASH GROUP: Bicyclist Left Turn/Merge (220)

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

CRASH GROUP: Bicyclist Right Turn/Merge (225)

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

Overtaking/Passing Circumstances

CRASH GROUP: Motorist Overtaking Bicyclist (230)

Codes	Attributes
231	Motorist Overtaking - Undetected Bicyclist or Detected – Too Late to Avoid

Codes	Attributes
232	Motorist Overtaking - Misjudged Space
235	Motorist Overtaking - Bicyclist Swerved
239	Motorist Overtaking - Other/Unknown

CRASH GROUP: Bicyclist Overtaking Motor Vehicle (240)

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

One Party on the Wrong Way/Wrong Side

CRASH GROUP: Wrong Way/Wrong Side (258)

Codes	Attributes
250	Wrong-Way/Wrong-Side - Bicyclist
255	Wrong-Way/Wrong-Side - Motorist
259	Wrong-Way/Wrong-Side - Unknown

CRASH GROUP: Parallel Paths Other Circumstances (290)

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

Initial Approach Path - Crossing Paths

Bicyclist Ride-Out

CRASH GROUP: Bicyclist Failed to Yield - Midblock (310)

Codes	Attributes
311	Bicyclist Ride-Out - Residential Driveway
312	Bicyclist Ride-Out - Commercial Driveway
313	Bicyclist Ride-Out - Driveway, Unknown Type
318	Bicyclist Ride-Out - Other Midblock
319	Bicyclist Ride-Out - Midblock - Unknown
357	Multi-Threat - Midblock

Motorist Drive-Out

CRASH GROUP: Motorist Failed to Yield - Midblock (320)

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

Unusual/Specific Circumstances

CRASH GROUP: Backing Vehicle (600)

Codes	Attributes
610	Backing Vehicle

CRASH GROUP: Other/Unusual Circumstances (850)

Codes	Attributes
700	Play Vehicle-Related
800	Unusual Circumstances

CRASH GROUP: Non-Trafficway (910)

Codes	Attributes
910	Non-Trafficway

CRASH GROUP: Other/Unknown Insufficient Details (990)

Codes	Attributes
970	Unknown Approach Paths
980	Unknown Location

Remarks

Crash Type selection depends upon the Initial Approach Path.

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

Initial Approach Paths - Parallel Paths is used when the bicyclist and motorist were traveling in the same or opposite directions prior to their impact. This should be evaluated based on the

parties' movements prior to any avoidance actions that may occur or any turns that caused the impact between the two parties.

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

Initial Approach Path - Crossing Paths or Parallel Paths

CRASH GROUP: 110 (Part 1) Loss of Control

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

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

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

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

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

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

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

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

133 (Motorist Lost Control - Alcohol/Drug Impairment) -- used when the case material says that the motorist lost control as a result of alcohol or drug impairment. Do not independently evaluate test results for this determination. The case material must indicate that the operator's impairment

caused the loss of control and not just that alcohol or drugs were listed among the contributing factors in the crash.

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

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

Initial Approach Path - Crossing Paths

CRASH GROUP: 110 (Part 2) Turning Error

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

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

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

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

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

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

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

Drive/Ride-Out/Through

Drive/Ride - Out/Through is used when the bicyclist and motorist are on crossing paths and identifies situations where the critical factor leading to the collision involves either the motorist

or the bicyclist failing to yield the right-of-way while turning at or proceeding straight through an intersection.

CRASH GROUP: 140 (Motorist Failed to Yield - Sign-Controlled Intersection)

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

141 (Motorist Drive-Out - Sign-Controlled Intersection) -- used when the case material says that the bicyclist had the right-of-way, and the motorist was stopped at a sign (stop or yield) or flashing signal prior to turning or proceeding straight through and colliding with the bicyclist.

143 (Motorist Drive-Through - Sign-Controlled Intersection) -- used when the case material says that the bicyclist had the right-of-way, and the motorist did not stop at a sign (stop or yield) or flashing light-controlled intersection prior to turning or proceeding straight through and colliding with the bicyclist.

CRASH GROUP: 145 (Bicyclist Failed to Yield - Sign-Controlled Intersection)

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

142 (Bicyclist Ride-Out - Sign-Controlled Intersection) -- used when the case material says that the motorist had the right-of-way, and the bicyclist was stopped prior to proceeding and colliding with the motorist. Note: 147 (Multi-Threat - Sign-Controlled Intersection) takes precedence if both apply.

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

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

CRASH GROUP: 150 (Motorist Failed to Yield - Signalized Intersection)

This group is used when Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related), and the motorist either violated the signal or did not properly yield the right-of-way to the bicyclist.

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

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

154 (Motorist Drive-Through - Signalized Intersection) -- used when the case material says that the bicyclist had the right-of-way, and the motorist proceeded through the red light without stopping (ran the red light).

CRASH GROUP: 158 (Bicyclist Failed to Yield - Signalized Intersection)

This group is used when PB31B-Crash Location-Bicycle is 1 (At Intersection) or 2 (Intersection-Related) and the bicyclist either violated the signal or did not properly yield the right-of-way to the motorist. Do not confuse with Crash Type 158.

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

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

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

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

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

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

CRASH GROUP: 190 (Crossing Paths - Other Circumstances)

This group is used when the bicyclist and motorist were on initial crossing paths, but the crash cannot be further classified.

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

158 (Signalized Intersection - Other/Unknown) -- used when the crash occurred at a signal-controlled intersection but cannot be further classified. Do not confuse with Crash Group 158.

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

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

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

Initial Approach Paths - Parallel Paths

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

CRASH GROUP: 210 (Motorist Left Turn/Merge)

This group is used when the motorist made a left turn or merged into the path of a bicyclist traveling in the same or opposite direction as the motorist.

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

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

CRASH GROUP: 215 (Motorist Right Turn/Merge)

This group is used when the motorist made a right turn or merged into the path of a bicyclist traveling in the same or opposite direction as the motorist.

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

217 (Motorist Right Turn on Red - Same Direction).

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

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

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

CRASH GROUP: 219 (Parking/Bus-Related)

This group is used when the bicyclist was in a collision with a vehicle entering or exiting a parking space or by a bus or delivery vehicle pulling into or away from the curb while in forward motion. If the motorist was “backing” see Crash Group 600 (Backing Vehicle).

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

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

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

CRASH GROUP: 220 (Bicyclist Left Turn/Merge)

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

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

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

CRASH GROUP: 225 (Bicyclist Right Turn/Merge)

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

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

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

Overtaking/Passing Circumstances**CRASH GROUP: 230 (Motorist Overtaking Bicyclist)**

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

231 (Motorist Overtaking - Undetected Bicyclist or Detected – Too Late to Avoid) -- used when the motorist was overtaking the bicyclist, either as a passing maneuver or approaching from behind at a faster speed, and the case material says that the motorist did not see the bicyclist or there is indication that the motorist saw the bicyclist, but the recognition was too late to avoid the collision. For example, the officer identifies that the driver was distracted or inattentive, the bicyclist was wearing dark clothing/not visible, or there was no roadway lighting and/or no lights/reflectors on the bicycle at night.

232 (Motorist Overtaking - Misjudged Space) -- used when the motorist was overtaking the bicyclist either as a passing maneuver or approaching from behind at a faster speed, and the case material says that the motorist saw the bicyclist but misjudged the width or distance required to pass the bicyclist resulting in a collision between the two.

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

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

CRASH GROUP: 240 (Bicyclist Overtaking Motor Vehicle)

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

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

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

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

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

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

One Party on the Wrong-Way/Wrong-Side

CRASH GROUP: 258 (Wrong-Way/Wrong-Side)

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

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

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

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

CRASH GROUP: 290 (Parallel Paths - Other Circumstances)

This group is used when the bicyclist and motorist were on initial parallel paths, but the crash cannot be further classified.

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

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

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

Initial Approach Path - Crossing Paths

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

CRASH GROUP: 310 (Bicyclist Failed to Yield - Midblock)

This group is used when Crash Location-Bicycle is 3 (Not at Intersection), and the bicyclist rode into the street from a non-intersection location (including residential or commercial driveway or other midblock location) without yielding to the motorist.

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

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

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

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

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

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

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

CRASH GROUP: 320 (Motorist Failed to Yield - Midblock)

This group is used when Crash Location - Bicycle is 3 (Not at Intersection) and the motorist drove across the sidewalk or into the street from a non-intersection location (including residential or commercial driveway or other midblock location) without yielding to the bicyclist.

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

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

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

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

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

Unusual/Specific Circumstances

CRASH GROUP: 600 (Backing Vehicle)

This group is used when the motorist was backing when the vehicle contacted the bicyclist.

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

CRASH GROUP: 850 (Other/Unusual Circumstances)

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

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

800 (Unusual Circumstances) -- used when there were other unusual circumstances not defined by the other attributes. This would include all set-in-motion situations such as propelling an object, animal, or parked vehicle into the bicyclist. Also, includes a vehicle-to-vehicle collision where an in-transport vehicle is redirected into the bicyclist. Crashes involving a bicyclist and a driverless motor vehicle in-transport are included here.

CRASH GROUP: 910 (Non-Trafficway)

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

CRASH GROUP: 990 (Other/Unknown - Insufficient Details)

This group is used when there is insufficient information to determine the location of the impact between bicyclist and the motorist or the initial approach paths of the bicyclist/motorist.

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

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

Bicycle Crash Group**Element Values**

Codes	Attributes
110	Loss of Control/Turning Error
140	Motorist Failed to Yield - Sign-Controlled Intersection
145	Bicyclist Failed to Yield - Sign-Controlled Intersection
150	Motorist Failed to Yield - Signalized Intersection
158	Bicyclist Failed to Yield - Signalized Intersection
190	Crossing Paths - Other Circumstances
210	Motorist Left Turn/Merge
215	Motorist Right Turn/Merge
219	Parking/Bus-Related
220	Bicyclist Left Turn/Merge
225	Bicyclist Right Turn/Merge
230	Motorist Overtaking Bicyclist
240	Bicyclist Overtaking Motor Vehicle
258	Wrong Way/Wrong Side
290	Parallel Paths - Other Circumstances
310	Bicyclist Failed to Yield - Midblock
320	Motorist Failed to Yield - Midblock
600	Backing
850	Other/Unusual Circumstances
910	Non-Trafficway
990	Other/Unknown - Insufficient Details

Remarks

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

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

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

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

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

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

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

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

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

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

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

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

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

240 (Bicyclist Overtaking Motor Vehicle) -- used when the bicyclist was traveling the same direction as the motor vehicle and was overtaking the motor vehicle on the right or left when

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

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

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

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

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

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

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

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

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

Bicycle Crash Location

Element Values

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

Remarks

1 (At Intersection) -- used when a person is on a roadway (travel lane) either (1) in the intersection, (2) in an area between a crosswalk and the perimeter of the intersection, or (3) in a crosswalk (whether marked or unmarked) adjacent to an intersection. The crossing or connection of a roadway and a driveway access is not an intersection and should be coded as 2 (Intersection-Related) or 3 (Not at Intersection). The intersection is the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. See Bicyclist Crash Location Flowchart at Intersection and Intersection-Related.

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

3 (Not at Intersection) -- used when a person is within the trafficway more than 50 feet out from the perimeter of an “At Intersection,” AND the crash is not identified as related to the movement of the traffic units through an intersection. This includes the entire cross section of the trafficway (medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.). This attribute is the default when the case material give no indication that the crash is within 50 feet of an intersection. See Bicyclist Crash Location Flowchart Not at Intersection.

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

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

Bicycle Position

Element Values

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

Remarks

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

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

3 (Sidewalk/Crosswalk/Driveway Access) -- used when a person is within the trafficway on a sidewalk, crosswalk (this includes shared-use path crossing), or driveway access. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access.

4 (Shared-Use Path) -- used when a person is on a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or an independent right-of-way. Shared-Use paths will also be used by pedestrians, skaters, wheelchairs, joggers, and other nonmotorized users. Shared-use path crossings are coded under 3 (Sidewalk/Crosswalk/Driveway Access).

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

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

8 (Other) -- used when the person is located within the trafficway in an area with an improved surface not applicable to previous attributes (e.g., a paved gore, paved separator, concrete traffic

island) or when the person is in an area within the trafficway where there is no improved surface (e.g., no pavement). Examples include grass medians, unpaved shoulders, and roadside locations like the space between the curb and the sidewalk.

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

Bicycle Initial Direction of Travel**Element Values**

Codes	Attributes
1	With Traffic
2	Facing Traffic
3	Not Applicable
9	Unknown

Remarks

This element identifies the direction the bicyclist was initially traveling prior to being struck or prior to making any turns that resulted in the crash. If a bicyclist crossed or turned prior to the crash, use the direction of travel with respect to the trafficway prior to the crossing or turning.

1 (With Traffic) -- used when the bicyclist was traveling with the flow of traffic for the side of the trafficway the bicyclist occupied prior to the crash. This includes being in or adjacent to a travel lane (e.g., roadway, bike lane, shoulder, sidewalk, roadside). If a bicyclist crossed or turned prior to the crash use the direction of travel with respect to the trafficway prior to the crossing or turning.

2 (Facing Traffic) -- used when the bicyclist was traveling against the flow of traffic for the side of the trafficway the bicyclist occupied prior to the crash. Includes being in or adjacent to a travel lane (e.g., roadway, bike lane, shoulder, sidewalk, roadside). If a bicyclist crossed or turned prior to the crash, use the direction of travel with respect to the trafficway prior to the crossing or turning.

3 (Not Applicable) -- used when the bicyclist was traveling in a direction transverse or perpendicular to the flow of vehicular traffic on the trafficway prior to the crash. This includes when the bicyclist was traveling on one of the following: exiting a driveway, in a parking lot, or other non-trafficway area. It also includes when a bicycle is travelling on a trail or path that crosses the trafficway.

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

Crash/Trafficway

Land Use

Codes	Attributes
1	Rural
2	Urban
6	Trafficway Not in State Inventory
9	Unknown

Element Values

Remarks

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

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

Code the value that represents the FHWA approved Rural Urban Classification and Functional System. FHWA classification obtainable from the State Highway Department must be used. No other classification source is acceptable.

1 (Rural) -- used when the State Highway Inventory says the roadway is outside of an urban area with a population of less than 5,000 people within the territory based on U.S. Census data.

2 (Urban) -- used when the State Highway Inventory says a densely developed territory that contains a population of at least 5,000 people based on U.S. Census data.

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

9 (Unknown) -- used when the crash occurred on a reportable trafficway, but it is unknown if the crash location is within the boundaries of an urban area. If Rural Urban Classification is unknown, FUNCTIONAL SYSTEM, OWNERSHIP and NATIONAL HIGHWAY SYSTEM can still be coded with known values. For example, it may be known that the crash occurred somewhere along on an interstate. Thus, the trafficway is owned by the State and is part of the NHS. However, it may not be known if the location was within urban boundaries or not.

Functional System

Element Values

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

Remarks

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

This element is coded with respect to the trafficway selected in NATIONAL HIGHWAY SYSTEM, OWNERSHIP, ROUTE SIGNING, and in the top row of TRAFFICWAY IDENTIFIER. The exception would be an intersection crash in an interchange. Please see the remarks below and in TRAFFICWAY IDENTIFIER for a hierarchy for selecting the appropriate trafficway to be coded.

Code the value that represents the FHWA approved Rural Urban Classification and Functional System. FHWA classification obtainable from the State Highway Department must be used. No other classification source is acceptable.

NON-JUNCTION CRASHES

Assign the crash to the trafficway on which the FIRST HARMFUL EVENT occurred. If the FIRST HARMFUL EVENT occurred on private property, assign the crash to the trafficway on which the vehicle was traveling when the Unstabilized Situation began.

INTERSECTION CRASHES (Not Within an Interchange)

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

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

INTERSECTION CRASHES (Within an Interchange)

Interchange crashes that occur in an intersection of a ramp that connects a higher and a lower class trafficway should be assigned to the highest-class trafficway. For example: vehicle #1

strikes vehicle #2 in the intersection of the I-270 ramp and US-10. Code FUNCTIONAL SYSTEM as 01 (Interstate).

Ramps are part of the highest class of trafficway to which they connect. Therefore, if a crash occurs on a ramp, including in the merge/diverge lanes, and it is not an Intersection crash, it is assigned to the highest class of trafficway to which the ramp connects. Example: vehicle #1 overturns on the ramp of I-270 and US-10. Code FUNCTIONAL SYSTEM 01 (Interstate). This includes intersection-related and entrance/exit ramp-related crashes for RELATION TO JUNCTION.

OTHER CRASHES (Within an Interchange)

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

QUESTIONABLE CASES

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

01 (Interstate) -- used for the highest classification of Arterials, Principal Arterials. Interstates are designed and constructed with mobility and long-distance travel in mind. They are typically limited-access, divided highways linking the major urban areas of the United States.

02 (Other Freeways and Expressways) -- used for roadways that have directional travel lanes usually separated by some type of physical barrier, and their access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections. They look very similar to Interstates, and like Interstates, these roadways are designed and constructed to maximize their mobility function and abutting land uses are not directly served by them.

03 (Other Principal Arterial) -- used for roadways that serve major centers of metropolitan areas, provide a high degree of mobility, and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly. Forms of access for Other Principal Arterial roadways include driveways to specific parcels and at-grade intersections with other roadways.

04 (Minor Arterial) -- used for roadways that provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts, and offer connectivity to the higher Arterial system. In an urban context, they interconnect and augment the higher Arterial system, provide intra-community continuity, and may carry local bus routes.

05 (Major Collector) -- route that gathers traffic from Local Roads and funnels it to the Arterial network. The distinctions between Major Collectors and Minor Collectors are often subtle. Major Collectors are longer in length; have lower connecting driveway densities; have higher speed limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their Minor Collector counterparts.

06 (Minor Collector) -- route that gathers traffic from Local Roads and funnels it to the Arterial network. The distinctions between Major Collectors and Minor Collectors are often subtle.

Minor Collectors are shorter in length; have higher connecting driveway densities; have lower speed limits; are spaced at smaller intervals; have lower annual average traffic volumes; and may have fewer travel lanes than their Major Collector counterparts.

07 (Local) -- used for roadways that are not intended for use in long-distance travel except at the origin or destination of the trip due to their provision of direct access to abutting land. Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year.

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

99 (Unknown) -- used when the crash occurred on a reportable trafficway, but the functional classification of the segment of the trafficway on which the crash occurred can't be determined or the applicable segment can't be determined. If FUNCTIONAL SYSTEM is unknown, RURAL URBAN CLASSIFICATION, OWNERSHIP and NATIONAL HIGHWAY SYSTEM can still be coded with a known value. For example, it may be known that the crash occurred within or outside urban boundaries (RURAL URBAN CLASSIFICATION). However, the trafficway may change classification along its length and the segment of the trafficway on which the crash occurred may not be known.

Functional System Intersecting Road**Element Values**

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

Remarks

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

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

Code the value that represents the FHWA approved Rural Urban Classification and Functional System. FHWA classification obtainable from the State Highway Department must be used. No other classification source is acceptable. Refer problems in obtaining the FHWA classification to the State DOT planning office.

NON-JUNCTION CRASHES

Assign the crash to the trafficway on which the FIRST HARMFUL EVENT occurred. If the FIRST HARMFUL EVENT occurred on private property, assign the crash to the trafficway on which the vehicle was traveling when the Unstabilized Situation began.

INTERSECTION CRASHES (Not Within an Interchange)

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

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

INTERSECTION CRASHES (Within an Interchange)

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

Ramps are part of the highest class of trafficway to which they connect. Therefore, if a crash occurs on a ramp, including in the merge/diverge lanes, and it is not an Intersection crash, it is assigned to the highest class of trafficway to which the ramp connects. Example: vehicle #1 overturns on the ramp of I-270 and US-10. Code FUNCTIONAL SYSTEM 01 (Interstate). This includes intersection-related and entrance/exit ramp-related crashes for RELATION TO JUNCTION.

OTHER CRASHES (Within an Interchange)

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

QUESTIONABLE CASES

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

01 (Interstate) -- used for the highest classification of Arterials, Principal Arterials. Interstates are designed and constructed with mobility and long-distance travel in mind. They are typically limited-access, divided highways linking the major urban areas of the United States.

02 (Other Freeways and Expressways) -- used for roadways that have directional travel lanes usually separated by some type of physical barrier, and their access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections. They look very similar to Interstates, and like Interstates, these roadways are designed and constructed to maximize their mobility function and abutting land uses are not directly served by them.

03 (Other Principal Arterial) -- used for roadways that serve major centers of metropolitan areas, provide a high degree of mobility, and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly. Forms of access for Other Principal Arterial roadways include driveways to specific parcels and at-grade intersections with other roadways.

04 (Minor Arterial) -- used for roadways that provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts, and offer connectivity to the higher Arterial system. In an urban context, they interconnect and augment the higher Arterial system, provide intra-community continuity, and may carry local bus routes.

05 (Major Collector) -- route that gathers traffic from Local Roads and funnels it to the Arterial network. The distinctions between Major Collectors and Minor Collectors are often subtle. Major Collectors are longer in length; have lower connecting driveway densities; have higher speed

limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their Minor Collector counterparts.

06 (Minor Collector) -- route that gathers traffic from Local Roads and funnels it to the Arterial network. The distinctions between Major Collectors and Minor Collectors are often subtle. Minor Collectors are shorter in length; have higher connecting driveway densities; have lower speed limits; are spaced at smaller intervals; have lower annual average traffic volumes; and may have fewer travel lanes than their Major Collector counterparts.

07 (Local) -- used for roadways that are not intended for use in long-distance travel except at the origin or destination of the trip due to their provision of direct access to abutting land. Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year.

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

98 (Not Applicable) -- used when there is no intersecting trafficway

99 (Unknown) -- used when the crash occurred on a reportable trafficway, but the functional classification of the segment of the trafficway on which the crash occurred can't be determined or the applicable segment can't be determined. If FUNCTIONAL SYSTEM is unknown, RURAL URBAN CLASSIFICATION, OWNERSHIP and NATIONAL HIGHWAY SYSTEM can still be coded with a known value. For example, it may be known that the crash occurred within or outside urban boundaries (RURAL URBAN CLASSIFICATION). However, the trafficway may change classification along its length and the segment of the trafficway on which the crash occurred may not be known.

Ownership

Element Values

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

Remarks

This element identifies the entity that has legal ownership of the segment of the trafficway on which the crash occurred. The entity that maintains the trafficway may differ from the owner in some locations.

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

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

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

95 (Other (Specify)) -- used when the crash occurred on a segment of the trafficway where the ownership is known but is not one of the listed attributes.

Note: For attributes with a “Specify:” designation, a fill-in textbox will open in CISSWeb. This textbox should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

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

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

Federal Highway Administration classification obtainable from the State Highway Department must be used. No other classification source is acceptable.

Type of Intersection

Element Values

Codes	Attributes
1	Not an Intersection
2	Four-Way Intersection
3	T-Intersection
4	Y-Intersection
5	Traffic Circle
6	Roundabout
7	Five Point, or More
10	L-Intersection
99	Unknown
11	Other Intersection Type

Remarks

The data element value selected should be based on the location of the FIRST HARMFUL EVENT and is only applicable to intersection or intersection-related crashes.

If it is known that a rotary type of intersection was involved but it is not known if it was a 05 (Traffic Circle) or a 06 (Roundabout), default to a 05 (Traffic Circle).

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

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

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

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

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

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

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

06 (Roundabout) refers to an intersection of roads where motor vehicles must travel around a circle to continue on the same road or leave on any intersecting road. (See Figure 14 below.) A 06 (Roundabout) must meet the following criteria:

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

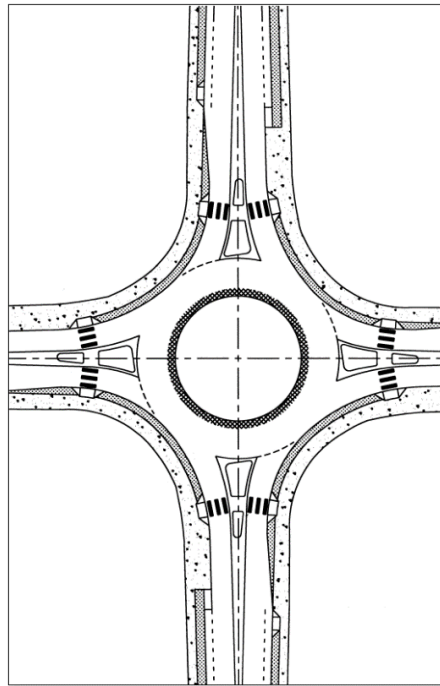


Figure 24. Example of Single-Lane Roundabout

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

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

11 (Other Intersection Type) refers to an intersection design not captured under one of the other attributes.

99 (Reported as Unknown) -- used when police indicate unknown.

Relation to Trafficway

Element Values

Codes	Attributes
1	On Roadway
2	On Shoulder
3	On Median
4	On Roadside
5	Outside Trafficway
6	Off Roadway-Location Unknown
7	In Parking Lane/Zone
8	Gore
10	Separator
11	Continuous Left - Turn Lane
12	Pedestrian Refuge Island or Traffic Island
99	Unknown

Remarks

This element identifies the location of the crash as it relates to its position within or outside the trafficway based on the FIRST HARMFUL EVENT (FHE). The first harmful event in the crash does not have to be an event with the nonmotorist.

For collision events when the vehicle is overlapping adjacent areas:

- For fixed object collisions FHE, base RELATION TO TRAFFICWAY on the location of the object struck.
- Fixed objects that are associated with the Trafficway such as curbs, ditches, guardrails, sign supports, utility poles, etc. are not located in the travel lanes or on the shoulder. Therefore, when these fixed objects are contacted in the FIRST HARMFUL EVENT, RELATION TO TRAFFICWAY should be coded with respect to the location of the object contacted (e.g., 04 (On Roadside), 03 (On Median), 12 (Pedestrian Refuge Island or Traffic Island)), regardless of the location of the entire vehicle.
- Non-fixed object collisions (e.g., striking a vehicle on the shoulder or a pedestrian on the sidewalk) when the striking vehicle is overlapping two locations (e.g., roadway and shoulder) are coded with respect to the object contacted, regardless of the location of the entire vehicle.

For Rollover/Overtake crashes when the vehicle is overlapping two locations (e.g., roadway and shoulder), use the LAST area the vehicle entered as the location for Relation to Trafficway. For example, 04 (On Roadside) would be correct for a case where the documentation identifies a vehicle runs off the roadway, partially through the shoulder, and the front wheels enter the roadside grass resulting in an overturn.

Default rules for the location of ditches, culverts, embankments, and fences:

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

01 (On Roadway)—The roadway is that part of a trafficway designed, improved, and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for northbound and southbound traffic or for trucks and automobiles. Roadway may be noted as the “travel lanes” and, if present, includes the area between the painted “fog lines.” Additionally, a driveway access area is considered part of the roadway of the trafficway to which it connects. This attribute may also be used for cases involving a parked vehicle opening a door into moving traffic, extended mirrors into the travel lane. If a bike lane is immediately adjacent to the curb/edge of the road, code 04 (On Roadside). If the bike lane is between lanes of travel or a lane and the parking lane, code 01 (On Roadway). When the FIRST HARMFUL EVENT occurs in an 11 (Continuous Left-Turn Lane), this attribute takes precedence over 01 (On Roadway).

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

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

04 (On Roadside) refers to a location off the roadway, but inside the right-of-way. It is the outermost part of the trafficway that lays between the outer property line or other barrier and the edge of the first road encountered in the trafficway. Bicycle lanes and shared use paths or trails contiguous with the roadway and sidewalks are also included. For cases involving a vehicle that goes off the roadway into a “tree line,” “wood line,” “brush line,” etc. that is adjacent to the roadway, code as 04 (On Roadside) unless there is specific information available in the case material that identifies the FIRST HARMFUL EVENT was beyond the boundaries of the trafficway (e.g., a “tree line” in a homeowner’s front yard). If a bike lane is immediately adjacent to the curb/edge of the road, code 04 (On Roadside). If the bike lane is between lanes of travel or a lane and the parking lane, code 01 (On Roadway).

05 (Outside Trafficway) -- used for areas not open to the public as a matter of right or custom for moving people or property. This includes property beyond the roadside outside the boundaries of

the trafficway. Also, a portion of the trafficway closed for construction is not a trafficway and would be considered 05 (Outside Trafficway).

06 (Off Roadway - Location Unknown) refers to a location off the roadway, but it is unknown if the location was the shoulder, median, roadside, gore, outside the trafficway, etc. This should only be used when no reasonable assessment can be made as to the location of the FIRST HARMFUL EVENT because the information in the case is too ambiguous.

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

08 (Gore) is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadway, which join at the point of divergence or convergence. The direction of traffic must be the same on both 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 18.)

Gore Inclusions:

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

Gore Exclusions:

- Islands for channelizing of vehicle movements. Code these as 12 (Pedestrian Refuge Island or Traffic Island).
- Islands for pedestrian refuge. Code these as 12 (Pedestrian Refuge Island or Traffic Island).

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

11 (Continuous Left-Turn Lane) is a two-way left turn lane positioned between opposing straight-through travel lanes. When the FIRST HARMFUL EVENT occurs in an 11 (Continuous Left-Turn Lane), this attribute takes precedence over 01 (On Roadway).

12 (Pedestrian Refuge Island or Traffic Island) is coded when case material says the FIRST HARMFUL EVENT occurred on a Pedestrian Refuge Island or Traffic Island.

Examples include areas:

- between roadways of a trafficway meant to allow for a nonmotorist to pause while traveling from one side of a trafficway to the other side.
- for channelizing the flow of traffic at an intersection.
- in the center of a traffic circle or roundabout.
- dividing the entrance and exit in a driveway access.

99 (Reported as Unknown) -- used when police indicate unknown.

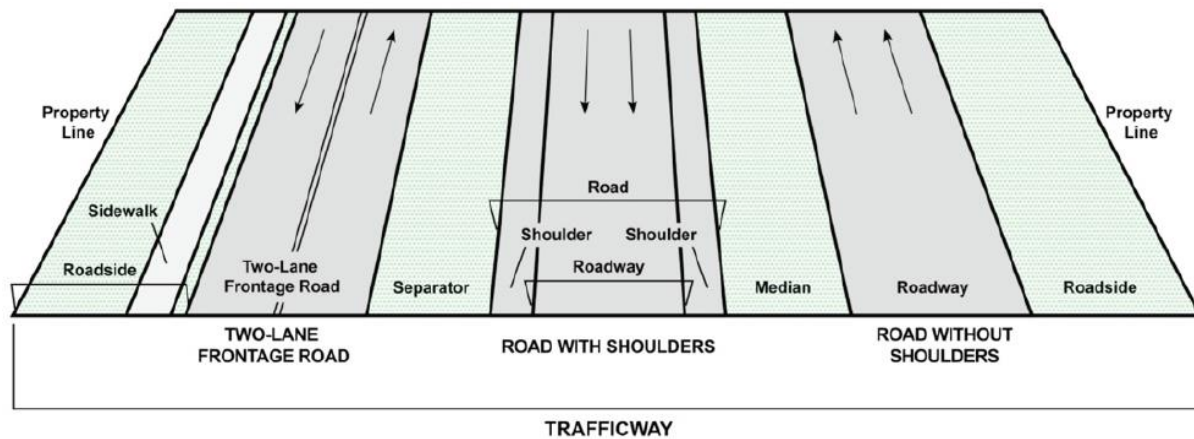


Figure 25. Trafficway (See ANSI D16.1 - 2017, 8th Edition)

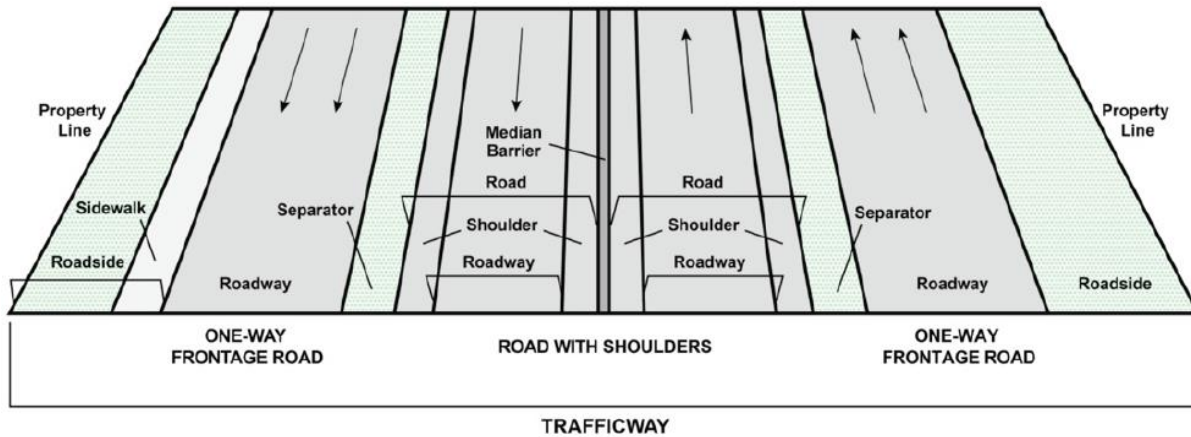


Figure 26. Trafficway Including Frontage Road (See ANSI D16.1 - 2017, 8th Edition)

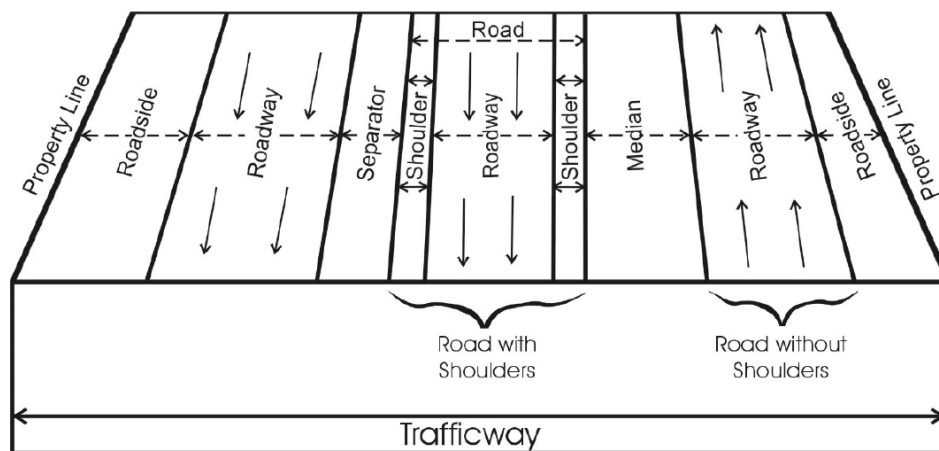


Figure 27. Trafficway with Multiple Roadways in the Same Direction (See ANSI D16.1 - 2017, 8th Edition)

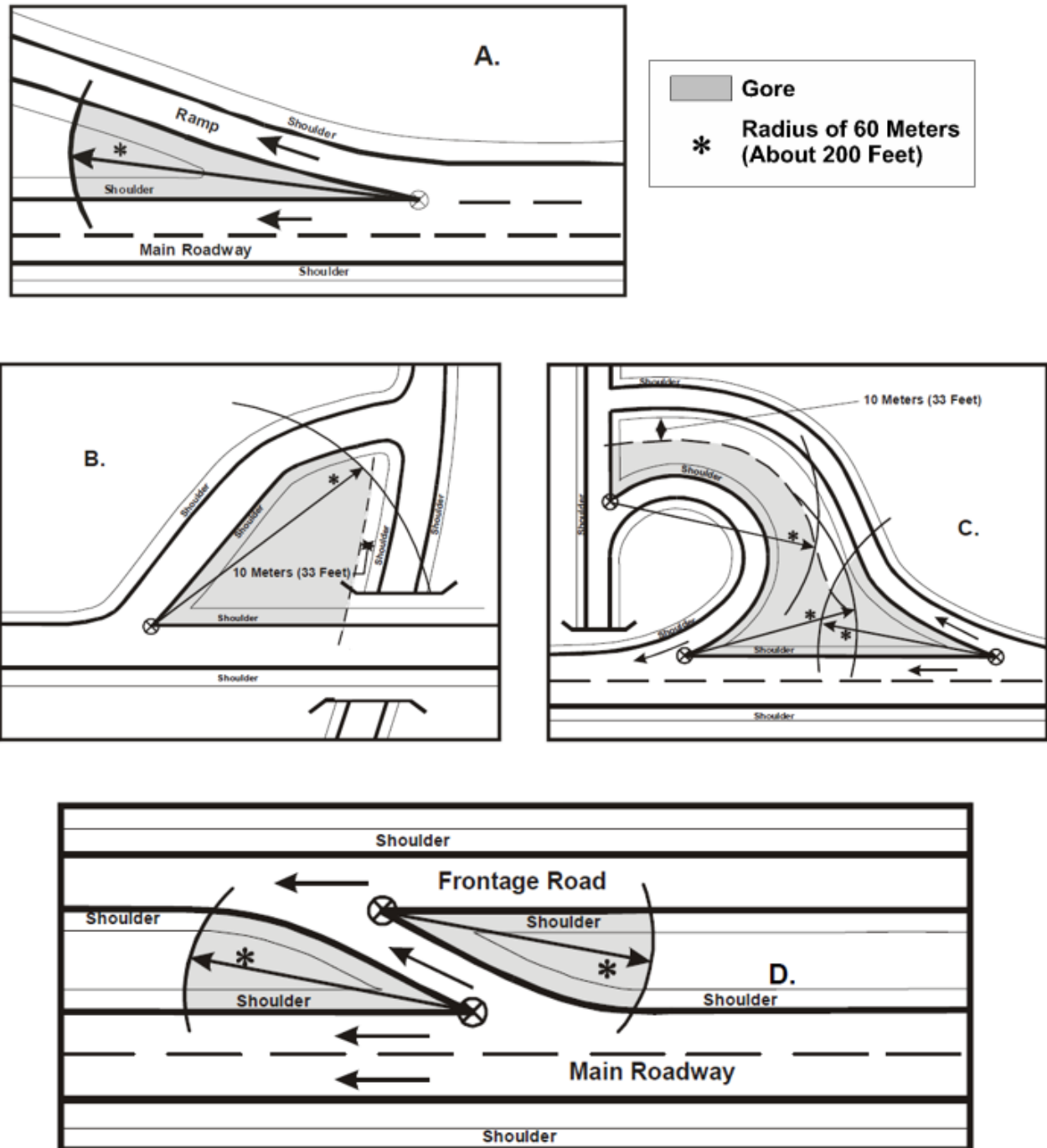


Figure 28. Four Examples of Gores (See ANSI D16.1 - 2017, 8th Edition)

Presence of Traffic Channel Turning Traffic

Element Values

Codes	Attributes
0	No Channel
1	Channel Indicated by Pavement Markings
2	Raised Channel With Curb Cuts
3	Raised Channel Without Curb Cuts
4	Channel Controlled Differently Than Through Lanes
5	Extended Longitudinal Lane Line Markings
9	Unknown

Remarks

Code the presence of and control of any traffic channel on the same side of the intersection the path of the case nonmotorist is on for the road on which the case vehicle approached the intersection. This includes extended longitudinal lane line markings intended to guide drivers through a turn. Extended longitudinal lane line markings for through traffic are not included.

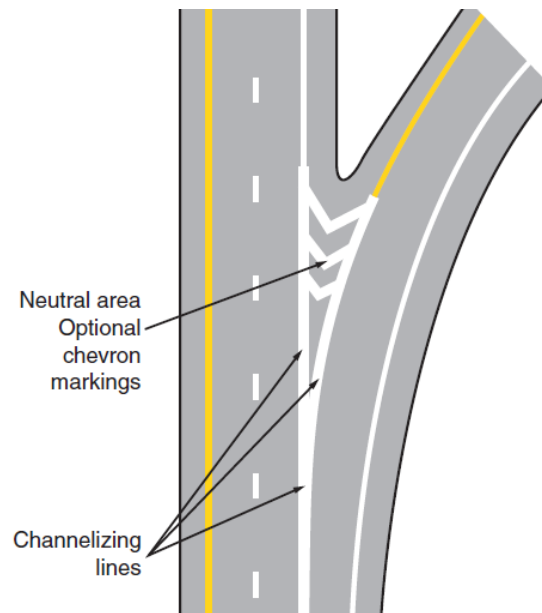


Figure 29. Example of Channeling lines

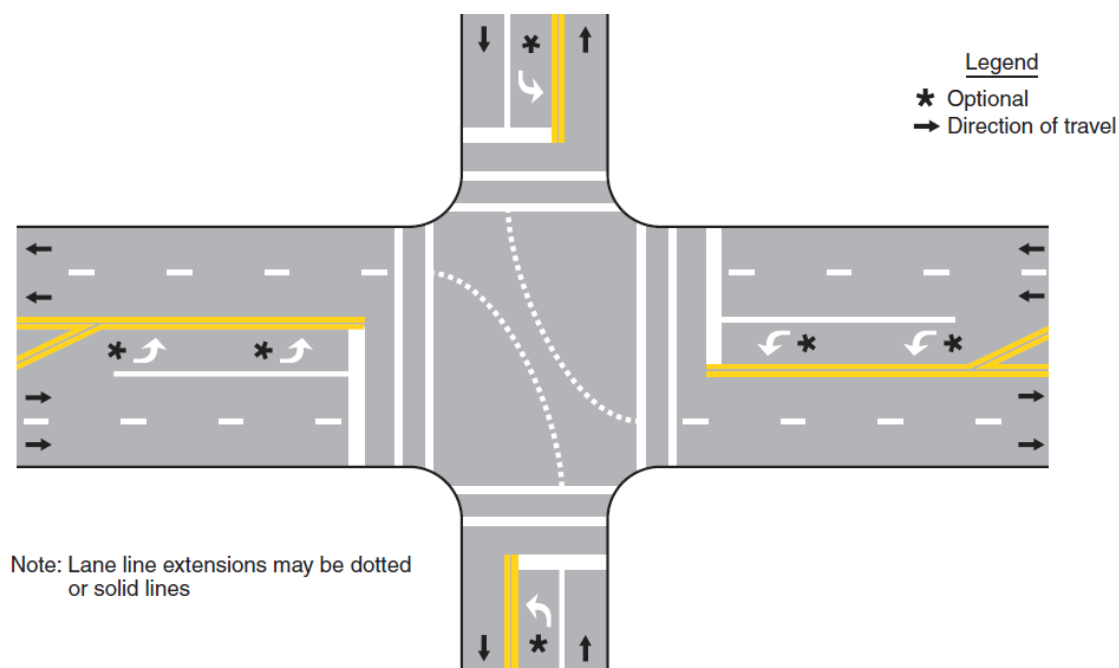


Figure 30. Example of Extensions Through an Intersection

Curb/Curve Radius**Element Values**

0 to 200 Meters

Codes	Attributes
-9998	Not Applicable
-9999	Unknown

Remarks

Code when the trajectory of the case vehicle to the point of conflict with the case nonmotorist follows a curb or curve.

- If the vehicle trajectory is on a curved roadway, document the curve radius. See Figure 32.
- If the vehicle is turning right at an intersection, document the radius of the nearside curb. See Figure 33.
- If the vehicle is turning left at an intersection, document the radius of the vehicle's turning path. See Figure 34.
- If the vehicle is traveling on a straight roadway with no intersecting roadways or going straight through an intersection (not turning), then code Not Applicable.

Visually determine the point of greatest curvature along the case vehicle approach path. Calculate the radius using the formula below, using measurements taken either in the field or from the scene diagram.

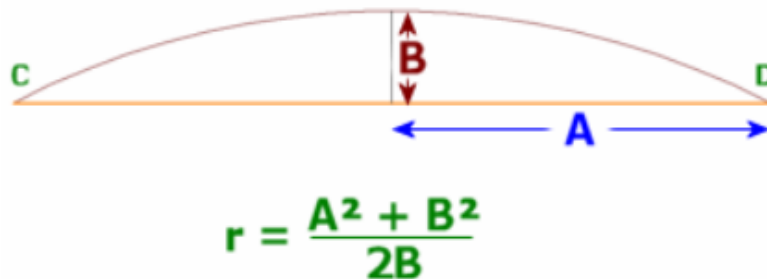


Figure 31. Radius of Curvature

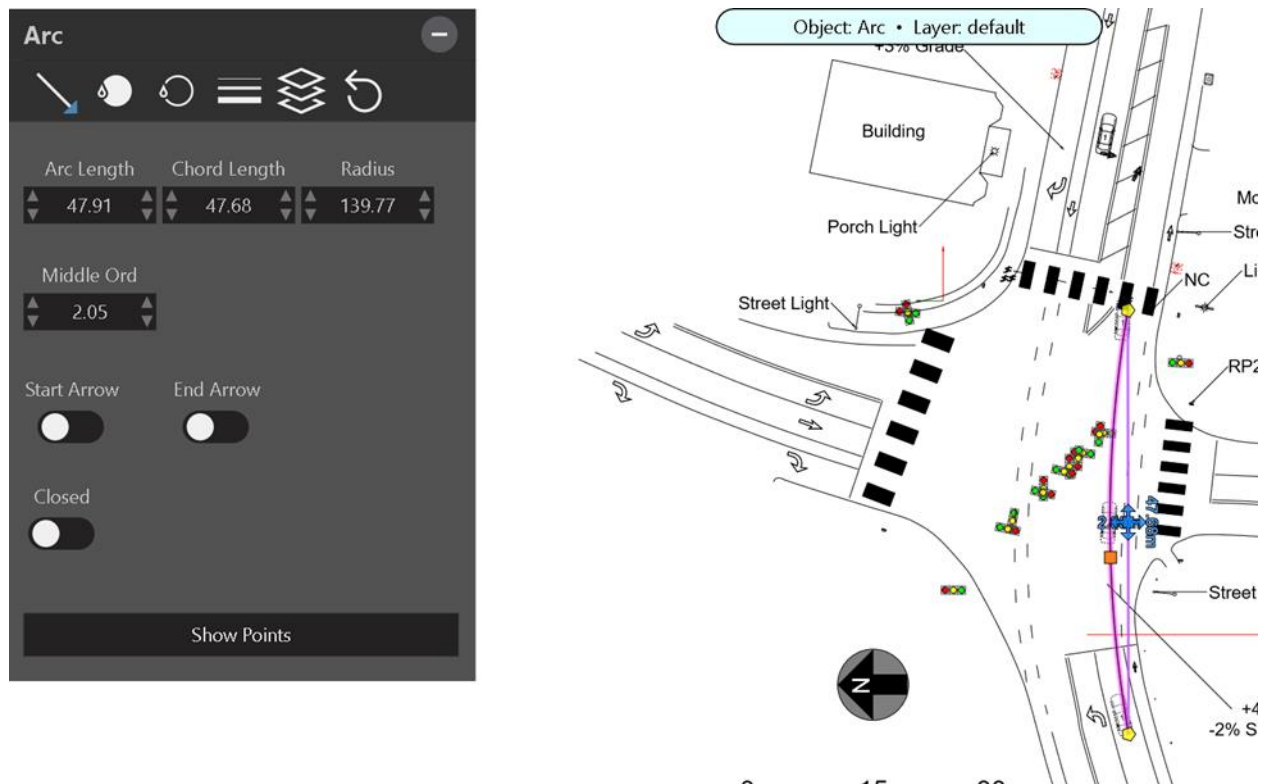


Figure 32. Example of Radius of Curvature, Vehicle negotiating curve

Note: The radius of curvature (139.77) is displayed in FARO software when a curve showing the vehicles path is drawn using the arc tool.



Figure 33. Example of Radius of Curvature, Vehicle Turning Right at Intersection

Note: The radius of curvature (7.65) is displayed in FARO software when the curb radius is documented using the arc tool.

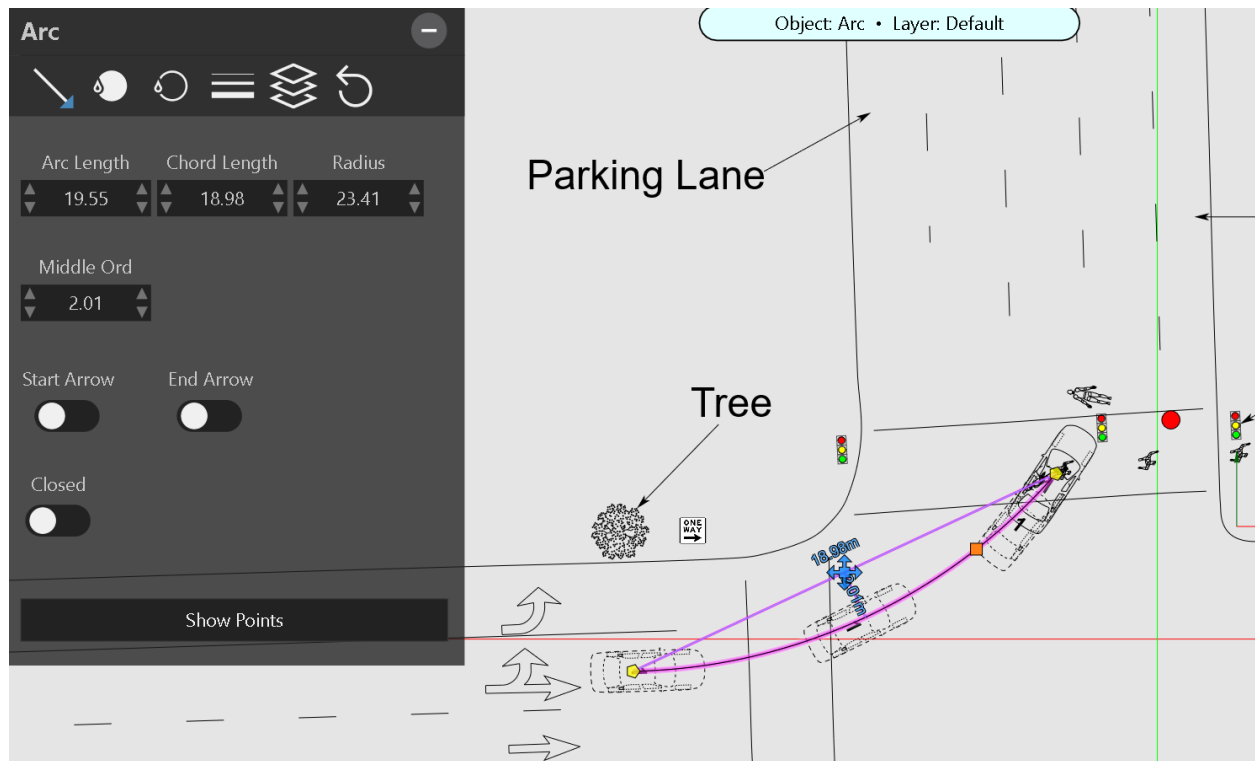


Figure 34. Example of Radius of Curvature, Vehicle Turning Left

Note: The radius of curvature (23.41) is displayed in FARO software when a curve showing the vehicles path is drawn using the arc tool.

Work Zone

Element Values

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

Remarks

A crash that occurs in or related to a construction, maintenance, or utility work zone, Work zone-related crashes may also include those involving motor vehicles slowed or stopped because of the work zone, even if the first harmful event occurred before the first warning sign.

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

Work Zone:

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

Work Zone Crash:

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

See the 8th Edition of ANSI D16.1 definitions of “Work Zone” and “Work Zone Crash” for inclusions and exclusions.

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

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

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

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

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

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

Hit-and-Run?**Element Values**

Codes	Attributes
0	No
1	Yes
9	Unknown

Remarks

This element refers to cases where a vehicle is a contact vehicle in the crash and does not stop to render aid (this can include drivers who flee the scene on foot).

In many States, the investigating officer will note this in the narrative or check the appropriate box on the PCR. In some cases, the driver can be cited for failing to render assistance. Review the case material carefully for references to hit-and-run or failure to render aid.

It does not matter whether the hit-and-run vehicle was striking or struck. The hit-and-run vehicles is (are) the ones that “departed prior to investigation by the police,” or that vehicle that is “abandoned” at the scene when its occupants fled from the area. If the PCR says that the vehicle was involved in a collision that was investigated, but there is no information on that vehicle or the driver/owner because of departure prior to police arrival on-scene, then hit-and-run is indicated.

0 (No) -- used if there is no reason to believe a hit-and-run occurred involving this vehicle or its driver. Example: If a vehicle is involved in a multi-vehicle collision and one of the other contact vehicles leaves the scene.

Examples:

- occupants of a vehicle who are taken or go directly from the scene to a medical treatment facility or physician. However, if doubt exists concerning the departure for treatment, assume hit-and-run.
- a driver who leaves the scene but furnishes name, address, vehicle make, model, and model year such that it is recorded in the available information and the available information does not indicate hit-and-run.
- vehicles that set an object in motion such that (a) the object is contacted before it stabilizes by another in-transport motor vehicle, and (b) the vehicle that set the object in motion leaves the scene without providing the pertinent information (compare with exception two above), and (c) the available information does not indicate hit-and-run.

1 (Yes) -- used when it has been determined that this vehicle’s driver left the scene with or without their vehicle.

A hit-and-run occurred when this vehicle's driver left the scene after:

- striking a pedestrian or other type of nonmotorist.
- striking a parked/stopped off roadway motor vehicle (with or without occupants).
- being struck while parked or in-transport.
- striking or being struck by an in-transport motor vehicle.

Crash/Nonmotorist Facilities

School Zone

Element Values

Codes	Attributes
0	No
1	In School Zone – Sign
2	In School Zone – Flashing Signal
3	In School Zone – Pavement Marking
4	In School Zone – Sign or Signal and Pavement Marking
9	Unknown

Remarks

A school zone may be indicated by a warning or regulatory sign present along the path of the case vehicle. These signs may include a sign that says the posted speed in effect when students may be present or a 5-sided sign with the point at the top, a rectangular or some other black printing on a yellow background sign. Whether or not the crash occurred during the time the sign was in effect does not affect the section of the code. Code the type of warning or regulatory sign and or pavement marking present.

00 No means the conflict with the nonmotorist did not occur in a school zone

01 In School Zone means the conflict with the nonmotorist occurred in a school zone marked by a sign

02 In School Zone means the conflict with the nonmotorist occurred in a school zone marked by a signal

03 In School Zone means the conflict with the nonmotorist occurred in a school zone marked by pavement markings

04 In School Zone means the conflict with the nonmotorist occurred in a school zone marked by a sign or signal and pavement markings

09 Unknown means it unknown whether the conflict with the nonmotorist occurred in a school zone

Crosswalk

Element Values

Codes	Attributes
0	No Crosswalk Present
1	Unmarked Crosswalk Present
2	Marked Crosswalk Without Ladder/Zebra Lines Present
3	Marked Crosswalk With Ladder/Zebra Lines Present
8	Unknown Type of Crosswalk Present
9	Unknown

Remarks

Code the type of crosswalk available within 30 meters on the path of the case nonmotorist to provide a safe crossing. This attribute includes crosswalk areas that pass through a median, crossing, or traffic island.

As crosswalk area exists on an intersection leg in an area where there is a sidewalk on at least one side of that leg, but no marked crosswalk is present or identified in the PCR. The projection of the sidewalk across the leg is an unmarked crosswalk area. Crosswalk areas can pass through a median, crossing, or traffic island. For midblock locations, the crosswalk must be marked. See diagrams below.

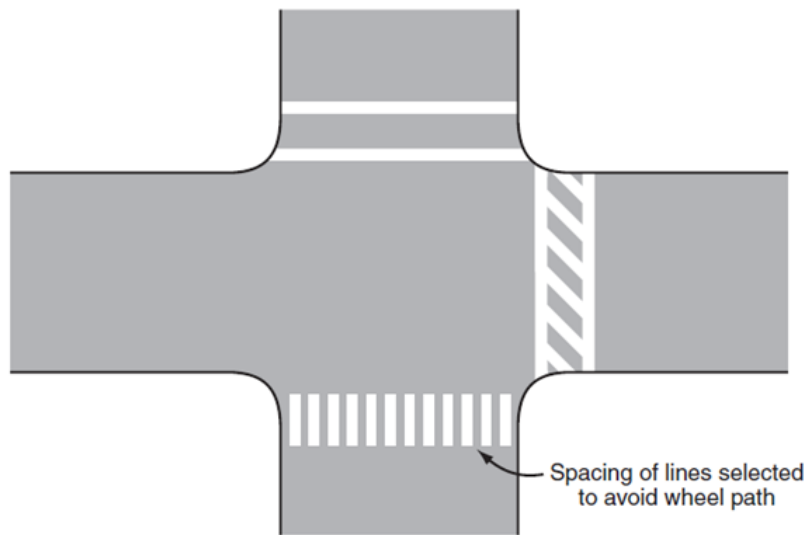


Figure 35. Examples of Intersection Crosswalk Markings

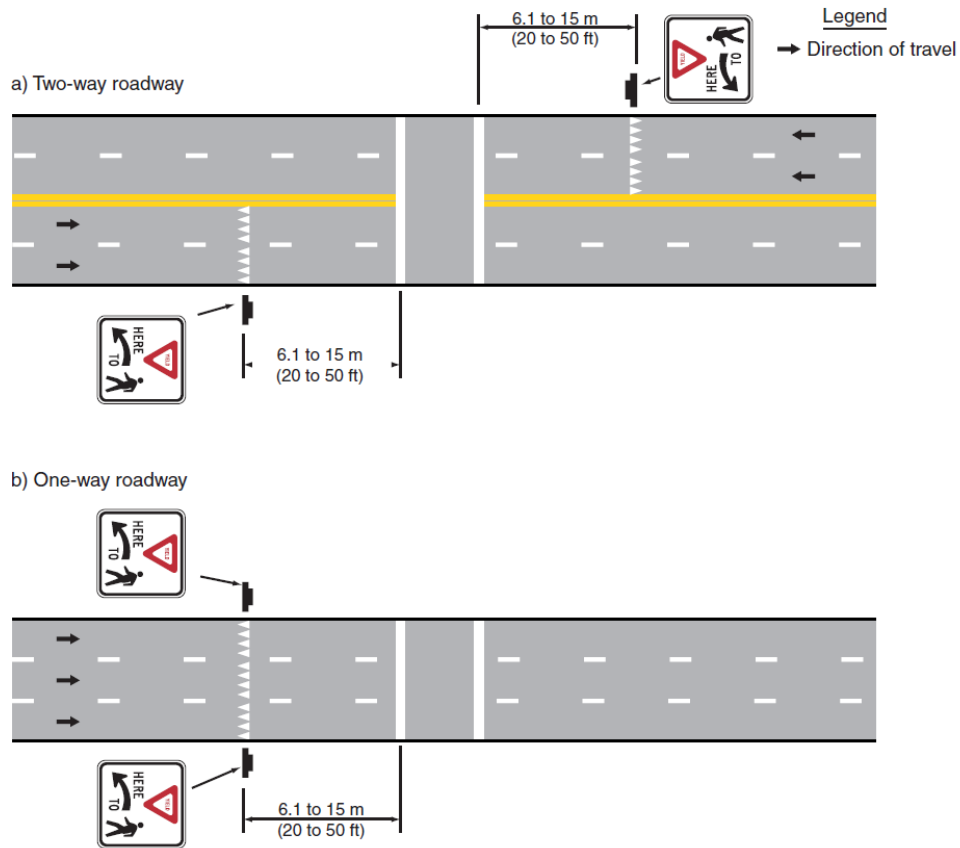


Figure 36. Examples of Lines at Unsignalized Mid-Block Crosswalks

The projection of the sidewalk across an intersection leg is an unmarked crosswalk area. Crosswalk areas can pass through a median, crossing, or traffic island.

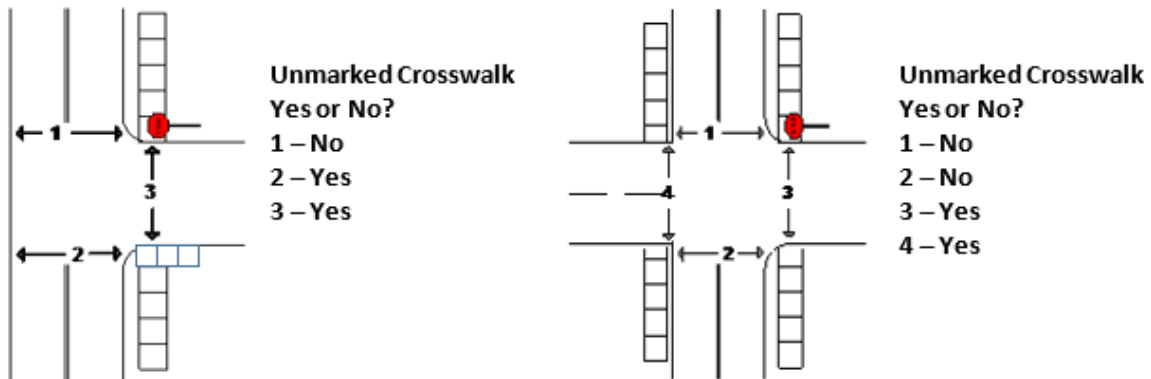


Figure 37. Illustration of Presence of Unmarked Crosswalks Example A and B

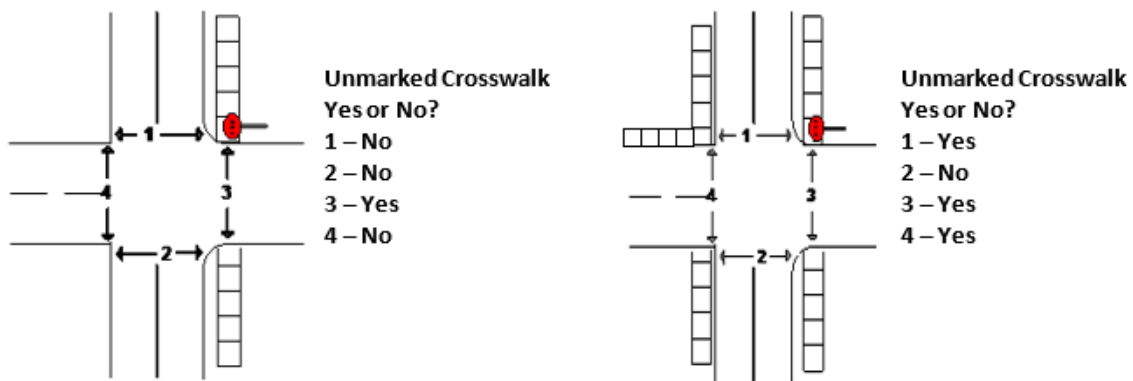


Figure 38. Illustration of Presence of Unmarked Crosswalks Example C and D

Crosswalk Location

Element Values

Codes	Attributes
0	No Crosswalk Present
1	At Intersection
2	Intersection-Related
3	Not at Intersection
4	Non-Trafficway Location
9	Unknown

Remarks

This variable includes the area defined by ANSI as an intersection as well as a painted crosswalk, a crosswalk area and the area between the lines extending from the curb delimiting an intersection and a painted crosswalk or a crosswalk area. Any area within 15m (50 feet) along the approach to a crosswalk or a crosswalk area is an intersection-related area. For example, the space between a stop bar and a painted crosswalk is an intersection-related area.

The area more than 15m (50 feet) out from an intersection + crosswalk or a crosswalk area is not at an intersection. This includes the entire cross section of the trafficway. The junction of a roadway and a driveway access is not an intersection. This attribute is the default when the case materials/PAR give no indication that the crash is within 15m (50 feet) of an intersection.

Crashes occurring on paved shoulders, sidewalks (within the trafficway) or within the junction of a driveway access with a roadway are considered “trafficway” crashes and should not be coded as Non-Trafficway Location.

01 At Intersection means a person is on a roadway whether (a) in the intersection, (b) in an area between a crosswalk and the perimeter of the intersection, or (c) in a crosswalk (whether marked or unmarked) adjacent to an intersection.

02 Intersection-Related means a person is within the trafficway 15m (50 feet) out from the perimeter of an intersection area including the entire cross section of the trafficway (e.g., medians, turn lanes, bike lanes, parking lanes, shoulders, sidewalks, etc.) OR the crash is related to the flow of traffic through an intersection (e.g., the result of queuing traffic).

03 Not at Intersection means a person is within the trafficway more than 50 feet out from the perimeter of an intersection + crosswalk or a crosswalk area.

04 Non-Trafficway Location means a person is off the trafficway, including parking lot spaces and aisles, driveways (beyond the), private roads etc.

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

Sidewalk Present**Element Values**

Codes	Attributes
0	No Sidewalk Present
1	Sidewalk Present
9	Unknown

Remarks

Code the presence of any sidewalk or paved foot path on the case nonmotorist's path to the roadway. The case nonmotorist does not have to have used the sidewalk and it does not have to be relevant to the crash.

This variable refers only to sidewalks along the nonmotorist's path. For example, if the nonmotorist approached the roadway from the east, and there was only a sidewalk on the west side of the road, then 'No sidewalk present' should be coded.

01 No Sidewalk Present means there is no sidewalk present.

02 Sidewalk Present means a sidewalk was present.

09 Unknown

Presence of Curb Cuts on the Pedestrian Path

Element Values

Codes	Attributes
1	No Sidewalk Present
2	No Curb
3	Curb, No Curb Cut Present
4	Curb Cut to Sidewalk
5	Curb Cut to Unimproved Roadside
6	Curb Return, No Curb Cut Present
7	Curb Return, Curb Cut to Sidewalk
8	Curb Return, Curb Cut to Unimproved Roadside
9	Curb Present, Unknown if Curb Cut Present
99	Unknown

Remarks

Code the presence of any type of curb cuts within 30 meters of the nonmotorist's path, regardless of usage. Curb cuts provide for a safe transition from a roadway to provides an accessible route to the traffic-way beyond the shoulders of a road, usually a curbed sidewalk. Curb cuts may exist at a straight section of curb at non-junction crosswalks or at the curb return of intersections. Curb return is the curved section of curb used at intersections in joining straight sections of curb. Typically, they are connected to the lateral lines of the sidewalks on opposite sides of the roadway.

01 No Sidewalk Present mean there is no sidewalk

02 No Curb means no curb separates the road from the roadside

03 Curb, No Curb Cut Present means a curb separates the road from the roadside, but there is no ramp graded down from the top surface of the roadside or sidewalk to the surface of an adjoining street

04 Curb Cut to Sidewalk means a ramp graded down from the top surface of a sidewalk to the surface of an adjoining street is present

05 Curb Cut to Unimproved Roadside means a curb separates the road from the roadside, and there is a ramp graded down from the top surface of a roadside to the surface of an adjoining street

06 Curb Return, No Curb Cut Present means there is a curb return at an intersection, but there is no ramp graded down from the top surface of the roadside or sidewalk to the surface of an adjoining street

07 Curb Return, Curb Cut to Sidewalk means at an intersection a ramp graded down from the top surface of a sidewalk to the surface of an adjoining street is present

08 Curb Return, Curb Cut to Unimproved Roadside means at an intersection a curb separates the road from the roadside, and there is a ramp graded down from the top surface of a roadside to the surface of an adjoining street

09 Curb Present, unknown if curb cut present

99 Unknown it cannot be determined from the available source material whether a curb is present

Presence of Median**Element Values**

Codes	Attributes
0	No Median Present
1	Painted Median Present
2	Raised Median Present, With Curb Cut
3	Raised Median Present, Without Curb Cut
4	Raised Median Present, Refuge Area Less Than 122 Cm (48 in) and 76cm (30 in) Deep
5	Raised Median Present, Refuge Area = 122 Cm (48 in) and 76cm (30 in) Deep
8	Median Present, Unknown Type
9	Unknown

Remarks

Code the presence of any type of median or separator separating the roadway the trajectory of the case vehicle is on. Usually, the separated roadway will carry traffic traveling in the opposite direction to that of the case vehicle. A median may provide a refuge for a nonmotorist crossing the roadway.

Center, left-turn lanes for two-way traffic, may be used as a refuge by a nonmotorist not in a crosswalk area crossing mid-block, but this use does not permit the turn lane to be coded as a painted median.

Curb cuts in raised medians are typically connected to the lateral lines of the sidewalks on opposite sides of the roadway by a crosswalk marked on the pavement. Typically raised medians with curb cuts are designed or have been adapted to provide a refuge area allow nonmotorists to cross one direction of traffic at a time.

00 No Median Present

01 Painted Median Present

02 Raised Median Present, With Curb Cut means a ramp graded down from the top surface of the median to the surface of an adjoining street is present

03 Raised Median Present, Without Curb Cut means a ramp graded down from the top surface of the median to the surface of an adjoining street is not present

04 Raised Median Present means a refuge area less than 122 cm (48 in) and 76cm (30 in) deep is present

05 Raised Median Present means a refuge area $\geq$ 122 cm (48 in) and 76cm (30 in) deep is present

08 Median Present, Unknown Type

09 Unknown

Pedestrian Signal

Element Values

Codes	Attributes
1	Unsignalized Crossing
2	No Pedestrian Signal
3	Fixed Time Pedestrian Signal
4	Pedestrian Signals Activated by a Push Button
5	Pedestrian Signals Activated by a Push Button, But Inoperable
6	Pedestrian Signal Present, Type Unknown
7	Not a Crosswalk or Crosswalk Area
9	Unknown

Remarks

Code the type of signal available on the path of the case pedestrian to provide a safe crossing. Where pedestrian traffic is regular and frequent at Intersections, pedestrian signal phases should be activated automatically. Code 'Pedestrian signal present, type unknown' when the PCR narrative of diagram says a pedestrian signal present was present.

01 Unsignalized Crossing means there are no traffic control signals present

02 No Pedestrian Signal means traffic control signals are present, but there is no pedestrian signal

03 Fixed Time Pedestrian Signal means a pedestrian signal is present and it do not require activation by a pedestrian

04 Pedestrian Signals Activated by a Push Button means the signal requires pedestrian to activate it

05 Pedestrian Signals Activated by a Push Button, But Inoperable means the signal cannot be activated by pushing the button

06 Pedestrian Signal Present, Type Unknown means the method of signal activation is not known

07 Not a Crosswalk Or Crosswalk Area means the pedestrian crossed the road at a point outside a marked crosswalk or statutory crosswalk area

09 Unknown means the presence of a signal cannot be determined

Bicycle Lane**Element Values**

Codes	Attributes
0	No Indicated Bike Lane Present
1	Bike Lane Against a Curb
2	Bike Lane Adjacent to a Parking Lane
9	Unknown if Indicated Bike Lane Present

Remarks

A bicycle lane is a bikeway adjacent to travel lanes that has been designated by striping, signing, pavement markings, or flexible posts for the preferential or exclusive use by pedalcyclists. Bike lanes should not be separated from other motor vehicle lanes by curbs, parking lanes, or other obstructions.

00 No Indicated Bike Lane Present means there is no striping, signing, or pavement markings indicating a bike lane

01 Bike Lane Against a Curb means the bike lane extends into the roadway outside of the curb and any gutter

02 Bike Lane Adjacent to a Parking Lane means the bike lane extends into the roadway outside of any legal parking lane

09 Unknown if Indicated Bike Lane Present

Parking Lane Presence

Element Values

Codes	Attributes
0	No Parking Lane Present
1	Dual Use Lane, Designated for Travel
2	Dual Use Lane, Designated for Parking
3	Parking Lane, Parallel Parking
4	Parking Lane, Angle Parking
5	Parking Lane, Perpendicular Parking
9	Unknown

Remarks

A parking lane is a designated parking area on a roadway or between the roadway and the curb on the nonmotorist precrash path. Some roadway lanes used for travel during some periods and for parking during other periods. Vehicles parked in a lane during the time it is designated for travel are not legally parked and are considered as stopped in traffic.

The parking lane designated for parking with and without pavement making delineating a parking space. The lane may accommodate parallel to the curb or roadside, parking at an angle to the curb or roadside or parking perpendicular to the curb or roadside.

00 No Parking Lane Present

01 Dual Use Lane, Designated For Travel means parking in a lane not permitted at the time of crash

02 Dual Use Lane, Designated For Parking means parking in a lane permitted at the time of crash

03 Parking Lane, Parallel Parking means lane never designated for travel, parallel parking permitted

04 Parking Lane, Angle Parking means lane never designated for travel, angle parking permitted

05 Parking Lane, Perpendicular Parking means lane never designated for travel, perpendicular parking permitted.

09 Unknown if Parking Lane Present

Speed Bump/Traffic Calming Presence**Element Values**

Codes	Attributes
1	Yes
0	No
9	Unknown

Remarks

This element describes the presence of one or more traffic calming devices in the crash area. Traffic calming devices reduce automobile speeds or volumes, mainly through the use of physical measures, to improve the quality of life in both residential and commercial areas and increase the safety and comfort of walking and bicycling.

Traffic calming measures include the following.

- Speed bumps
- Speed humps
- Speed lumps
- Speed tables
- Raised crosswalks
- Raised intersections
- Chicanes
- Median islands
- Crosswalk refuge
- Choker
- Curb extensions

Visual examples on subsequent pages are from:

TRAFFIC CALMING GUIDE FOR NEIGHBORHOOD STREETS, Virginia Department of Transportation Traffic Engineering Division, September 23, 2018



Figure 39. Speed Hump



Figure 40. Speed Lump



Figure 41. Speed Table



Figure 42. Raised Intersection



Figure 43. Raised Crosswalk



Figure 44. Chicane Example A



Figure 45. Chicane Example B



Figure 46. Median Island



Figure 47. Crosswalk Refuge



Figure 48. Chokers



Figure 49. Curb Extension

Parking Lane Vehicles Present**Element Values**

Codes	Attributes
00	No Vehicle resent
##	CISS Class of Vehicle code
##	CISS Class of Vehicle code
##	CISS Class of Vehicle code
99	Unknown

Remarks

Code this element when vehicles are legally parked along the trajectory of the case vehicle approach to the point of conflict with the nonmotorist. This vehicle is coded whether or not the parked vehicles obstruct the sightlines of the driver or the case nonmotorist.

Code the CISS class of vehicle code for up to three legally parked vehicles in the sequence they came into proximity as the case vehicle approached to the point of conflict with the nonmotorist.

If there is a gap in the sequence of parked vehicles large enough to accommodate a light passenger car, truck, SUV, van, or minivan code not vehicle present. If the gap is judged to narrow to accommodate a light-passenger vehicle disregard the gap and code any adjacent vehicle as part of the sequence.

Sidewalk Practicable Use

Element Values

Codes	Attributes
0	No Sidewalk Present
1	Use Practicable
2	Use Impaired by Encroaching Vegetation
3	Use Impaired by Pavement Cracks
4	Use Impaired by Pavement Upheaval
5	Use Obstructed by Parked Vehicle
6	Use Obstructed by Object
7	Use Impaired by Surface Condition
8	Use Impaired by Other (Specify)
99	Unknown

Remarks

Where sidewalks are provided along the case nonmotorist path determine whether or not its use is practical. Practicable use is determined with reference to a nonmotorist with mobility impairments. Assessment is not limited to the condition of the pavement but includes any obstruction that may induce a nonmotorist to enter the road. The obstruction may be partial or complete.

Some examples are a tree branch hangs down below the height of a pedestrian along the path; upheaved pavement impairs uses by a visually impair person with dog guide or a white cane or walking stick; a delivery truck in a driveway extends into the sidewalk area or a stretch of pavement uncleared of snow or covered by pooling water induces pedestrians/pedalcyclists to by-pass it by entering the road.

00 No Sidewalk Present mean there is no sidewalk

01 Use Practicable means use by a nonmotorist is unimpaired

02 Use Impaired by Encroaching Vegetation means vegetation at some height impairs use of the sidewalk

03 Use Impaired by Pavement Cracks means cracks are large enough to impair use of the sidewalk

04 Use Impaired by Pavement Upheaval means uneven pavement impairs use of the sidewalk

05 Use Obstructed by Illegally Parked vehicle means use is obstructed by an illegally parked vehicle

06 Use Obstructed by Object means use is obstructed by a moveable or fixed object

07 Use Impaired by Surface Condition means use is impaired by something on the surface of the pavement

08 Use Impaired by Other (Specify:)

99 Unknown is used if it cannot be determined whether used of the sidewalk was impaired

Visibility of Traffic – Pedestrian Point of View

Element Values

Codes	Attributes
0	No Obstruction
1	Trees
2	Other Landscaping I.E., Shrubs or Retaining Walls
3	Utility or Other Poles
4	Buildings
5	Signs
6	Transit or School Bus Shelters
7	Legally Parked Vehicles
8	Stopped Vehicles
9	Bus at a Bus Stop
10	Large Vehicle in Traffic
97	Other (Specify)
99	Unknown

Remarks

Objects at the side of the road or in the median may obstruct sightlines between approaching drivers and pedestrians/pedalcyclists entering the roadway. Objects may be fixed, transient, or temporary. Code any object that may obstruct the view of any nonmotorist adult or child of the approach of the case vehicle within 6 meters (20 feet) of the roadway. An assessment is made each meter along the case nonmotorist's path. Code each obstruction observed.

Only vehicles that are officially purposed to carry pre-primary, primary, and secondary school students to and from school or related events are considered school buses. See the CISS manual guidance for vehicle special use.

Repurposed "school buses" with a GVWR of more than 10,000 pounds that are operated by a church, civic group or other private party and used as a common carrier are considered a transit bus. Vans converted to serve as school buses and later repurposed for private use are considered shuttle buses and should be code as Legally Parked, Stopped in Traffic or Large Vehicle in Traffic. If a shuttle bus is stopped at a designated transit bus stop this should be captured under Other (Specify).

Stopped vehicles includes garbage trucks, delivery trucks, or vehicles that are standing in traffic or 'double' parked. Temporary obstructions like snowbanks or obstructions due construction work are captured under Other (Specify).

00 No Obstruction means the case nonmotorist had a clear view of the case vehicle approach

01 Trees means one or more trees obstructed the view of the case vehicle approach

02 Other Landscaping i.e., shrubs or retaining walls means a fixed landscaping obstructed the view of the case vehicle approach

03 Utility or Other Poles means one or more poles obstructed the view of the case vehicle approach

04 Buildings means a building obstructed the case nonmotorist view of the case vehicle approach

05 Signs mean any legally posted sign

06 Transit or School Bus Shelters means any bus shelter, public or private intended for use by transit or school bus passengers

07 Legally Parked Vehicles mean any vehicle, motorized or not, that are legally parked in traffic

08 Stopped Vehicles means any vehicle, motorized or not, that are stopped in traffic and not legally parked

09 Bus at a Bus Stop means a transit or school bus stopped at a designated bus stop

10 Large Vehicle in Traffic

97 Other (Specify)

99 Unknown

Pedestrian Warning Sign Presence

Element Values

Codes	Attributes
0	No Pedestrian Warning Sign
1	Pedestrian Crossing Sign
2	Flashing Pedestrian Crossing Sign
3	Pedestrian Crossing Sign, With Speed Bump or Hump
4	School Zone Sign, Flashing
5	School Zone Sign, Not Flashing
6	Yield For Pedestrian in Crosswalk Sign
7	Other Pedestrian Warning Sign (Specify)
9	Unknown

Remarks

Code the presence of a school zone or yellow pedestrian warning sign along the trajectory of the case vehicle to the point of conflict with the case pedestrian. School zone signs not equipped with flashing lights are considered as not flashing signs. Yellow pedestrian warning signs are typically placed to warn drivers of mid-block pedestrian crossings and before intersections where there are high volumes of pedestrian traffic. For example, pedestrian warning signs include 'Children at Play' and 'Deaf Child' signs.

00 No Pedestrian Warning Sign means no sign is posted

01 Pedestrian Crossing Sign means a yellow Pedestrian Crossing Sign is posted

02 Flashing Pedestrian Crossing Sign means yellow pedestrian crossing equipped to flash is posted

03 Pedestrian Crossing Sign With Speed Bump or Hump means a pedestrian crossing is posted in the presence of a Speed bump or hump before a crossing is reached

04 School Zone Sign, Flashing means a School Zone sign is present with an active flashing light

05 School Zone Sign, Not Flashing means a School Zone sign is present without an active flashing light

06 Yield for Pedestrian in Crosswalk Sign means a Yield for Pedestrian in Crosswalk sign is posted

07 Other Pedestrian Warning Sign (Specify)

09 Unknown

Crash/Environment**Street Lighting – Presence****Element Values**

Codes	Attributes
1	No Street Lighting Present
3	Street Lighting Present, Illuminated
4	Street Lighting Present, Not Illuminated
8	Street Lighting Present, Unknown if Illuminated
9	Unknown

Remarks

Code the presence of street lighting that is ≤ 10 meters (33 feet) from the prolongation of the lateral curb lines of a junction or intersection. If the crash is non-junction-related, code street lighting that is ≤ 10 meters (33 feet) from the point of the conflict with the nonmotorist and ≤ 10 meters (33 feet) from the lateral boundary lines of the roadway. The street lighting may be furniture on the sides of the road, in the median, or suspended over the intersection.

Street Lighting – Location**Element Values**

Codes	Attributes
0	No Street Lighting
1	Lighting On Nearside of Crash Location, On Side of Nonmotorist Approach Path
2	Lighting On Nearside of Crash Location, Opposite Side of Nonmotorist Approach Path
3	Lighting On Far-Side of Crash Location, On Side of Nonmotorist Approach Path
4	Lighting On Far-Side of Crash Location, Opposite Side of Nonmotorist Approach Path
10	Nonmotorist Approach Path Is Unknown
99	Unknown

Remarks

Select all that apply.

For the purpose of coding this variable, the nearside of the crash location is the side the case vehicle approached from. The far-side of the crash location is the side beyond the point of impact that the case vehicle was heading toward.

Code the location of street lighting that is ≤ 10 meters (33 feet) from the prolongation of the lateral curb lines of a junction or intersection. The street lighting may be furniture on the sides of the road, in the median, or suspended over the intersection.

If the crash is non-junction-related, code street lighting that is ≤ 10 meters (33 feet) from the point of the conflict with the nonmotorist and ≤ 10 meters (33 feet) from the lateral boundary lines of the roadway. For non-junction crashes lighting along the vehicle's path prior to impact would be considered nearside, and lighting past impact far side.

Refer to the figures below for assistance with coding.

00 No Street Lighting, means no street lighting is present at the crash location

01 Lighting on Nearside of Crash Location, on Side of nonmotorist Approach Path means a streetlight is on the side of the intersection or crash location that the case vehicle approached from and on the same side of the intersection or crash location as the nonmotorist path of approach to the intersection.

02 Lighting on Nearside of Crash Location, Opposite Side of Nonmotorist Approach Path means a streetlight is on the side of the intersection or crash location the case vehicle approached from, and on the opposite side of the intersection or crash location as the nonmotorist path of approach.

03 Lighting on Far-Side of Crash Location, on Side of Nonmotorist Approach Path means a streetlight is on the side of the intersection or crash location the case vehicle was traveling

toward, and on the same side of the intersection or crash location as the nonmotorist path of approach.

04 Lighting on Far-Side of Crash Location, Opposite Side of Nonmotorist Approach Path means a streetlight is on the side of the intersection or crash location the case vehicle was traveling toward, and on the opposite side of the intersection or crash location as the nonmotorist path of approach.

10 The path the nonmotorist took to the crash location is not known.

99 Unknown if streetlights present

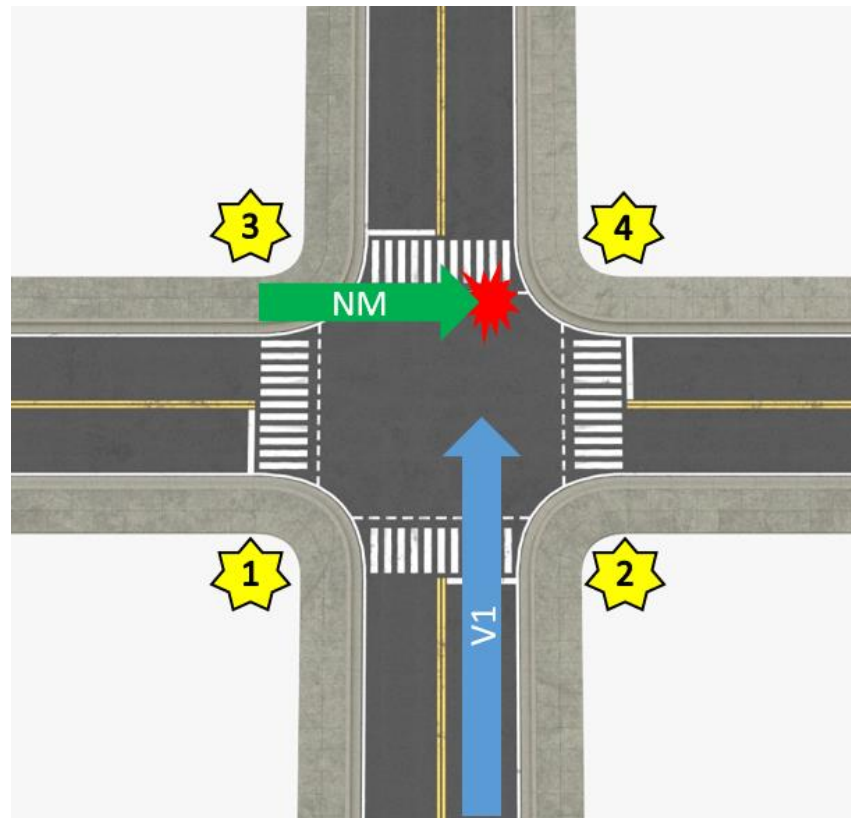


Figure 50. Diagram Showing Nearside and Farside Lighting Locations at an intersection based on vehicle and nonmotorist paths

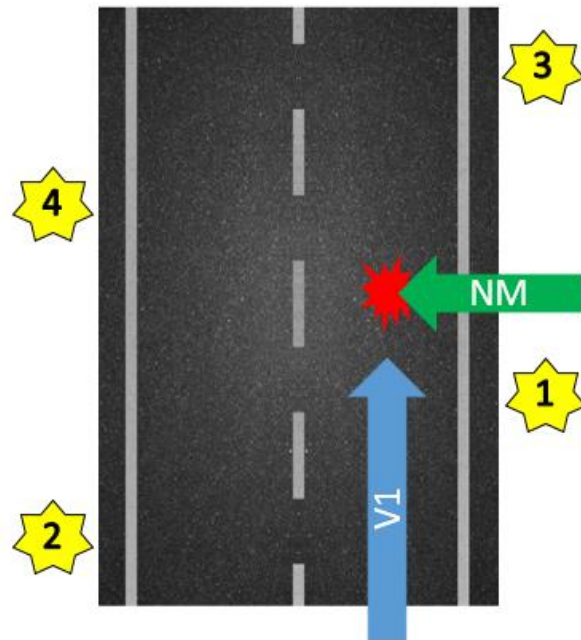


Figure 51. Diagram Showing Nearside and Farside Lighting Locations on Roadway With Nonmotorist crossing roadway

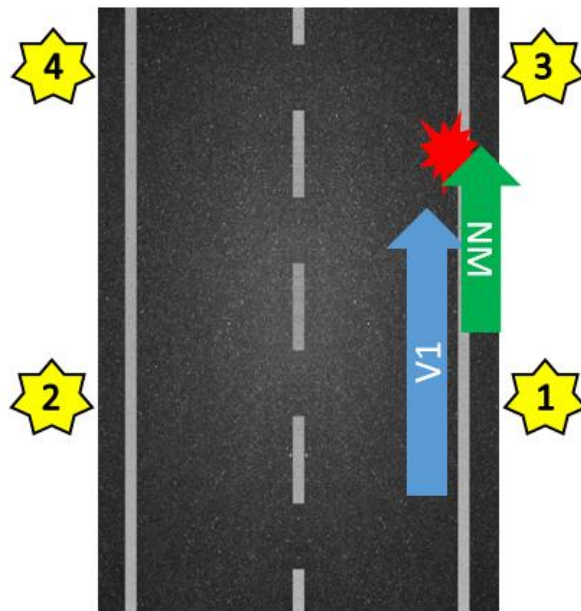


Figure 52. Diagram Showing Nearside and Farside Lighting Locations on Roadway With Nonmotorist traveling same direction as nonmotorist

Action/Action**Nonmotorist Crash Location****Element Values**

Codes	Attributes
1	At Intersection - In Marked Crosswalk
2	At Intersection-Unmarked/Unknown if Marked Crosswalk
3	At Intersection - Not In Crosswalk
9	At Intersection - Unknown location
10	Not at Intersection - In Marked Crosswalk
11	Not at Intersection - On Roadway, Not in Marked Crosswalk
13	Not at Intersection - On Roadway, Crosswalk Availability Unknown
14	Parking Lane/Zone
16	Bicycle Lane
20	Shoulder/Roadside
21	Sidewalk
22	Median/Crossing Island
23	Driveway Access
24	Shared-Use Path
25	Non- Trafficway Area
28	Other
99	Unknown Location

Remarks

This element identifies the location of the nonmotorist with respect to the roadway at the time of the crash.

“At Intersection” means: The person is on a roadway (travel lane) either (1) in the intersection, (2) in an area between a crosswalk and the perimeter of the intersection, or (3) in a crosswalk (whether marked or unmarked) adjacent to an intersection. If there are no crosswalks, “at intersection” means only the intersection, which is the area embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. See the Coding Guide: Intersections for helpful information.

Crosswalk is (1) that part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway, and in the absence of a sidewalk on one side of the highway, that part of the highway included within the extension of the lateral line of the existing sidewalk to the side of the highway without the sidewalk, with such extension forming a right angle to the centerline of the highway; or (2) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings

on the surface of the roadway placed in accordance with the provisions in the Manual of Uniform Traffic Control Devices.

Intersection is an area that (1) contains a crossing or connection of two or more roadways not classified as driveway access (2) is embraced within the prolongation of the lateral curb lines, or, if none, the lateral boundary lines of the roadways.

01 (At Intersection - In Marked Crosswalk) -- used when a person is in that portion of a roadway at an intersection that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway. This attribute includes shared-use path crossings. This does not include crosswalks located in mid-blocks.

02 (At Intersection - In Unmarked/Unknown if Marked Crosswalk) -- used when the person is “at intersection” within the prolongations of the sidewalk edges but there are no lines or other markings on the surface of the roadway (unmarked crosswalk). There must be a sidewalk or improved path present on one side of the leg of the trafficway that this person is crossing for there to be an unmarked crosswalk. If there are no sidewalks, there are no crosswalks. If it is unknown if the crosswalk is marked or unmarked, default to unmarked.

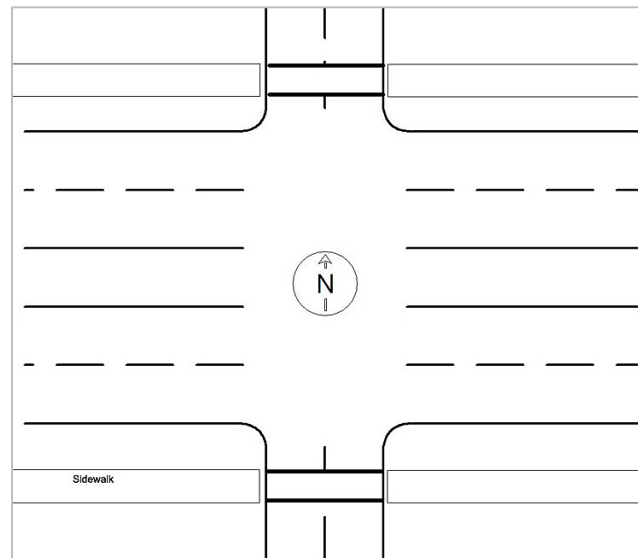


Figure 53. Intersection With Only Two Crosswalks

In a four-way intersection with sidewalks running along the East/West trafficway and no sidewalks on the North/South trafficway, the intersection area would only have two crosswalks. The two that allow crossing of the North/South trafficway. (See Figure 41 above.)

03 (At Intersection - Not in Crosswalk) refers to a person in a travel lane that is not using an available crosswalk or there is not a crosswalk at this location.

- For people other than pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection, use 03 (At Intersection-Not in Crosswalk).
- For pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection, use 16 (Bicycle Lane).

- If you do not know if there is a bike lane through the intersection, then default to 03 (At Intersection-Not in Crosswalk).

09 (At Intersection-Unknown Location) -- used when a person is known to be at an intersection, but it cannot be determined whether the person was in a crosswalk area (marked or unmarked) or the intersection.

10 (Not at Intersection - In Marked Crosswalk) -- used when a person is in the portion of the roadway, not at an intersection, that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway (i.e., the case identifies a mid-block crosswalk exists and the person is using it.). This attribute includes shared-use path crossings.

11 (Not at Intersection - On Roadway, Not in Marked Crosswalk) -- used when a person is in the portion of the roadway, not at an intersection, and either:

1. the case identifies a mid-block crosswalk exists and the person is not using it (e.g., the person is jaywalking when a mid-block crosswalk is available),
2. there is not a crosswalk at this location, or
3. the person is crossing at a location where a mid-block crosswalk would not be expected to exist (e.g., a rural roadway or interstate).

13 (Not at Intersection - On Roadway, Crosswalk Availability Unknown) -- used when it cannot be determined if a crosswalk was available (e.g., there is some information [possibly conflicting] that leads you to believe that there may be a mid-block crosswalk at this location, but there is not sufficient information about the location to be able to make a determination).

14 (Parking Lane/Zone) refers to a person in an area on the roadway, or next to the roadway, on which parking is permitted in marked or unmarked spaces. This includes curbside and edge of roadway parking (for example, legal residential parking, city-street parking, etc.). Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This code should NOT be used during hours when parking is NOT permitted (see 11 (Not at Intersection-On Roadway, Not in Marked Crosswalk)).

16 (Bicycle Lane) -- used when a person is adjacent to travel lanes in a bikeway that has been designated for preferential or exclusive use by pedalcyclists through striping, signage, or pavement markings.

- For people other than pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection, use 03 (At Intersection-Not in Crosswalk).
- For pedalcyclists in a marked bicycle lane or an unmarked prolongation of the bicycle lane in an intersection use 16 (Bicycle Lane).
- When at an intersection, if you do not know if there is a bike lane through the intersection, then default to 03 (At Intersection-Not in Crosswalk).

20 (Shoulder/Roadside)—Shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped motor vehicles, and lateral support of the roadway structure. Roadside is the outermost part of the trafficway from the property line or other boundary into the edge of the first road. For people on a sidewalk on the roadside select 21 (Sidewalk).

21 (Sidewalk) is any improved surface primarily constructed for use by pedestrians. Do not select this attribute for sidewalks within a 23 (Driveway Access), 22 (Median/Crossing Island), 25 (Non-Trafficway Area).

22 (Median/Crossing Island) -- used when a person is in a median or crossing island. Median is an area of trafficway between parallel roads separating travel in opposite directions. A median should be 4 or more feet wide. Crossing Island is a cement or grassy area in the middle of a trafficway. This attribute excludes crosswalk areas that pass through a median, crossing or traffic island (i.e., select 01 (At Intersection-In Marked Crosswalk), 02 (At Intersection-In Unmarked/Unknown if Marked Crosswalk), or 10 (Not at Intersection-In Marked Crosswalk).)

23 (Driveway Access) is a portion of the trafficway at the end of a driveway providing access to property adjacent to a trafficway. This includes the driveway crossing that is the portion of the driveway access where a sidewalk or shared-use path crosses over the driveway access.

24 (Shared-Use Path) -- used when a person on a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or an independent right-of-way. Shared-Use Paths will also be used by pedestrians, skaters, wheelchairs, joggers, and other nonmotorized users. Shared-use path crossings are coded under 01 (At Intersection-In Marked Crosswalk) or 10 (Not at Intersection-In Marked Crosswalk).

25 (Non-Trafficway Area) is not physically located on any land way open to the public as a matter of right or custom for moving people or property from one place to another. For example: a person in a parking lot but not in a parking lot way, a yard, a person in a closed portion of a work zone, or in a house.

28 (Other) -- used when a person is at a location stated in the case material that is not reflected in the listed attributes for this data element. These would be people within the trafficway (i.e., not element value 25 (Non-Trafficway Area)). Examples include central islands of rotary intersections, gores, separators, or directional/channelizing islands.

99 (Unknown Location) -- used when the location of the nonmotorist was unknown at the time of the crash.

Nonmotorist Action

Element Values

Codes	Attributes
2	Waiting to Cross Roadway
3	Crossing Roadway
5	Movement Along Roadway With Traffic (In or Adjacent to Travel Lane)
6	Movement Along Roadway Against Traffic (In or Adjacent to Travel Lane)
8	In Roadway - Other (Working, Playing, Etc.)
9	Stationary and Adjacent to Roadway (e.g., Shoulder, Median)
10	Working in Trafficway (Incident Response)
11	Entering/Exiting Parked or Stopped Vehicle
12	Disabled Vehicle-Related (Working on, Pushing, Leaving/Approaching)
14	Other ((Specify)
16	Movement Along Roadway – Direction Unknown
99	Unknown

Remarks

This element describes the actions of the nonmotorist at the time of their involvement in the crash.

02 (Waiting to Cross Roadway) -- used when the nonmotorist is near the curb or the roadway edge waiting to cross a roadway anywhere along the roadway. If the pedestrian began to cross the roadway, stopped, and then was struck select 03 (Crossing the Roadway). For people adjacent to the roadway where their intent to cross is not identified, use 09 (Stationary and Adjacent to Roadway (e.g., Shoulder, Median, Sidewalk)).

03 (Crossing Roadway) -- used when the nonmotorist was moving across or in the travel lanes with the goal of crossing the roadway.

05 (Movement Along Roadway With Traffic (In or Adjacent to Travel Lane)) -- used when the nonmotorist was moving in the same direction as the flow of traffic, either in the travel lane or adjacent to it (e.g., jogging or walking on shoulder or roadside). This also includes situations where the person's action/intent was traveling along the roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on mobile phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median or driveway access, etc. Note: This excludes At Intersection location where the nonmotorist is crossing. See 03 (Crossing Roadway).

06 (Movement Along Roadway Against Traffic (In or Adjacent to Travel Lane)) -- used when the nonmotorist was moving in the opposite direction of the flow of traffic (facing oncoming vehicles), either in the travel lane or adjacent to it (e.g., jogging or walking on shoulder or roadside). This also includes situations where the person's action/intent was traveling along the

roadway. For example, a person stopped momentarily when they were struck (e.g., to tie shoes, talk on mobile phone) or someone that moved out into the path of a vehicle to avoid an obstacle along the roadside. This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median, or driveway access, etc. Note: This excludes At Intersection location where the nonmotorist is crossing. See 03 (Crossing Roadway).

16 (Movement Along Roadway - Direction Unknown) -- used when the nonmotorist was moving in or adjacent to a travel lane but their direction with respect to the flow of traffic is unknown (e.g., jogging or walking on shoulder or roadside). This may include the roadway edge, shoulder (paved or unpaved), sidewalk, roadside, median, or driveway access, etc. Note: This excludes At Intersection location where the nonmotorist is crossing. See 03 (Crossing Roadway).

08 (In Roadway - Other [Working, Playing, etc.]) -- used when the nonmotorist was in the roadway but not crossing it. Examples include conducting maintenance, playing in the roadway, operating a snow blower or lawn care equipment, standing, or lying in the roadway. This attribute should not be used when the nonmotorist was involved in incident response. For cases involving incident response, use attribute 10 (Working in Trafficway [Incident Response]). For cases involving a nonmotorist working within a closed portion of a work zone area, use attribute 14 (Other ((Specify))).

09 (Stationary and Adjacent to Roadway (e.g., Shoulder, Median, Sidewalk)) -- used when the nonmotorist was not moving and not in the roadway but in an area immediately adjacent to the roadway, such as a median, shoulder, sidewalk, pedestrian refuge, traffic island, etc.

10 (Working in Trafficway [Incident Response]) -- used when the nonmotorist was in the roadway as part of an official response to an incident, such as a firefighter moving between an emergency vehicle and a crash involved vehicle.

11 (Entering/Exiting Parked/Stopped Vehicle) -- used when a pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. This does not include crashes involving pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.

12 (Disabled Vehicle-Related (Working on, Pushing, Leaving/Approaching)) -- used when the pedestrian was outside of a disabled or inoperative vehicle for any of number of reasons, including working on it, pushing it, leaving it, or approaching it. For vehicles in a previous crash, it is not necessary to know the damage severity.

14 (Other ((Specify))) -- used when the actions or circumstances stated in the case material do not reflect the listed attributes for this data element. This includes nonmotorists working within a closed portion of a work zone area.

Note: For attributes with a “Specify:” designation, a fill-in text box will open in CISSWeb. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

99 (Unknown) -- used when the action or circumstances of the nonmotorist prior to the crash was unknown.

Nonmotorist Attitude**Element Values**

Codes	Attributes
1	Standing
2	Bending at Waist
3	Sitting
4	Crouching
5	Kneeling
6	On Skates/Skateboard
7	On Bike/Scooter
8	Other (Specify)
99	Unknown
97	N/A

Remarks

Code the attribute that best describes the nonmotorist's vertical orientation just prior to the nonmotorist's first avoidance action. If there are no avoidance actions, code the attribute that best describes the nonmotorist's vertical orientation just prior to the first impact. Thus, people who are in an upright may be stationary, walking, running, etc., are all classified under code 1 (Standing). Variations in the range of upright positions are distinguished in the Nonmotorist Motion element

01 (Standing) -- used when the pedestrian is upright on both feet; this code includes pedestrians who are leaning to one side or against an object, walking, running, hopping, skipping, or jumping.

02 (Bending at waist) -- used when the pedestrian is bent over, using the hips as the pivot point.

03 (Sitting) -- used when the pedestrian is sitting on the ground, with buttocks in contact with the ground.

04 (Crouching) -- used when the pedestrian is stooped down or bent low by using the knees as the pivot point.

05 (Kneeling) -- used when at least one knee of the pedestrian is in contact with the ground or an object.

06 (On Skates/Skateboard) -- used when the nonmotorist is riding on skates or a skateboard.

07 (On Bike/Scooter) -- used when the nonmotorist is riding a bike or scooter.

08 (Other (Specify):) Used when the nonmotorist's attitude is not covered by preceding categories. Examples include the nonmotorist seated on a bench and/or lying in the roadway. Specify the pre-crash attitude.

99 (Unknown) – Used when there is insufficient information to determine the nonmotorist's attitude.

Nonmotorist Motion

Element Values

Codes	Attributes
1	Not Moving
2	Walking Slowly
3	Walking Rapidly
4	Running or Jogging
5	Skipping/Hopping/Jumping
6	Falling/Stumbling/Rising
7	On Skates/Skateboard
8	On Bike/Scooter
97	N/A
98	Other (Specify)
99	Unknown

Remarks

Code the attribute that best describes the nonmotorist's motion just prior to the first avoidance action. If there are no avoidance actions, code the attribute that best describes the nonmotorist's motion just prior to the first impact.

01 (Not Moving) -- used when the nonmotorist is stationary and includes crouching, kneeling, and bending at the waist.

02 (Walking Slowly) -- used when the pedestrian is advancing on foot in such a manner that part of one foot or the other is always in contact with the ground and the pace is a normal walking stride.

03 (Walking Rapidly) -- used as described for code "01" except that the pedestrian is advancing at an accelerated rate, i.e., deliberately moving his/her legs quickly to achieve a more rapid advance than a normal walking stride, but not running.

04 (Running or Jogging) -- used when the pedestrian is moving rapidly in such a manner that both feet are off the ground for a portion of each step.

05 (Skipping/Hopping/Jumping) -- used when the pedestrian is moving by making short leaps on one or both feet, when the pedestrian is moving in light springy steps, alternating a hop between steps while walking, or when the pedestrian is springing or propelling from the ground in generally an upward motion.

06 (Falling/Stumbling/Rising) -- used in two circumstances to describe a pedestrian who is not stationary, as coded under value "01," but who is also not engaged in controlled motion as coded under values "02" to "05." "Falling/stumbling" refers to situations where the pedestrian's control of his/her motion is interrupted such that balance is lost and the pedestrian is no longer in an upright posture. "Rising" refers to situations where the pedestrian was previously not in an

upright posture (i.e., was kneeling, crouching, etc., or had just fallen or stumbled) and was engaged in the act of attaining an upright standing posture.

07 (On Skates/Skateboard) -- used when the nonmotorist is riding on skates or a skateboard.

08 (On Bike/Scooter) -- used when the nonmotorist is riding a bike or scooter.

97 (N/A)

98 8" [Other (Specify):] -- used when the pedestrian's motion cannot be coded as described for values "00" to "10." A brief annotation must be included to describe the situation.

99 9" Unknown

Nonmotorist Approach to Vehicle**Element Values**

Codes	Attributes
1	Stationary
2	From Left
3	From Right
4	From Behind
5	In Line
8	Other (Specify)
9	Unknown
7	N/A

Remarks

Code the attribute that best describes the nonmotorist's approach relative to the vehicle just prior to the nonmotorist's first avoidance action.

01 (Stationary) when the nonmotorist is still.

02 (From Left) when the nonmotorist enters the path of the vehicle from the driver's left side.

03 (From Right) when the nonmotorist enters the path of the vehicle from the driver's right side.

04 (From Behind) when the nonmotorist enters the path of the vehicle from behind.

05 (In Line) when the nonmotorist is moving in line with the vehicle's trajectory, either towards or away from the vehicle. The nonmotorist will exhibit little or no lateral movement from the driver's perspective.

Nonmotorist Heading**Element Values**

0 to 360°

Codes	Attributes
9999	Unknown

Remarks

Nonmotorist heading refers to the direction the police said the sternum was pointing at initial impact. Determine the heading of the nonmotorist trajectory along the path to the point of conflict with the case vehicle.

Road Section Struck**Element Values**

Codes	Attributes
1	Struck on Nearside Shoulder
2	Struck in Nearside Roadway
3	Struck on Centerline or Median
4	Struck in Far-Side Roadway
5	Struck on Far-Side Shoulder
8	Nonmotorist Not Attempting to Cross
9	Unknown

Remarks

For this element, the nearside of a traffic-way is the side that the nonmotorists initiated their crossing from. The far-side of a traffic-way is the side that the nonmotorist's intended to cross to. Refer to the diagrams below.

01 Struck on Nearside Shoulder means the conflict between the nonmotorist and case vehicle occurred on the shoulder of the road the nonmotorist was crossing from.

02 Struck in Nearside Roadway means the conflict between the nonmotorist and case vehicle occurred in the roadway before the nonmotorist reached the centerline or median.

03 Struck on Centerline or Median means the conflict occurred in the portion of the roadway that separates two-way traffic, on the centerline, in the area of a separator or a median.

04 Struck in Far-Side Roadway means the conflict between the nonmotorist and case vehicle occurred in the roadway after the nonmotorist crossed the centerline/median and entered the travel lanes for oncoming traffic,

05 Struck on Far-Side shoulder means the conflict between the nonmotorist and case vehicle occurred on the shoulder of the road on the side the nonmotorist was crossing to.

08 The nonmotorist was Not Attempting to Cross any travel lanes. This code is also used when the nonmotorist is traveling in-line with the roadway, either on the shoulder or in a travel lane.

09 Unknown is used when it is not known where the conflict between the nonmotorist and the vehicle occurred.

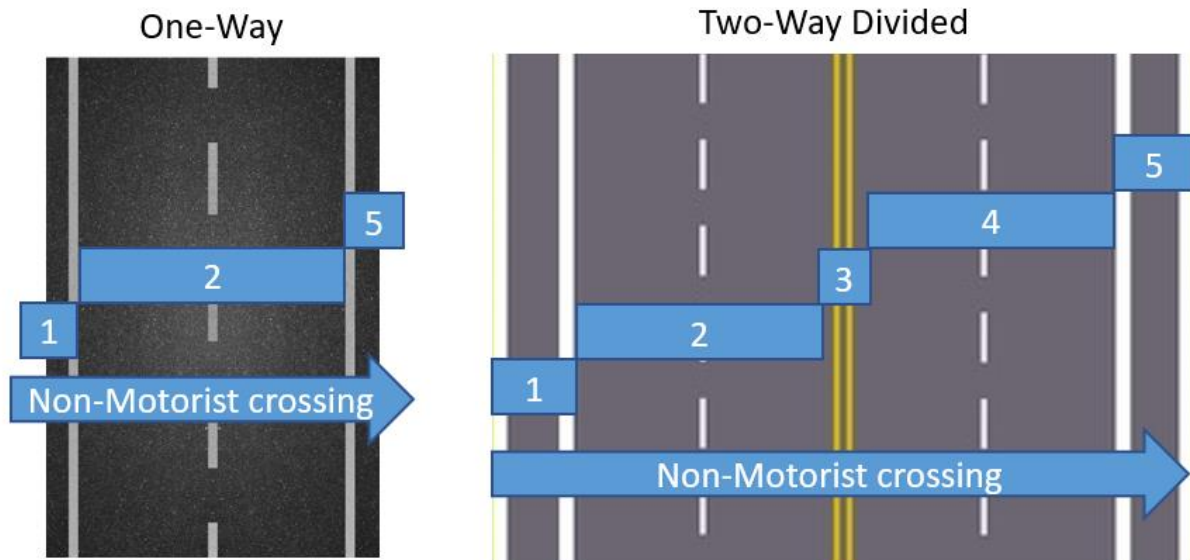


Figure 54. Diagram showing nearside and far side sections of the roadway on one-way and two-way divided roadway.

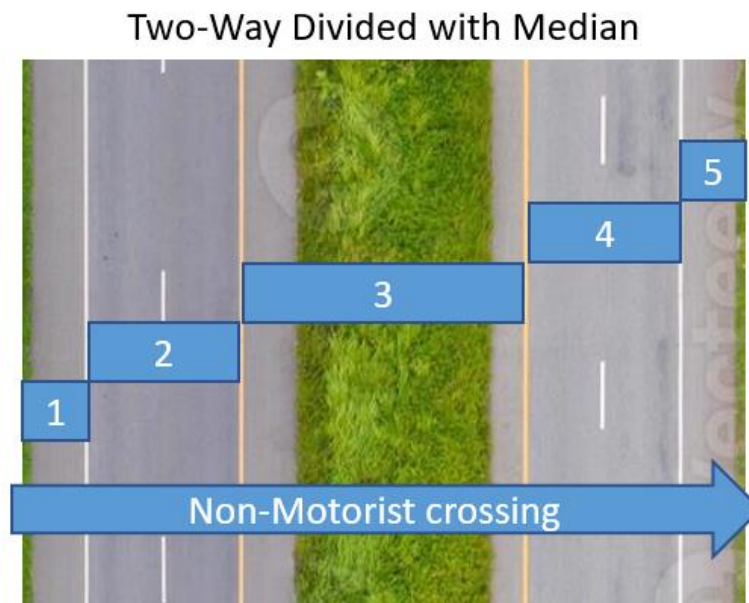


Figure 55. Diagram showing nearside and far side sections of the roadway on median divided roadway.

Distance Crossed**Element Values**

0.0 to 300.0 Meters

Codes	Attributes
9998	Not Applicable
9999	Unknown

Remarks

Enter the distance (in tenth of meters) the nonmotorist travelled from the curb or roadway edge to point of impact with the vehicle. Do not include the shoulder for this measurement, it starts when the nonmotorist enters a travel lane.

Going to or From School (K-12)**Element Values**

Codes	Attributes
1	No
2	Yes
9	Unknown

Remarks

Code whether the stuck nonmotorist was commuting to or from school at the time of the crash. This includes people ages 2-18 or an adult supervising people ages 2-18 going to or from a school for any reason. Examples are going to a school dance, sports practice, or extracurricular activities.

Nonmotorist Chest Prior**Element Values**

Codes	Attributes
1	Facing Vehicle
2	Facing Away From Vehicle
3	Left Side to Vehicle
4	Right Side to Vehicle
5	Prone
8	Other (Specify):
9	Unknown

Remarks

This variable describes the nonmotorist's body orientation with respect to the striking vehicle prior to avoidance actions. "Facing vehicle" means the nonmotorist is facing the (tracking or yawing) vehicle.

View the nonmotorist as having four planes (i.e., front, back, left, and right; code top and bottom in code "8"). Choose the plane that best says how the nonmotorist was positioned prior to any avoidance actions. For example, if the left side and rear area of the nonmotorist's body are exposed to the striking vehicle (i.e., 45° off the assumed 90°), then select either code "(Facing away) or code "(Left side to vehicle), depending on the nonmotorist's activity and action. If, as in the above example, the nonmotorist was crossing the road, then select code "(Left side to vehicle), and if the nonmotorist was moving with traffic, then select code "(facing away). For orientations between 45° and 90°, select the appropriate code based on the body area that is exposed the most (i.e., side or rear).

Nonmotorist Avoidance Actions

Element Values

Codes	Attributes
1	No Avoidance Actions
2	Stopped
3	Accelerated Pace
4	Ran Away (Along Vehicle Path)
5	Jumped
6	Turned Away From Vehicle
7	Turned Toward Vehicle and Braced
8	Dove or Fell Away From Vehicle
98	Other (Specify)
99	Unknown

Remarks

It should be noted that to be considered an avoidance action, the nonmotorist activity must be a conscious or instinctive action and not a kinematic response to the impact. This does not imply however, that the pedestrian must recall initiating the maneuver.

Indicate the response of the nonmotorist, relative to the recognition of the impending impact. Note that, in situations involving personal danger, people do not always behave rationally. The action coded as the nonmotorist avoidance maneuver need not be a "sensible" or appropriate response to danger. If more than one response was initiated (e.g., pedestrian saw vehicle, stopped, and then used their hands to vault the corner of the vehicle) use code "98" [Other (Specify):].

01 (No Avoidance Actions) -- used when the nonmotorist did not take any action to avoid an impending impact.

02 (Stopped) -- used when the pedestrian was engaged in some form of motion (nonmotorist motion is not coded "00") and the nonmotorist ceased this motion upon recognizing the impending impact.

03 (Accelerated Pace) -- used when the nonmotorist was engaged in some form of motion (nonmotorist motion is not coded "00") and the Nonmotorist began or attempted to move more quickly upon recognizing the impending impact.

04 [Ran Away (Along Vehicle Path)] is used when the pedestrian attempted to avoid the impact by running away from the approaching vehicle and the pedestrian's path of attempted escape was in the same direction as the vehicle's path of travel.

05 (Jumped) -- used when the pedestrian attempted to avoid the impact by jumping out of the way.

06 (Turned Away From Vehicle) -- used when the pedestrian, upon recognizing the impending impact, turned away from the vehicle such that his or her back was toward the vehicle at impact.

07 (Turned Toward Vehicle) -- used when the pedestrian upon recognizing the impending impact, turned toward the vehicle such that he or she was facing the vehicle at impact.

08 (Dove or Fell Away) -- used when the nonmotorist made a dive or permitted him or herself to fall to the ground in an attempt to avoid the impending impact. Diving is distinguished from jumping in that when jumping, the intent is to land on the feet, whereas in diving the action is a head-first lunge with the diver not intending to land on the feet.

98 8" [Other (Specify):] -- used when the nonmotorist's avoidance maneuver is not among the attributes listed or when more than one of the above responses is initiated. The use of this code must include an annotation indicating the specific actions performed.

99 (Unknown) -- used when the nonmotorist's avoidance maneuver is not known.

Note: Codes may be appropriate when the pedestrian had the intention to attempt an avoidance maneuver but was not successful in executing this intent. For example, a pedestrian may turn toward the vehicle with the intent to brace or vault but was struck before he or she could complete the avoidance maneuver. Similarly, a pedestrian may turn away from the vehicle with the intent to run or dive but was struck before the running or diving was accomplished.

Nonmotorist Chest at Impact

Element Values

Codes	Attributes
1	Facing Vehicle – Parallel
2	Facing Vehicle – Oblique/Left
3	Facing Vehicle – Oblique/Right
4	Left Side to Vehicle – Perpendicular
5	Facing Away – Parallel
6	Facing Away – Oblique/Left
7	Facing Away – Oblique/Right
8	Right Side to Vehicle – Perpendicular
98	Other (Specify):
99	Unknown

Remarks

This element describes the nonmotorist's body orientation with respect to the striking vehicle at impact. "Facing vehicle - parallel" means the nonmotorist's chest is presented to the vehicle at impact, while "Facing away – parallel" means the nonmotorist's back is presented at impact.

View the nonmotorist as having eight planes, as displayed in the diagram below. Choose the attribute that best says which plane the nonmotorist presented to the vehicle at the initial point of contact.

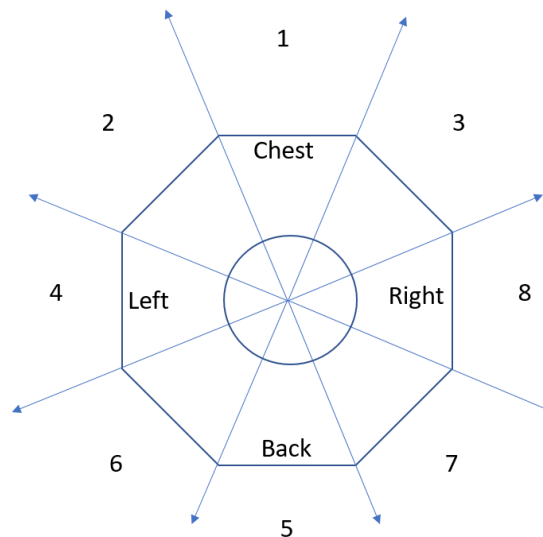


Figure 56. Nonmotorist Chest Orientation at Impact

Nonmotorist Head at Impact**Element Values**

Codes	Attributes
1	To Front
2	To Left
3	To Right
4	Up
5	Down
8	Other (Specify):
9	Unknown

Remarks

Select the appropriate code to indicate the direction in which the nonmotorist's facial area is oriented relative the body's anatomical (midsagittal plane) axis at initial impact. For example, if the nonmotorist's right side is exposed to the vehicle and he turns his head to the right to see the vehicle (i.e., head is facing vehicle) then code "(to right).

Nonmotorist Legs at Impact**Element Values**

Codes	Attributes
1	Together
2	Apart-Laterally
3	Apart-Right Leg Forward
4	Apart-Left Leg Forward
5	Apart-Forward Leg Unknown
6	Left Foot off the Ground
7	Right Foot off the Ground
8	Both Feet off the Ground
98	Other (Specify):
99	Unknown

Remarks

Select the appropriate code to indicate the nonmotorist's leg orientation at initial impact. Codes 01-05 are intended for use in those situations where both feet are in contact with the road or ground surface. For codes 03-05, the forward direction is relative to the body's anatomical orientation.

(Both feet off the ground) -- used when the pedestrian jumps off the ground immediately prior to impact (e.g., Pedestrian Avoidance Maneuver = "Jumped").

8" [Other (Specify):] refers to a leg orientation not listed in codes "01" to "08." Riding a pedalcycle or personal conveyance would be included in this code.

Nonmotorist Arms at Impact

Element Values

Codes	Attributes
1	At Sides
2	Folded Across Chest
3	Hands Clapsed Behind Back
4	Hands On Hips
5	Hands In Pockets
6	Extended Upward
7	Extended to Side
8	Extended Forward, Bracing
9	Extended Forward or Backward Holding or Pulling Object (Holding Briefcase, Pulling Suitcase, Bag, Etc.)
10	Holding an Object (Young Child, Grocery Bag, Etc.) in Arms
11	Holding Object (Young Child, Grocery Bag, Etc.) on Shoulders or Head
98	Other (Specify):
99	Unknown

Remarks

Note that all codes designate positions relative to anatomical body orientation and that for codes 06-11, if one arm is in the designated position, then the code is applicable.

01 (At Sides) -- used when both arms are positioned generally in line vertically with the upper torso and legs. Normal swaying of arm (as in running or jogging) is acceptable for this code.

02 (Folded Across Chest) -- used when the arms are in a crossing pattern relative to the chest. It is not necessary for the arms to be folded together or in a locked position to use this code.

03 (Hands Clapsed Behind Back) -- used when the hands are interlocked behind the lateral surface of the back.

04 (Hands on Hips) -- used when the hands of the pedestrian is (are) in a slightly bent position and resting on the hips.

05 [Hands in Pockets] -- used when any hand is in any pocket of the pedestrian. The pockets can be pants, shirt, or jacket, and front side or rear pockets.

06 (Extended Upward) -- used when either arm or arms are above the longitudinal plane of the shoulders.

07 (Extended to Side) -- used when either arm or arms are extended laterally to the side of the pedestrian.

08 (Extended Forward, Bracing) -- used when the pedestrian's arms are extended forward and acting as a brace to the vehicle.

09 (Extended, Holding Object (Holding Briefcase, Pulling Suitcase, Bag, etc.,)) is used when the pedestrian is holding or pulling an object.

10 (Holding an Object in Arms) -- used when the pedestrian is holding an object with their arms.

11 (Holding Object on Shoulders or Head) -- used when the pedestrian is holding an object upon their shoulders or head.

98 (Other, Specify), refers to an arm orientation not listed in codes "01" to "11." Riding a pedalcycle or personal conveyance would be included in this code.

Vehicle/Nonmotorist Interaction**Element Values**

Codes	Attributes
1	Carried by Vehicle Wrapped Position
2	Carried by Vehicle, Slid to Windshield
3	Carried by Vehicle, Position Unknown
4	Passed Over Vehicle Top
5	Thrown Straight Forward
6	Thrown Forward and Left of Vehicle
7	Thrown Forward and Right of Vehicle
8	Knocked to Pavement, Forward
9	Knocked to Pavement, Left of Vehicle
10	Knocked to Pavement, Right of Vehicle
11	Knocked to Pavement, Run Over, or Dragged by Vehicle
12	Shunted to Left (Corner Impacts Only)
13	Shunted to Right (Corner Impacts Only)
14	Bumped or Pushed Aside
15	Snagged, Rotated
16	Snagged, Dragged by Vehicle
17	Foot or Legs Run Over
98	Other (Specify):
99	Unknown

Remarks

Select the appropriate code to describe the vehicle to nonmotorist interaction. Codes "01" to "13" and "17" are used when the impact with the nonmotorist was through the front plane of the vehicle or was at a corner of the vehicle. Codes "14" to "16" are used when the impact with the nonmotorist was through the left or right-side plane of the vehicle, forward of the top of the A-pillar.

Codes "01," "02" and "03(Carried by vehicle...) refer to circumstances where the initial vehicle-to-nonmotorist impact was through the vehicle's front plane and the nonmotorist's body remained in contact with the vehicle such that the nonmotorist was carried by the vehicle (a.k.a. 'Wrap sequence' type variant). This is distinguished from Codes "05", "06", "08", "09" and "10" circumstances where the impact pushes the nonmotorist away from the vehicle and the vehicle to nonmotorist contact is brief (a.k.a. 'Forward projection sequence' type variant). 4" is used when a roof vault sequence occurs. Codes "12" and "13" are used to indicate a fender vault sequence type variant. A somersault sequence is captured under code "98 Other (Specify):"

01 (Carried by Vehicle, Wrapped Position) -- used when the impact caused the nonmotorist's body to fold such that part of the body was against the frontal structures (bumper, grille,

headlights) and part of the body was laying across the hood or the top of the fenders. The distance the NM is carried is irrelevant. This attribute should be used in conjunction with wrap Kinematic Trajectory

02 (Carried by Vehicle, Slid to Windshield) -- used when the force of the impact caused the nonmotorist to slide along the hood and impact the windshield.

03 (Carried by Vehicle, Position Unknown) -- used when it is known that the nonmotorist was carried by the vehicle, but the nonmotorist's position is not known.

04 (Passed Over Vehicle Top) -- used when the force of the impact caused the nonmotorist to slide up and over the windshield, along the roof and subsequently to fall away from the vehicle rearward of the passenger cabin.

Note: Codes "05," "06," and "0(Thrown...) refer to circumstances where the force of the impact caused the nonmotorist to be lifted from the ground and propelled through the air away from the location of the impact.

05 (Thrown Straight Forward) -- used when the force of the impact caused the nonmotorist to be thrown or pushed forward along the vehicle's path of travel.

06 (Thrown Forward and Left of the Vehicle) or

07 (Thrown Forward and Right of the Vehicle) -- used when the force of the impact caused the nonmotorist to be thrown forward and off to the left or right, respectively, of the vehicle's path of travel.

Note: Codes "08," "09," "10," and "10 (Knocked to Pavement...) refer to circumstances where the force of the impact caused the nonmotorist to fall to the ground at or immediately adjacent to the location of the impact.

08 (Knocked to Pavement, Forward) -- used when the force of the impact caused the nonmotorist to fall to the ground immediately in front of the vehicle.

09 (Knocked to Pavement, Left of Vehicle) -- used when the force of the impact caused the nonmotorist to fall to the ground immediately to the left, respectively, of the vehicle.

10 (Knocked to Pavement, Right of Vehicle) -- used when the force of the impact caused the nonmotorist to fall to the ground immediately to the right, respectively, of the vehicle.

11 (Knocked to Pavement, Run Over, or Dragged by vehicle) -- used when the force of the impact caused the nonmotorist to fall to the ground immediately adjacent to the location of the impact and the nonmotorist was subsequently run over or dragged by the vehicle.

12 (Shunted to Left (Corner Impact Only)) -- used in the circumstance where the impact with the nonmotorist was at a corner (≤ 41 cm from the corner of the vehicle) and the nonmotorist was pushed away from the vehicle to the left.

13 (Shunted to Right (Corner Impact Only)) -- used in the circumstance where the impact with the nonmotorist was at a corner (≤ 41 cm from the corner of the vehicle) and the nonmotorist was pushed away from the vehicle to the right.

14 (Bumped or Pushed Aside) -- used when the vehicle to nonmotorist contact was through a side plane of the vehicle and the force of the impact caused the nonmotorist to be pushed away from the vehicle.

15 (Snagged, Rotated) -- used when the vehicle to nonmotorist contact was through a side plane of the vehicle and some component of the nonmotorist 's body or clothing became attached (caught, snared) to a vehicle component and the nonmotorist was caused to rotate or spin.

16 (Snagged, Dragged) -- used when the vehicle to nonmotorist contact was through a side plane of the vehicle and some component of the nonmotorist 's body or clothing became attached (caught, snared) to a vehicle component and the nonmotorist was dragged by the vehicle.

17 (Foot or Legs Run Over) -- used when the nonmotorist 's lower extremity was extended such that the limbs was/were under the vehicle and run over. This may occur, for example, when a nonmotorist is striding with one leg extended, or when a nonmotorist loses his or her footing and "his feet went out from under him." If the position of the extremity under the vehicle is the result of being thrown, knocked, shunted, dragged, or bumped, one of the other codes defined above is used. It is expected that this code will be rarely used.

98 [Other (Specify):] -- used when the nonmotorist to vehicle interaction cannot be expressed by codes defined above. Use of code "98" includes an annotation describing the situation.

99 (Unknown) -- used when the vehicle to nonmotorist interaction is not known.

Nonmotorist Final Rest Distance**Element Values**

0.0 to 999.9 Meters

Codes	Attributes
9999	Unknown

Remarks

Measure the distance from initial point of conflict with the striking vehicle to the final rest location of the nonmotorist in meters. This distance is valuable in nonmotorist crash reconstruction formulas.

Were Any Other Nonmotorists Present**Element Values**

(Select all that apply)

Codes	Attributes
0	Alone
1	One Other Adult Present
2	One Other Child Present
3	Two or More Other Adults Present
4	Two or More Other Children Present
-9999	Unknown

Remarks

Select all the appropriate attributes that apply for the number of other adults and/or children present along with the case nonmotorist. Code 0 “Alone” if the nonmotorist was traveling alone at the time of the crash.

Action/Distractions**Nonmotorist Primary Focus of Attention****Element Values**

Codes	Attributes
1	Striking Vehicle
2	Play Object
3	Person
4	Surrounding Traffic
5	Animal
6	Handheld Electronic (Phone, MP3 Player, etc.)
7	Path of Travel
98	Other Object (Specify)
99	Unknown

Remarks

Code the element attributes that describes the focus of the nonmotorist ahead of any realization of an impending crash and/or avoidance actions.

Nonmotorist Contributing Circumstances

Element Values

(Select all that apply)

Codes	Attributes
0	None Noted
1	Dart-Out Visual Obstruction Noted
2	Failure to Yield Right-of-Way
3	Failure to Obey Traffic Signs, Signals or Officer
4	In Roadway Improperly (Standing, Lying, Working, Playing, etc.)
5	Entering/Exiting Parked or Stopped Vehicle
6	Inattentive (Talking, Eating, Etc.)
7	Improper Turn/Merge
8	Improper Passing
9	Wrong-Way Riding or Walking
10	Riding on Wrong Side of Road
11	Dash - Run, No Visual Obstruction Noted
12	Improper Crossing of Roadway or Intersection (Jaywalking)
13	Failing to Have Lights on When Required
14	Operating Without Required Equipment
15	Improper or Erratic Lane Changing
16	Failure to Keep in Proper Lane or Running Off Road
17	Making Improper Entry to or Exit From Trafficway
18	Operating in other Erratic, Reckless, Careless or Negligent Manner
19	Not Visible (Dark clothing, No Lighting, etc.)
20	Passing With Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle
21	Other ((Specify)
99	Unknown

Remarks

This element describes the actions and/or circumstances of the nonmotorist that may have contributed to the crash.

Remarks: As a “Select All That Apply” element, attributes can be used in combination.

00 (None Noted) -- used when no contributing circumstances or improper actions are noted by the officer for this nonmotorist. “Not Reported” is coded here. If this attribute is used no other attribute may be selected.

01 (Dart-Out - Visual Obstruction Noted) -- used when a person entered the roadway and was involved in a collision with a vehicle where the driver's view of the person was blocked until an instant before impact. A dart-out can only occur if there is some documented visual obstruction (i.e., DRIVER'S VISION OBSCURED BY must not equal 00 (No Obstruction Noted), 95 (No Driver Present/Unknown if Driver Present), or 99 (Reported as Unknown) for the driver of the vehicle that struck this nonmotorist).

02 (Failure to Yield Right-of-Way) -- used when a person fails to yield the right-of-way as indicated in the case materials. A citation need not be issued, only that a failure to yield by the person was represented on the PCR through the crash description, diagram, and or coded boxes. The officer does not have to make the specific statement "failed to yield." For example, a person crossing in the path of a vehicle outside of an intersection and not in a crosswalk would be failing to yield.

Examples:

- Failure to yield when exiting a driveway.
- Mid-block crossings not at a crosswalk.
- Not clearing an intersection before the light turns green for crossing traffic.
- Failure to yield at an intersection not controlled by a stop sign or flashing red lights.
- A bicyclist who stopped at the stop sign but did not realize it was a two-way stop rather than a four-way stop control and proceeded into the intersection without yielding to traffic on the through trafficway.

Failure to Obey a Traffic Control Device is coded as 03 (Failure to Obey Traffic Signs, Signals or Officer) and can be coded in conjunction with 02 (Failure to Yield Right-of-Way).

03 (Failure to Obey Traffic Signs, Signals, or Officer) -- used when a person fails to obey a traffic control device as indicated in the case materials. Examples include person does not obey traffic signs, traffic control devices (including pedestrian signals), traffic officers, or safety zones; or passes around railroad gates.

04 (In Roadway improperly (Standing, Lying, Working, Playing, etc.)) -- used when a person was indicated to have been in the roadway improperly other than making an improper crossing as in code 12 (Improper Crossing of Roadway or Intersection (Jaywalking)). This attribute is coded in the unusual situations listed above. In instances when case material says a person was walking in the roadway, this attribute should not be coded.

Examples:

- Playing in the road before the vehicle arrived. The person must not have just run into the roadway after a ball, which would be coded 01 (Dart-Out - visual obstruction noted) or 11 (Dash - Run, No visual obstruction noted).
- Working in the road other than because of the requirement of his/her job (e.g., someone walking backwards into the roadway with a snow blower or lawn care equipment).
- In the street voluntarily, such as a civilian directing traffic at the scene of a crash.
- Attempting to hail a cab, flag down assistance, or flag down a transit bus between designated stops.
- Sitting, getting up, asleep/unconscious, kneeling, etc.

05 (Entering/Exiting Parked or Stopped Vehicle) -- used when a pedestrian was adjacent to a stopped or parked vehicle and in the process of getting into or had just exited that stopped or parked vehicle. This does not include crashes involving pedestrians performing other actions such as crossing the roadway to/from a parked vehicle or other movements that occurred after the pedestrian exited the vehicle.

06 (Inattentive [Talking, Eating, etc.]) -- used when the case material specifically state a person is inattentive, lost in thought or distracted. Examples include using any electronic devices (mobile phone, video game, e-reader), using earbuds on a music player while jogging, chatting with a neighbor, caring for a baby in a stroller, admiring a garden, etc.

07 (Improper Turn/Merge) -- used when the case material says the bicyclist/operator made an improper turn or merge. Examples of an improper turn include too wide right or left turns, making a right turn from the left lane, a left turn from the right lane or unsafe U-turns. An example of an improper merge is when the bicycle lane ends and the bicyclist merges into the path of a vehicle without leaving sufficient space.

08 (Improper Passing) -- used when the case material says the bicyclist/operator made an improper passing maneuver. The bicyclist/operator may be passing a motor vehicle or another bicyclist. Actions include passing on the right and where prohibited by signs, pavement markings, or a stopped school bus (i.e., mainly violations as designated by traffic controls). Improper passing that is based on faulty judgment errors such as insufficient distance or inadequate visibility are captured by 20 (Passing with Insufficient Distance or Inadequate visibility or Failing to Yield to Overtaking Vehicle).

09 (Wrong-Way Riding or Walking) -- used when a person was identified in the case material to have been traveling the wrong way.

10 (Riding on Wrong Side of Road) -- used when a bicyclist was identified in the case material to have been traveling on the wrong side of the road.

11 (Dash - Run, No Visual Obstruction Noted) -- used when a person ran into the roadway and was involved in a collision with a vehicle. There is no mention in the case material that the driver's view of the person was obstructed. The case material should state that the person ran.

Examples of proper use:

- A person's activity prior to the crash is jogging or running, but just prior to the impact the nonmotorist darted into the roadway.
- Children seen playing in a front yard, who suddenly run into the road to retrieve an object associated with their play (e.g., a ball).

12 (Improper Crossing of Roadway or Intersection [Jaywalking]) -- used when a pedestrian or a person on a personal conveyance, either motorized or nonmotorized, is engaged in crossing a road but is not doing so properly. This includes mid-block crossings outside a crosswalk and crossing at an intersection by cutting on a diagonal through it. The officer's representation of either circumstance on the diagram or in the narrative substantiates the use of this attribute. The person may be engaged in other activities such as the continuation of jogging/running or a "sudden or impulsive" dart, run, etc. This attribute should not be used in conjunction with 04 (In Roadway Improperly (Standing, Lying, Working, Playing, etc.)).

13 (Failing to Have Lights on When Required) -- used when the case material says the operator of a bicycle, animal-drawn conveyance, or personal conveyance failed to have lights on when required. This also includes not having lights available to turn on and may be used with 14 (Operating Without Required Equipment).

14 (Operating Without Required Equipment) -- used when the case material says that the bicycle, animal-drawn conveyance, or person conveyance, was being operated without the proper equipment such as headlights, taillights, etc. Helmet use is captured under NONMOTORIST SAFETY EQUIPMENT.

15 (Improper or Erratic Lane Changing) -- used when a bicyclist, operator of horse-drawn vehicle, rollerblader, or skateboard rider was weaving in and out of traffic. This includes maneuvering between vehicles and in-and-out of a bike lane.

16 (Failure to Keep in Proper Lane or Running Off Road) -- used when a bicyclist/operator fails to stay in the proper lane or runs off the road. For example, a bicyclist fails to keep in bicycle lane or operator of horse-drawn vehicle goes straight in a turn lane. This includes running into a median or drifting into a parking lane.

17 (Making Improper Entry to or Exit from Trafficway) -- used when a person is engaged in entering or exiting the trafficway but is not doing so properly, or in a manner that would be anticipated by others. This includes entering or exiting the trafficway midblock between driveway accesses, improper use of ramps and turn-bays to enter or exit, and or cutting on a diagonal across a lawn or parking lot to enter a trafficway. This may be used in conjunction with 02 (Failure to Yield Right-of-Way), 03 (Failure to Obey Traffic Signs, Signals, or Officer), 07 (Improper Turn/Merge), and/or 09 (Wrong-Way Riding or Walking) if they apply. This code does not apply to PERSON TYPES 05 (Pedestrian) or 10 (Person In/On a Building).

18 (Operating in Other Erratic, Reckless, Careless or Negligent Manner) -- used when explicitly stated in the case materials. Examples include bicyclists doing wheelies, attempting to grab on to a vehicle for motion (“skitching”), or skateboard racing.

19 (Not Visible [Dark Clothing, No Lighting, etc.]) -- used when the nonmotorist was not visible to the motorist because of blocked views, insufficient lighting, or other reasons such as clothing that blends in with the surroundings at any time of the day (camouflage) or dark clothing in the rain at night. The officer must indicate that the nonmotorist was not visible.

20 (Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle) -- used when an improper passing maneuver is indicated in the case material for the nonmotorist. This says passing violations based on faulty judgment. This may be used in conjunction with 08 (Improper Passing) if both apply.

21 (Other (Specify)) -- used when the case material state that an actions/circumstances by the nonmotorist may have contributed to the crash but are not listed in these attributes. Examples include being pushed into the roadway, falling from a bicycle, traveling on a prohibited roadway.

*Note: For attributes with a “Specify:” designation, a fill-in text box will open in CISSWeb. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

99 (Unknown) -- used when the officer indicated unknown in the case material's contributing circumstances field, or narrative and no other information is available. If this attribute is used no other attribute may be selected.

Nonmotorist Distracted By**Element Values**

(Select all that apply)

Codes	Attributes
0	Not Distracted
2	By Other Non-Motorist(s)
3	By a Driver or Occupant of a Motor Vehicle
5	While Talking or Listening to Mobile Phone
6	While Manipulating Mobile Phone
7	Adjusting or Listening to Portable Audio Device (Other Than on a Mobile Phone)
8	Adjusting, Talking to, or Manipulating Other Portable Electronic Device
12	Distracted by Animal, Other Object, Event, or Activity
13	Eating or Drinking
14	Smoking Related
15	Other Mobile Phone Related:
17	Distraction/Inattention
18	Distraction/Careless
19	Careless/Inattentive
92	Distraction (Distracted), Details Unknown
93	Inattention (Inattentive), Details Unknown
97	Lost in Thought/Day Dreaming
98	Other Distraction ((Specify)
99	Unknown if Distracted

Remarks

This element identifies the attributes that best describes this nonmotorist's attention prior to the nonmotorist's involvement in this crash. This element reports on the presence of any distractions that may or may not have contributed to the crash. Distraction for a nonmotorist occurs when a nonmotorist's attention is diverted from the task of navigating in public to some other activity. Also, NHTSA identifies daydreaming or lost in thought as distractions. NHTSA does not identify physical conditions/impairments (fatigue, alcohol, medical condition, etc.) or psychological states (anger, emotional, depressed, etc.) as distractions.

Note: "Presence" is not the same as an activity associated with the person or item. The nonmotorist must be engaged in some activity associated with the thing that is causing a distraction. Just having a mobile phone, sandwich, other nonmotorist, etc. nearby isn't a distraction. The distraction is when the nonmotorist's attention is diverted from the task of navigating in public to using the phone, eating the sandwich, turning to talk to another

nonmotorist, etc. It doesn't have to be a contributing factor in the crash, but it does have to be in use, engaged, the person was doing it at the time, etc. for it to have been a distraction.

Remarks: Record the attributes that best describes this nonmotorist's attention prior to the nonmotorist's involvement in this crash. Intoxication, ill, blackout, or fatigued are not considered distractions.

NONMOTORIST DISTRACTED BY is a "Select All That Apply" element. If the element values 00 (Not distracted), 17 (Distraction/ Inattention), 18 (Distraction/Careless), 19 (Careless/Inattentive), 92 (Distraction [Distracted], details unknown), 93 (Inattention [Inattentive], details unknown), or 99 (Unknown if Distracted) are selected, then only that one element value may be used.

00 (Not Distracted)

- When the case material says that the person was completely attentive.
- When the case material do not indicate a distraction in an available field, and not reporting a distraction in that field says 00 (Not distracted).

02 (By Other Nonmotorist[s]) -- used when the nonmotorist was distracted by another nonmotorist prior to becoming involved. Examples include conversing with, looking at, or otherwise interacting with another nonmotorist.

03 (By a Driver or Occupant of a Motor Vehicle) -- used when the nonmotorist was distracted by a driver or occupant of a motor vehicle prior to becoming involved (e.g., conversing with, watching, other interactions).

12 (Distracted by Animal, Other Object, Event, or Activity) -- used when the nonmotorist was distracted by an animal, object, event, or activity prior to becoming involved in the crash. Examples include, distractions related to pet walking, animals on the roadside, a previous crash, non-traffic-related signs (advertisements, electronic billboards, etc.) grooming activities, opening an umbrella, flying insects, etc.

05 (While Talking or Listening to Mobile Phone) -- used when the nonmotorist is talking or listening on a mobile phone. This attribute includes talking or listening on a "hands-free" or Bluetooth-enabled phone. This attribute also includes listening to audio on a mobile phone. For distractions related to manipulating the audio on a mobile phone, see 06 (While Manipulating Mobile Phone). For distractions related to audio on a device other than a mobile phone, see 07 (Adjusting or listening to Audio Device [Other than Mobile Phone]).

06 (While Manipulating Mobile Phone) -- used when the nonmotorist is dialing or text messaging (texting) on a mobile phone. Any manual button/control actuation on the phone qualifies. Examples include checking email, using the camera function to take a picture or record a video, manipulating audio, using the Internet, GPS navigation, fitness apps, playing a game, etc. on the mobile phone. For distractions related to listening to audio on a mobile phone, see 05 (While talking or listening to mobile phone).

15 (Other Mobile Phone Related) -- used when the case material says the nonmotorist was distracted due to mobile phone involvement, but none of the specified codes are applicable (reaching for mobile phone, etc.). This attribute is also applied when specific details regarding mobile phone distraction/usage are not provided (e.g., email, nonspecific mobile phone use).

07 (Adjusting or Listening to Portable Audio Device (Other than on a Mobile Phone)) -- used when the nonmotorist was distracted while adjusting, listening to, or using a radio, cassette player, CD player, or MP3 player (not on a mobile phone). For distractions related to audio on a mobile phone, see codes 05 (While talking or listening to mobile phone) and 06 (While manipulating mobile phone).

08 (Adjusting, Talking to, or Manipulating Other Portable Electronic Device) -- used when the nonmotorist is distracted while adjusting, talking to, or otherwise manipulating a portable electronic device that is not a mobile phone or audio player. Examples include digital camera, bike ride tracker, pedometer, laptop or tablet computer, gaming device, GPS navigation, etc.

13 (Eating or Drinking) -- used when the nonmotorist is eating or drinking or involved in an activity related to these actions (picking up food from a handheld carton, reaching to throw out used food wrapper, etc.).

14 (Smoking Related) -- used when the nonmotorist is smoking or involved in an activity related to smoking, such as lighting a cigarette, putting ashes in an outdoor ash tray, vaping, etc. Any method of lighting the cigarette would be coded 14 (Smoking-Related). Chewing tobacco-related distractions are coded under

98 (Other Distraction (Specify)).

17 (Distraction/Inattention) -- used exclusively when “Distraction/Inattention” or “Inattention/Distraction” are noted in the case material as one combined attribute and it cannot be determined which NONMOTORIST DISTRACTED BY attribute is intended, 92 (Distraction [Distracted], details unknown) or 93 (Inattention [Inattentive], details unknown).

18 (Distraction/Careless) -- used exclusively when “Distraction/Careless” or “Careless/Distraction” are noted in the case material as one combined attribute and it cannot be determined which NONMOTORIST DISTRACTED BY attribute applies.

19 (Careless/Inattentive) -- used exclusively when “Careless/Inattentive” or “Inattentive/Careless” are noted in the case material as one combined attribute and it cannot be determined which NONMOTORIST DISTRACTED BY attribute applies.

92 (Distraction [Distracted], details unknown) -- used when “distraction” or “distracted” are noted in the case materials, but specific distractions cannot be identified. For non-specific “inattention” see attribute

93 (Inattention [Inattentive], Details Unknown).

93 (Inattention [Inattentive], Details Unknown) -- used when “inattention” or “inattentive” are noted in the case materials, but it cannot be identified if this refers to a distraction.

97 (Lost in Thought/Day Dreaming) -- used when the nonmotorist is not completely attentive because he/she is thinking about items other than being aware of their surroundings. For non-specific “distraction” see element value 92 (Distraction [Distracted], details unknown). For non-specific “inattention” see element value

93 (Inattention [Inattentive], Details Unknown).

98 (Other Distraction (Specify)) -- used when details regarding this nonmotorist's distraction are known but none of the specified codes are applicable (e.g., chewing tobacco-related).

*Note: For attributes with a "Specify:" designation, a fill-in text box will open in CISSWeb. This text box should be used to provide additional detail about the attribute selection. Please include a specific reason for this selection.

99 (Unknown if Distracted) -- used when the case material specifically indicate unknown.

Nonmotorist Vision Obscured**Element Values**

Codes	Attributes
0	No, Clear
1	Yes, View Obstructed by Road Curvature
2	Yes, View Obstructed by Roadway Grade
3	Yes, View Obstructed by Non-Contact Vehicle
4	Yes, View Obstructed by Roadside Appurtenance (Building, Shrubbery)
8	Yes, View Obstructed by Other (Specify)
9	Unknown

Remarks

Code the element attribute that describes what obscured the nonmotorist's view of the striking vehicle at any point during the 5 seconds prior to the crash. If the line of sight was clear for the entire pre-crash duration, code "0."

Action/Safety Equipment Overview

The protective and preventative equipment elements allow for collecting any safety equipment in use if it can be classified as protective or preventive. Protective equipment is designed to mitigate injury, while preventive equipment is intended to avoid a crash from occurring. Examples of equipment that may be noted, and proper classification, are below.

Table 3. Safety Equipment Descriptions

Safety Equipment Described	Protective			Preventative		
	Helmet	Pads	Other	Clothing	Lighting	Other
Helmet on a horseback rider	2 (Yes)					
Reflective helmet	2 (Yes)			2 (Yes)		
Personal inflatable devices			2 (Yes)			
Lap belt in use on a wheelchair			2 (Yes)			
Child seat used in an Amish buggy			2 (Yes)			
3-Point belt used by toddler in a bicycle trailer			2 (Yes)			
Bicycle reflectors or flags						2 (Yes)
Safety flags or triangles on a nonmotorist conveyance						2 (Yes)
Day-Glo/Hi-Glo clothing						2 (Yes)
“Mr. Johnson was wearing a Hi-Glo orange hunting vest.”						2 (Yes)
“The pedestrian was not using any safety equipment.”	1 (No)	1 (No)	1 (No)	1 (No)	1 (No)	1 (No)
The cyclist didn’t use a headlight and was in violation of “Required to Use a Headlight at Night.”						
“Other” checked, not specified						
“No Helmet” or “Not Wearing a Helmet” is the ONLY indication on a PCR where only one field may be checked.	1 (No)					
“It’s unknown if the cyclist was using any safety equipment”	9 (U)	9 (U)	9 (U)	9 (U)	9 (U)	9 (U)
“Contrasting Clothing”						

Protective Helmet**Element Values**

Codes	Attributes
1	No
2	Yes, specify
9	Unknown

Remarks

This element is used to identify if the nonmotorist was wearing a safety helmet. The nonmotorist does not have to be riding a bicycle at the time of the crash to code this as 2 (Yes).

2 (Yes) includes all helmets (bicycle helmet, motorcycle helmet, racing helmets, etc.).

Protective Pads**Element Values**

Codes	Attributes
1	No
2	Yes, specify
9	Unknown

Remarks

This element is used to identify if the nonmotorist was wearing padded, shaped attachments to protect specific areas of the body (elbows, knees, shins, etc.) from injury.

Protective Other**Element Values**

Codes	Attributes
1	No
2	Yes, specify
9	Unknown

Remarks

This element is used to identify if the nonmotorist was using protective safety equipment other than a helmet or pads (eye wear/face shields, gloves, wrist guards, etc.).

Preventive Clothing**Element Values**

Codes	Attributes
1	No
2	Yes, specify
9	Unknown

Remarks

This element is used to identify if the nonmotorist was wearing or carrying some type of reflective item (jacket, backpack, vest, etc.). The emphasis is on the reflective property of the clothing or carried item and does not include devices that give off light under their own power (e.g., flashlights). For lighting, use the Nonmotorist Use of Lighting element. The reflective item can be reflective tape affixed to regular clothing, special reflective clothing, a reflective device that is worn or a reflective device that is carried. It can be made by the nonmotorist and does not have to be specially designed as a safety device.

Do not code bicycle reflectors or clothing that is non-reflective but considered to be safety equipment (Hi-Glo orange clothing) here, use the Nonmotorist Use of Other Preventive Safety Equipment element instead.

Additional details regarding the specific color of clothing being worn by the nonmotorist can be found on the Safety Equipment tab

Preventive Lighting**Element Values**

Codes	Attributes
1	No
2	Yes, specify
9	Unknown

Remarks

This element is used to identify if the nonmotorist was using a light on his/her person or on a pedalcycle or personal conveyance for safety purposes, to include flashlights.

Additional details regarding lighting on nonmotorist transport devices are captured on the Nonmotorist Device tab.

Preventive Other**Element Values**

Codes	Attributes
1	No
2	Yes, Specify:
9	Unknown

Remarks

This element is used to identify if the nonmotorist was using preventive safety equipment other than a reflective clothing/carried item or light (bicycle reflectors and flags, reflectors, and triangles on a buggy, Hi-Glo orange clothing, rollerblade stoppers, etc.).

Additional details regarding reflectors on nonmotorist transport devices are captured on the Nonmotorist Device tab

Head Clothing Color**Element Values**

Codes	Attributes
0	None
1	Black
2	White
3	Red
4	Green
5	Yellow
6	Blue
7	Pink
8	Gray
9	Brown
10	Orange
11	Purple
12	Light Color, Not Further Specified
13	Dark Color, Not Further Specified
99	Unknown

Remarks

Select the color that best describes the clothing being worn on the nonmotorist's head at the time of the crash. Hoods on the nonmotorist head from jackets, sweatshirts, etc., are included in this element.

0 None

Use this attribute if no hat, hood, or other clothing was being worn on the head at the time of the crash.

Upper-Body Clothing Color**Element Values**

Codes	Attributes
0	None
1	Black
2	White
3	Red
4	Green
5	Yellow
6	Blue
7	Pink
8	Gray
9	Brown
10	Orange
11	Purple
12	Light Color, Not Further Specified
13	Dark Color, Not Further Specified
99	Unknown

Remarks

Select the color that best describes the outermost layer of clothing being worn on the nonmotorist's arms and torso at the time of the crash.

Hats and hoods on the nonmotorist's head from jackets, sweatshirts, etc., are included in the Head Clothing Color element and not considered here.

0 None

Use this attribute if no clothing was being worn on the upper-Body at the time of the crash.

Lower-Body Clothing Color**Element Values**

Codes	Attributes
0	None
1	Black
2	White
3	Red
4	Green
5	Yellow
6	Blue
7	Pink
8	Gray
9	Brown
10	Orange
11	Purple
12	Light Color, Not Further Specified
13	Dark Color, Not Further Specified
99	Unknown

Remarks

Select the color that best describes the outermost layer of clothing being worn on the nonmotorist's legs and pelvic area at the time of the crash.

0 None

Use this attribute if no clothing was being worn on the lower-Body at the time of the crash.

Nonmotorist Interview

Interviewer

Element Values

PSU Specific

Remarks

Select the name of the crash technician or crash technician assistant completing the interview.

Nonmotorist Interviewee**Element Values**

Codes	Attributes
0	No Interview
2	Nonmotorist
5	Surrogate, Relative or Friend
7	Witness
8	Other

Remarks

Nonmotorist Manner of Interview**Element Values**

Codes	Attributes
1	Telephone
2	In-Person
3	Questionnaire
4	Other (Specify)
5	On-Scene (at crash site)
6	Email
7	Internet Search

Remarks

Nonmotorist Interview Results

Element Values

Codes	Attributes
1	Unable to Contact or Locate
2	Hit-and-Run
3	Fatal-Surrogate Not Available
4	In Intensive-Care-Surrogate Not Available
6	Refused Interview
7	Insurance Company Refusal
8	Attorney Refusal or Litigation
9	No Return of Questionnaire
10	Other (Specify)
11	Partial Interview
12	Complete Interview
-8887	Not Applicable

Remarks

Select the last response from the appropriate driver or occupant interview section of the Interview Contact Log.

Unable to Contact Or Locate

Is used only when an appropriate response cannot be selected from the other attributes.

Hit-and-Run

Is used when the occupant's vehicle left the scene of the crash, and no data are available about to the identity of the occupant.

Fatal - Surrogate Not Available

Is used when this occupant was fatally injured in the crash and no surrogates exist to obtain a partial interview.

In Intensive Care - Surrogate Not Available

Is used when this occupant was admitted into intensive care as a result of this crash and no surrogates exist to obtain a partial interview before file close-out.

Refused Interview

Is used when the owner of the vehicle has been contacted and refuses to allow an interview.

Insurance Company Refusal

Is used when the insurance company responsible for the vehicle is contacted and refuses to authorize an interview of the occupant.

Attorney Refusal or Litigation

Is used when an interview is denied by an attorney, generally as a result of litigation.

No Return of Questionnaire

Is used when the only contact to the occupant is via a questionnaire, and the questionnaire is not returned before file close-out.

Other (Specify)

Is used when no interview was obtained, and the above attributes do not adequately capture the reason an interview was not obtained.

Partial Interview

Is used when an interview is obtained but all required questions (listed under the "Complete interview" definition) have not been answered.

Complete Interview

Is used when all required data with respect to crash sequence, vehicle information and injuries are obtained from either the driver or another occupant of the same vehicle.

Kinematics Conflicts Overview

The Kinematics Tab for Nonmotorist crashes facilitates the hard coding of nonmotorist -to-vehicle/environment contact sequences and overall kinematic trajectories. This method allows for the discretization of contacts to the nonmotorist, which create the building blocks of the overall sequence as well as isolating injurious loading conditions. An overview of the nonmotorist kinematics coding process is below.

1. The Contacts list is populated in the Vehicle/Nonmotorist Crash/Contacts tab.
2. Conflicts are created for each plane of the vehicle's geometry and the environment that were contacted by the nonmotorist during the crash sequence.
3. The Associated Contacts are selected and grouped to the appropriate Conflicts.
4. The primary Kinematic Trajectory is chosen, and the associated conflicts are selected/linked to the trajectory in chronological order to define the sequence. If an alternate kinematic trajectory is proposed, conflicts are selected/linked to it also.
5. During injury coding, the Conflict associated with each specific injury is selected after the SOE. If an alternate Conflict is proposed for a given injury, then two separate ICS are created for the injury.

Conflict #**Remarks**

Conflicts are created by clicking the “Add Conflict” button, and are populated with Conflict #, Event # (and associated Vehicle #), Conflict Plane, and Contacts.

Automated numeral assigned chronologically in the order conflicts are created by the user. Conflicts are then ordered into the chronological sequence of the crash in the Kinematic Trajectory sub-tab later.

Event #**Remarks**

Choose the Event number from the drop-down list populated by the Crash/Events tab. The vehicle number associated with the Event will be automatically associated with the conflict.

Conflict Plane**Element Values**

Codes	Attributes
1	Front
2	Left
3	Right
4	Rear
5	Top
6	Greenhouse
7	Undercarriage
10	Other Object

Remarks

Choose the conflict plane from the drop-down list. The conflict plane is a discretization of the contact sequence between the nonmotorist and the striking vehicle/environment into groups (that occur at similar points in time in a similar location) that allow for the different phases of the Nonmotorist trajectory to be isolated.

The attribute “Green House” includes all the vehicle glazing, pillars, headers, and roof structure. The attribute “Other object” includes all the contacts that are not to the striking vehicle, such as the ground, a tree, fence, etc.

Available Contacts**Element Values**

Contacts A, B, C...

Remarks

The list of available contacts is populated from the contacts coded in the Vehicle/Nonmotorist Crash/Contacts tab. The attribute “No Associated Contacts” can be used when a conflict plane to the kinematic sequence does not have any contacts documented.

Selected Contacts**Element Values**

Contacts A, B, C...

Remarks

Use the right (select) and left (de-select) arrows to group the contacts associated with the coded conflict into the selected contacts list. Choose all contacts that apply for a given conflict plane. All environmental contacts such as the ground or curb are grouped into “Other object.”

Kinematics/Kinematic Trajectory

Primary Kinematic Trajectory

Element Values

Codes	Attributes
1	Wrap
2	Forward Projection
3	Fender Vault
4	Roof Vault
5	Somersault
6	Side Impact
7	Low Speed Bump
10	Partial Wrap/Interrupted Wrap
8	Other (Specify)
9	Unknown

Remarks

Assign a primary kinematic trajectory and choose to add an alternate kinematic trajectory if there is reasonable evidence for more than one possibility. Assign the sequence of conflicts to the primary (and alternate if applicable) Kinematic Trajectory (KT) along with confidence, evidence, and a free text field for notes.

Select the Kinematic Trajectory (KT) from the drop-down list. This element defines the overall kinematic trajectory of the nonmotorist's interaction with the striking vehicle and environment.

01 Wrap –The nonmotorist wraps over a vehicle when his upper torso/head bends over the vehicle, coming into contact and sliding along the vehicle hood and/or windshield. The nonmotorist achieves the vehicle speed, separates from the decelerating vehicle, becomes airborne, falls to the roadway, and scuffs (or tumbles) to final rest. The wrap trajectory involves a decelerating vehicle, and the struck nonmotorist comes to final rest in front of the vehicle. A common “nonmotorist conflict” sequence for a wrap trajectory is (front plane of vehicle -> top plane of vehicle -> vehicle greenhouse -> environment/ground).

02 Forward Projection – a nonmotorist is struck with principal impact forces above his center of gravity height. The nonmotorist's upper torso is rapidly accelerated in the direction of the vehicle impact, thereby projecting his body ahead of the vehicle. The nonmotorist then falls to the roadway and scuffs to final rest. Forward projections can occur for a nonmotorist with a center of gravity height above the hood leading edge in certain cases such as where the nonmotorist braces against the vehicle with their hands, or the impact speed is not sufficient to accelerate the nonmotorist's legs out of contact with the roadway. The nonmotorists can be overrun by the striking vehicle after a forward projection if there is no (or delayed) braking. A typical “nonmotorist conflict” sequence for a forward projection trajectory is (front plane of vehicle -> environment/ground).

NOTE: The next three kinematic trajectories – fender vault, roof vault, and somersault – are extensions of the wrap trajectory with the nonmotorist wrapping onto the vehicle prior to vaulting over the fender, or roof, or somersaulting.

03 Fender Vault – a nonmotorist is struck near a front corner of the vehicle and wraps or is vaulted over the fender to the side of the vehicle and comes to rest on the roadway behind or to the side of the vehicle. In cases involving unbraked vehicles, the nonmotorist is struck by the corner of the vehicle, slides on the hood or fender, contacts the windshield or a-pillar area, and then rolls off the side of the vehicle. A typical “nonmotorist conflict” sequence for a fender vault trajectory is (front plane of vehicle -> top plane of vehicle -> (possible vehicle greenhouse) -> environment/ground).

04 Roof Vault – a nonmotorist with a higher center of gravity height relative to the leading hood edge is struck by a vehicle and is lifted into the air. The nonmotorist slides all the way up (or passes over) the hood, contacting (or passing over) the windshield and the roof. The nonmotorist might also contact the trunk before ending up on the roadway behind the striking vehicle. Roof vaults indicate the striking vehicle was accelerating after impact and/or was traveling at a high rate of speed. A common “nonmotorist conflict” sequence for a roof vault trajectory is (front plane of vehicle -> top plane of vehicle -> vehicle greenhouse -> environment/ground).

05 Somersault – an extension of the wrap trajectory where the nonmotorist flips in the air before contacting the roadway, usually due to an increased impact velocity with a braking vehicle.

06 Side Impact - The side impact kinematic is like a fender vault, but the impact occurs on the vehicle’s side plane. The nonmotorist will contact the side fender before wrapping over the hood and/or A-pillar. Typically, the nonmotorist would be moving towards the side plane of the vehicle for this to occur. This would include NM struck only by a mirror.

07 Low speed bump- Impact speed less than 10 kph (6 mph). The nonmotorist typically is not knocked to the ground but might fall over due to loss of balance.

10 Partial Wrap/Interrupted Wrap - Wrap kinematics expected due to NM stature vs vehicle front end height, but NM bracing with arms or other avoidance maneuver prevents the wrap from occurring. Typically, occurs in lower speed impacts where NM intervention can change the trajectory.

08 Other (Specify): – use this attribute when the crash does not fit one of the common KT’s above.

09 Unknown – use this attribute when there is not sufficient evidence of which KT occurred in the crash.

Kinematic Trajectory Confidence

Element Values

Codes	Attributes
1	Certain
2	Probable
3	Possible
4	Unknown

Remarks

This element communicates the confidence of the Kinematic Trajectory (KT) coded based on the available evidence. The KT confidence is chosen based on the three factors listed below:

1. Vehicle and Nonmotorist Geometry – does the relative stature of the nonmotorist compared to the vehicle front end geometry (height of hood leading edge and shape of the vehicle front end) agree with the KT coded?
2. Contact Evidence – do the contacts documented on the vehicle and the injury evidence on the nonmotorist agree with the KT coded?
3. Vehicle Dynamics and Final Rest Positions – do the pre-crash and post-impact vehicle dynamics (steering inputs, acceleration, braking, yawing) and the relative final rest positions of the vehicle and nonmotorist agree with the KT coded?

Table 4. Kinematic Trajectory Confidence

Evidence-related factor	Certain	Probable	Possible	Unknown
1) Vehicle and Nonmotorist Geometry	High confidence in all three factors	High confidence in two of the three factors with the third being plausible	All three factors are plausible	Insufficient evidence available to develop a KT
2) Contact Evidence				
3) Vehicle Dynamics and Final Rest Positions				

A Kinematic Trajectory may be coded as “Certain” only if there is not an alternate KT coded. If a primary and an alternate KT are coded for the crash, only one may be coded as “Probable.”

Activate Alternate Kinematic Trajectory**Remarks**

Check this box to create an alternate Kinematic Trajectory, that will populate on a new tab next to Primary.

Available Conflicts**Remarks**

List populated by the coded conflicts created in Nonmotorist/Kinematics/Conflicts tab.

Selected Conflict Sequence**Remarks**

Use the right (select) and left (de-select) arrows to select the coded conflicts in the chronological order in which they occurred during the crash event. Kinematic trajectories are comprised of a sequence of “nonmotorist conflicts” arranged in chronological order.

Kinematic Trajectory Evidence

Element Values

Codes	Attributes
01	Vehicle Impact Speed
02	Nonmotorist Avoidance Maneuver (Specify)
03	Vehicle Braking Before/After Impact
04	Video
05	Vehicle Steering
06	Witness Statement
07	Final Rest Position
08	Empirical Experiment Results
09	Ratio of Stature to Front/Top Transition Point
10	Computer Simulation Results (Specify):
11	Vehicle Profile
12	Other (Specify):
13	Corner Impact
14	None
15	Nonmotorist initial orientation (Specify)

Remarks

All the coded nonmotorist conflicts and associated contacts are implied evidence for the assigned kinematic trajectory and do not need to be repeated here. This variable is used for additional evidence that is available at the time of reconstruction and injury causation analysis.

01 Vehicle Impact Speed

This attribute may be selected when the impact speed is known from EDR data or can be reliably calculated.

Example: Higher impact speeds are more likely to produce roof vault and somersault trajectories.

02 Nonmotorist Avoidance Maneuver (Specify)

This attribute may be selected when an avoidance maneuver by the pedestrian changes the resulting kinematic trajectory.

Example: A pedestrian braces with their arms against the hood and changes an expected wrap trajectory into a forward projection. A pedestrian jumps onto the hood and changes an expected forward projection into a wrap.

03 Vehicle Braking Before/After Impact

This attribute may be selected when there is evidence of vehicle braking, either before or during the interaction with the nonmotorist, that affects the resulting kinematics.

Example: Braking prior to the impact will pitch the front end of the vehicle down, changing the relationship between hood leading edge height and NM stature. Braking also affects how the NM departs the vehicle, especially during a wrap sequence where the NM is briefly carried by the vehicle. This attribute would be coded for a wrap sequence where the NM comes to final rest in front of the slowing vehicle.

04 Video

This attribute may be selected when video of the crash is obtained and provides evidence of the Kinematic Trajectory.

05 Vehicle Steering

This attribute may be selected when evidence says the motorist was in the process of steering at the time of impact.

Example: The driver steered to avoid the impact that produced a fender vault trajectory instead of a wrap.

06 Witness Statement

This attribute may be selected when there is a credible witness statement pertaining to the kinematic response of the nonmotorist.

07 Final Rest Position

This attribute may be selected when the final rest position of the struck nonmotorist relative to the vehicle supports the kinematic trajectory chosen.

Example: NM final rest in front of the vehicle for a forward projection or wrap with braking. NM final rest to the side and behind the vehicle for a fender vault.

08 Empirical Experiment Results

This attribute may be selected when the proposed Kinematic Trajectory agrees with the results of a substantially similar physical test, or the known input parameters of the crash allow for kinematic determinations based on other empirical results available in literature.

09 Ratio of Stature to Front/Top Transition Point

This attribute may be selected when it is inferred the stature of the nonmotorist determines whether the nonmotorist bends onto the hood or is thrown forward of the striking vehicle (is the nonmotorist CG above or below the vehicle's front/top transition point).

Example: A forward projection resulting from a vehicle with a tall front profile striking a NM with a CG below the transition point. A wrap/vault trajectory resulting from a vehicle with a shorter front profile striking a NM with a CG above the transition point.

10 Computer Simulation Results (Specify):

This attribute may be selected when computer simulation results of the crash corroborate the Kinematic Trajectory chosen.

11 Vehicle Profile

This attribute may be selected when the angles of the grille, hood or windshield affect the vehicle components contacted and the resulting Kinematic Trajectory.

Example: A vehicle with a short hood 20° slope constrains how far a tall stature nonmotorist bends laterally.

12 Other (Specify):

This attribute may be selected when other relevant evidence, not captured by the list of options, substantiates the Kinematic Trajectory.

13 Corner Impact

This attribute may be selected when the collision between the nonmotorist and the vehicle is located outboard of the longitudinal members (corner impacts) and there is a transitional edge creating oblique grille level faces.

Example: A fender vault trajectory resulting from a corner impact with the NM, where the vehicle has rounded corners that apply a lateral force in addition to longitudinal.

14 None

This attribute may be selected when no additional evidence, aside from coded nonmotorist conflicts and associated contacts, exists to support the proposed Kinematic Trajectory.

15 Nonmotorist Initial Orientation (Specify)

This attribute may be selected when the pedestrian's orientation at impact varies from an upright walking posture and affects the resulting kinematic trajectory.

Example: An elderly pedestrian is struck while walking with a cane and hunched over posture, leading to a forward projection instead of a wrap trajectory.

Kinematic Trajectory Note

Remarks

Free text field to add commentary about the analysis and choice of the coded Kinematic Trajectory.

Kinematics/Summary

Remarks

The Kinematics/Summary tab displays an auto-generated table with the conflicts, contacts, evidence, and confidence for the primary and alternate coded Kinematic Trajectory for the nonmotorist.

Kinematic Trajectory	Pedestrian Conflicts	Associated Contacts	Kinematic Trajectory Evidence	Kinematic Trajectory Confidence
Primary: Wrap	1. Front	A .Front lower valance/spoiler	Vehicle impact speed: Over 25 mph. Vehicle braking before/after impact: Braking right before and after impact Ratio of stature to hood opening: Ped CG higher than hood Vehicle profile: Sloped, wedge	Probable
		B .Front bumper		
		C .Hood edge and/or trim		
	2. Top	D .Hood surface		
		E .Cowl area		
	3. Greenhouse	F .Windshield glazing (perimeter)		
		G .A-pillar top surface		
		L .Celluar antenna		
	4. Other Object	H .Ground		
		I .Curb		
	5. Undercarriage	J .RF Tire/Wheel		
		K .Front crossmember		
Alternate: Fender Vault	1. Front	A .Front lower valance/spoiler		Possible
		B .Front bumper		
		C .Hood edge and/or trim		
	2. Top	D .Hood surface		
		E .Cowl area		
	3. Other Object	H .Ground		
		I .Curb		

Figure 57. Example Kinematics Summary

Nonmotorist Injury/PSU

Remarks

The elements and attributes on this tab mirror those found in other CISS case types. For additional information see the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Injury/ICC/Mortality**Remarks**

The elements and attributes on this tab mirror those found in other CISS case types. For additional information see the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Injury/ICC/Hospital Vitals-GCS**Remarks**

The elements and attributes on this tab mirror those found in other CISS case types. For additional information see the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Injury/ICC/EMS**Remarks**

The elements and attributes on this tab mirror those found in other CISS case types. For additional information see the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Injury/ICC/EMS Vitals-GCS**Remarks**

The elements and attributes on this tab mirror those found in other CISS case types. For additional information see the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Injury Codes

Injury Number

Element Values

Sequential number assigned by the system to each coded injury.

Remarks

The injury coding application generates a consecutive number for each injury inserted per occupant beginning with the number 1. No duplicate numbers or skipped numbers allowed.

AIS Code**Element Values**

AIS 2015 Update codes (7-digit numeric field describing injury)

Remarks

AIS 2015 is available from the Association for the Advancement of Automotive Medicine.

Localizer**Remarks**

Localizers mirror those found in other CISS case types. For additional information see the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Body Region Injured**Element Values**

Codes	Attributes
1	Head/Face
2	Neck
3	Cervical Spine
4	Shoulder
5	Arm
6	Elbow
7	Forearm
8	Wrist
9	Hand
10	Thorax
11	Thoracic Spine
12	Abdomen
13	Lumbar Spine
14	Pelvis
15	Hip
16	Thigh
17	Knee
18	Leg
19	Ankle
20	Foot
-9999	Unknown

Remarks

Body Region Injured attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Source of Energy**Element Values**

Codes	Attributes
1	Crash event #
2	Air bag #
3	Pretensioner
4	Fire
8	Crash event -Unknown #
9	Unknown

Remarks

Source of Energy attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Coded Conflict #**Remarks**

When coding on the injury level, the Coded Conflict associated with the specific injury is selected after the SOE. If an alternate Nonmotorist Conflict is proposed, then two separate ICS are created for the injury. The selection hierarchy for coding nonmotorist injuries is below.

- Injury Causation Scenario
- Source of Energy
- Conflict (Primary/Alternate requires two ICS) -- The kinematic trajectories that include this conflict are automatically associated
- IPC Configuration – IPCs and BRCs

Nonmotorist Involved Physical Component Configuration**Element Values**

Codes	Attributes
2	Isolated
5	Tandem
3	Critical 2-point
4	Critical 3-point

Remarks

Involved Physical Component Configuration attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the *NHTSA Field Crash Investigation Coding and Editing Manual*.

Nonmotorist Involved Physical Component Area**Element Values**

Codes	Attributes
1	Front
2	Left Side
3	Right Side
4	Back
5	Top
6	Greenhouse
7	Tire/Wheel
8	Undercarriage
9	Accessory
10	Other Object
99	Unknown

Remarks

Choose the area of nonmotorist contact to the striking vehicle (1 to 9), or environment (10) from the attribute list. The selection of IPC Area will determine which attributes are available to select for IPC. The attribute Greenhouse includes the vehicle glazing, pillars, headers, and roof structure. The attribute Other Object includes all contacts that are not to the striking vehicle, such as the ground, curb, tree, fence, etc.

The “IPC Area” codes include the following “IPC” code options”

Codes	Options
12	Front includes components 700 to 719.
13	Left includes components 720 to 739.
14	Right includes components 740 to 759.
15	Back includes components 760 to 769.
16	Top includes components 770, 772, 773, 774, 781, 787, 788, 789.
17	Greenhouse includes components 775, 776, 777, 778, 779, 780, 782, 783, 784, 784, 785.
18	Tire/Wheel includes components 790 to 799.
19	Undercarriage includes components 800 to 819.
20	Accessory includes components 820 to 828.
21	Other object includes components 41 to 89.
22	Unknown – code if the location of a contact is unknown

Nonmotorist Involved Physical Component**Element Values**

Front

Codes	Attributes
700	Front Bumper
701	Front Lower Valance/Spoiler
702	Front Grille
703	Hood Edge And/Or Trim
706	Headlight
708	Turn Signal/Parking Lights
718	Other Front or Add on Object (Specify):
719	Unknown Front Object

Left

Codes	Attributes
720	Front Fender Left Side Surface
722	A-Pillar Left Side Surface
724	B-Pillar
725	C-Pillar
726	D-Pillar
728	Other Pillar (Specify):
729	Left Side Roof Rail
730	Left Door Surface
732	Left Side Mirror Fixed
733	Left Side Mirror Folding
734	Left Glazing Forward of B-Pillar
735	Left Glazing Rearward of B-Pillar
736	Left Side Back Fender Quarter Panel
738	Other Left Side Object (Specify):
739	Unknown Left Side Component

Right

Codes	Attributes
740	Front Fender Right Side Surface
742	A-Pillar Right Side Surface
744	B-Pillar

Codes	Attributes
745	C-Pillar
746	D-Pillar
748	Other Pillar
749	Right Side Roof Rail
750	Right Door Surface
752	Right Side Mirror Fixed
753	Right Side Mirror Folding
754	Right Glazing Forward of B-Pillar
755	Right Glazing Rearward of B-Pillar
756	Right Side Back Fender or Quarter Panel
758	Other Right Side Object (Specify):
759	Unknown Right Side Component

Back

Codes	Attributes
760	Rear Bumper
761	Tailgate
762	Vertical Surface of Hatchback
768	Other Back Component (Specify):
769	Unknown Back Component

Top

Codes	Attributes
770	Hood Surface
772	Front Fender Top Surface
773	Cowl Area
774	Wiper Blades and Mountings
781	Rear Trunk Lid
787	Antenna
788	Other Top Component (Specify):
789	Unknown Top Component

Greenhouse

Codes	Attributes
775	Windshield Glazing
776	Front Header

Codes	Attributes
777	Roof Surface
778	Backlight Glazing
779	Rear Header
780	Hatchback
782	Sun/Moon Roof Glazing
783	Factory Roof Rack/Rail
784	A-Pillar Top Surface
785	Windshield Glazing (Perimeter)

Tire/Wheel

Codes	Attributes
790	LF Tire/Wheel
791	RF Tire/Wheel
792	LR Tire/Wheel
793	RR Tire/Wheel
798	Other Tire/Wheel (Specify):
799	Unknown Tire/Wheel

Undercarriage

Codes	Attributes
800	Front Crossmember
801	Steering Assembly/Front Suspension
802	Oil Pan
803	Exhaust System
804	Transmission
805	Drive Shaft
806	Catalytic Converter
807	Muffler
808	Floor Pan
809	Fuel Tank
810	Rear Suspension
818	Other Undercarriage Component (Specify):
819	Unknown Undercarriage Component

Accessory

Codes	Attributes
820	Air Scoop, Deflector
821	Cellular Antenna
822	Emergency Light Bar
823	Add-On Fog Lights
824	Luggage/Bike Rack
825	Cargo (Specify)
826	Spare Tire
827	Spot Light
828	Other Accessory (Specify):

Other Object

Codes	Attributes
41	Tree (<= 10 cm in diameter)
42	Tree (> 10 cm in diameter)
43	Shrubbery or bush
44	Embankment
45	Breakaway Pole or Post (any diameter)
47	Cable Barrier Guardrail
48	Guardrail Face
49	Guardrail End
50	Nonbreakaway Pole or Post (<= 10 cm in diameter)
51	Nonbreakaway Pole or Post (> 10 cm but <= 30 cm in diameter)
52	Nonbreakaway Pole or Post (> 30 cm in diameter)
53	Nonbreakaway Pole or Post (diameter unknown)
54	Concrete Traffic Barrier
55	Impact Attenuator
56	Other Traffic Barrier (Specify):
57	Fence
58	Wall
59	Building
60	Ditch or Culvert
61	Ground
62	Fire Hydrant
63	Curb
64	Bridge
68	Other Fixed Object (Specify):

Codes	Attributes
69	Unknown Fixed Object
72	Pedestrian
73	Cyclist or Cycle
74	Other Nonmotorist Or Conveyance (Specify)
75	Vehicle Occupant
76	Animal
77	Railway Vehicle
78	Trailer, Disconnected in Transport
79	Object Fell From Vehicle in-Transport
88	Other Nonfixed Object (Specify):
89	Unknown Nonfixed Object

Unknown

Codes	Attributes
848	Other Object in Environment
849	Unknown Object in Environment
950	Other in Transport Vehicle
959	Unknown Object or Vehicle

Remarks

Choose the area of nonmotorist contact to the striking vehicle (1 to 9), or environment (10) from the attribute list. The selection of IPC Area will determine which attributes are available to select for IPC. The attribute Greenhouse includes the vehicle glazing, pillars, headers, and roof structure. The attribute Other Object includes all contacts that are not to the striking vehicle, such as the ground, curb, tree, fence, etc.

The “IPC Area” codes include the following “IPC” code options”

Codes	Options
12	Front includes components 700 to 719.
13	Left includes components 720 to 739.
14	Right includes components 740 to 759.
15	Back includes components 760 to 769.
16	Top includes components 770, 772, 773, 774, 781, 787, 788, 789.
17	Greenhouse includes components 775, 776, 777, 778, 779, 780, 782, 783, 784, 784, 785.
18	Tire/Wheel includes components 790 to 799.
19	Undercarriage includes components 800 to 819.
20	Accessory includes components 820 to 828.

Codes	Options
21	Other object includes components 41 to 89.
22	Unknown – code if the location of a contact is unknown.

Nonmotorist IPC Confidence Level**Element Values**

Codes	Attributes
1	Certain
2	Probable
3	Possible
9	Unknown

Remarks

IPC Confidence Level attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Body Region Contacted**Element Values**

Codes	Attributes
1	Head/Face
2	Neck
3	Cervical Spine
4	Shoulder
5	Arm
6	Elbow
7	Forearm
8	Wrist
9	Hand
10	Thorax
11	Thoracic Spine
12	Abdomen
13	Lumbar Spine
14	Pelvis
15	Hip
16	Thigh
17	Knee
18	Leg
19	Ankle
20	Foot
-9999	Unknown

Remarks

Body Region Contacted attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Load Path**Remarks**

Load Path attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the NHTSA *Field Crash Investigation Coding and Editing Manual*.

Contributing Factors

Element Values

Codes	Attributes
0	None
6	Comorbidity
18	High-Velocity Impact
19	IPC Reinforced by Internal Structure
21	Pedestrian Detection System (Specify)
22	Pedestrian Crashworthiness Design Feature (Specify)
98	Other

Remarks

Comorbidity

This attribute may be selected when a documented comorbid condition is deemed relevant to the severity of the injury. Multiple comorbidities may be selected.

High-Velocity Impact

This attribute may be selected when the severity of the impact associated with the coded SOE was over 40 km/h (25 mph).

IPC Reinforced by Internal Structure

This attribute may be selected when it is determined a more ridged underlying structure contributed to the injury or its severity.

Pedestrian Detection System (Specify)

This attribute may be selected when there is evidence a pedestrian detection system activated (reduction in injury severity).

Pedestrian Crashworthiness Design Feature (Specify)

This attribute may be selected when there exists a vehicle design feature that has been tested/shown to reduce aggressiveness to pedestrians (reduction in injury severity).

Other

This attribute may be selected when relevant factors not described by other options contribute to the severity of the injury.

ICS Confidence Level**Element Values**

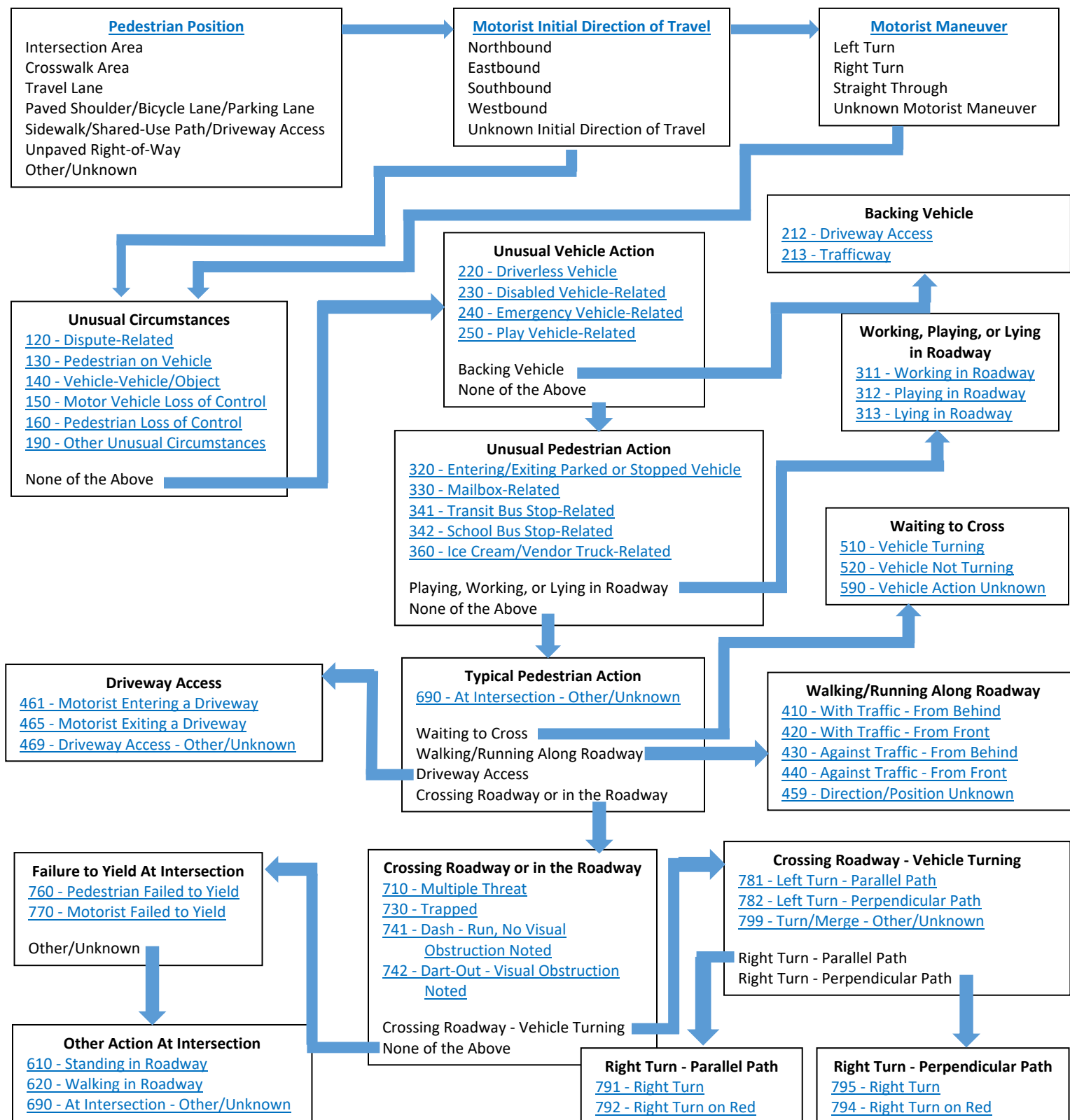
Codes	Attributes
1	Certain
2	Probable
3	Possible
9	Unknown

Remarks

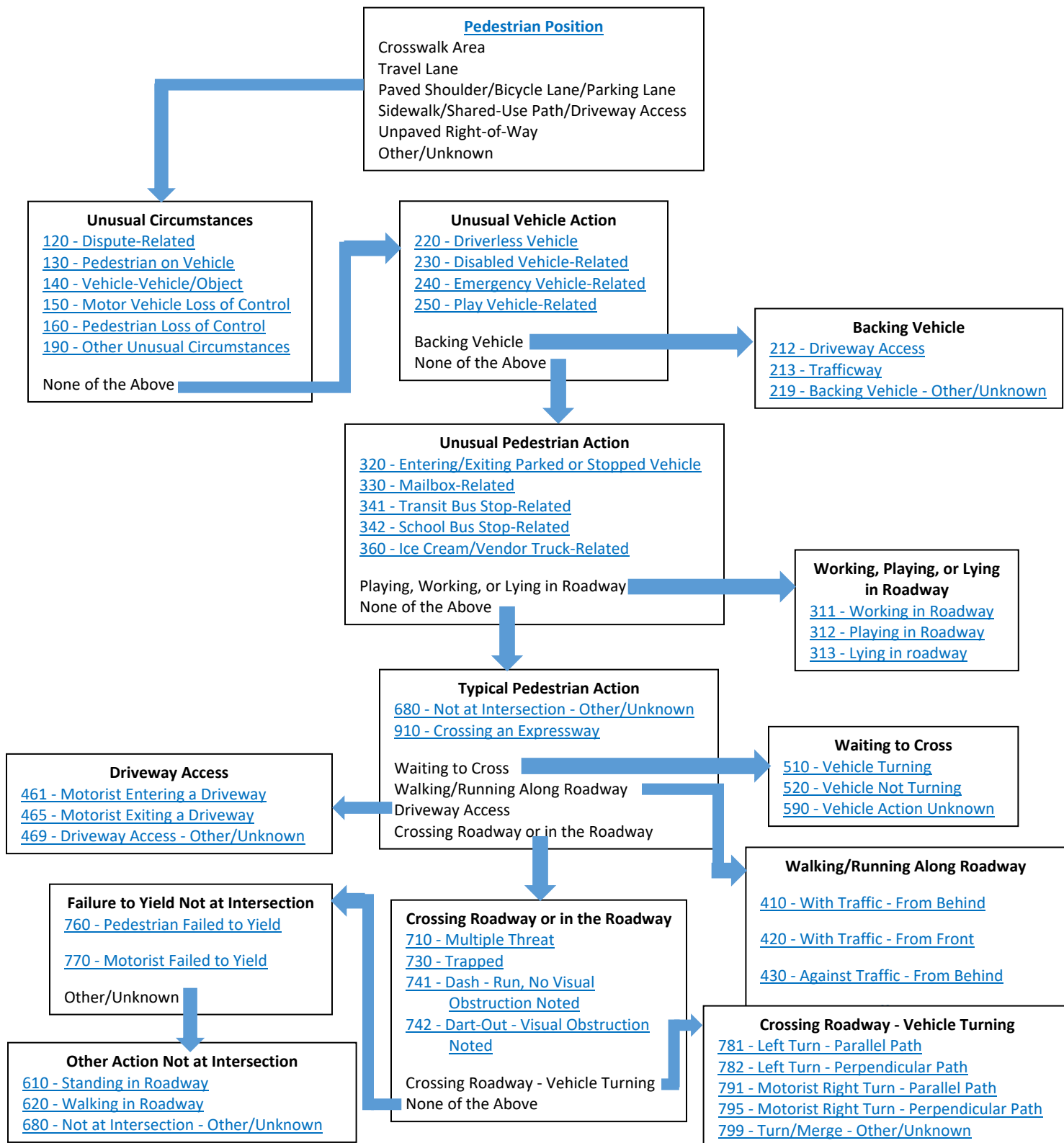
ICS Confidence Level attributes mirror those found in other CISS case types. For additional information see the Injury Causation Coding Overview section in the NHTSA Field Crash Investigation Coding and Editing manual

Appendix A: Pedestrian Crash Location Flowcharts

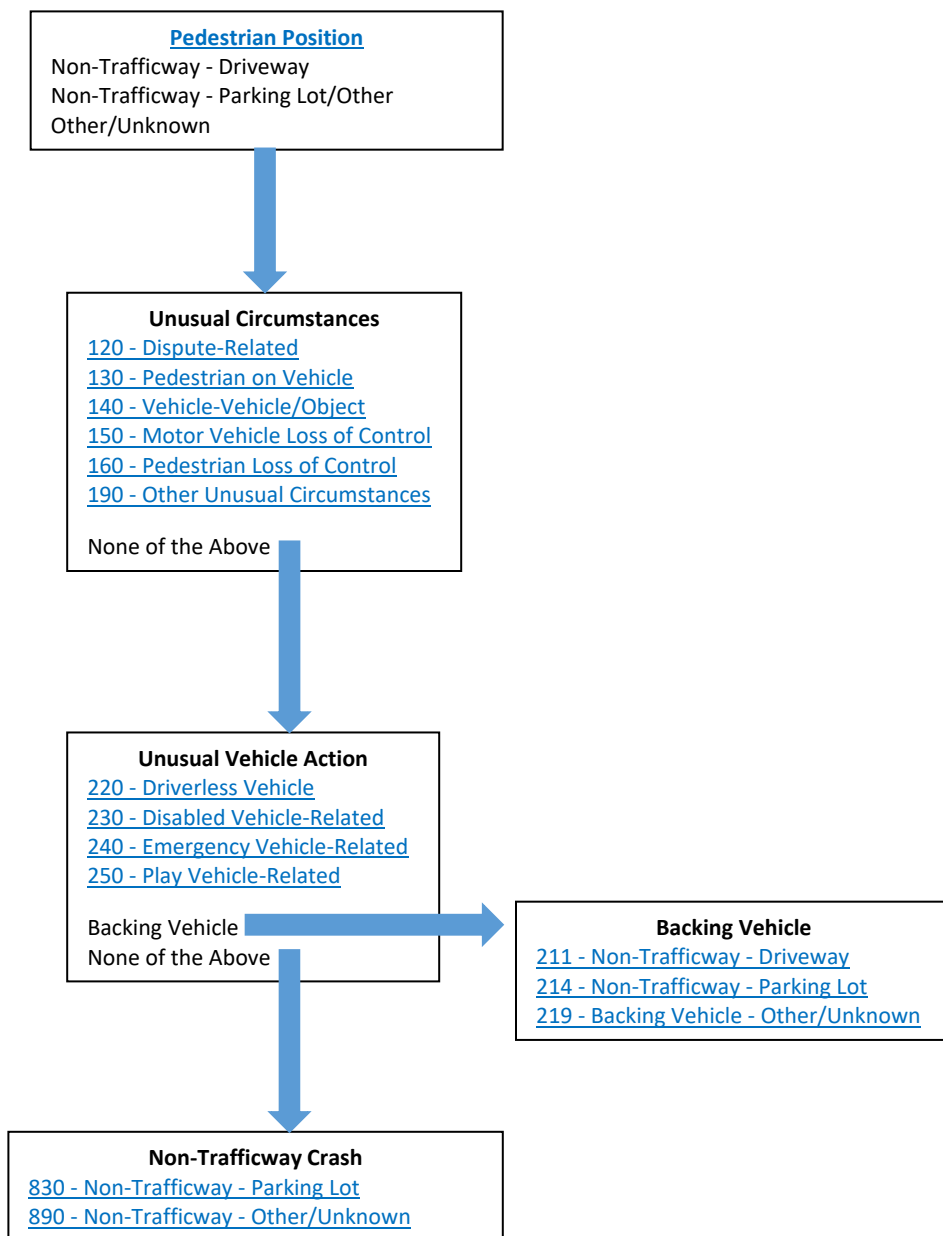
Crash Location - At Intersection and Intersection-Related



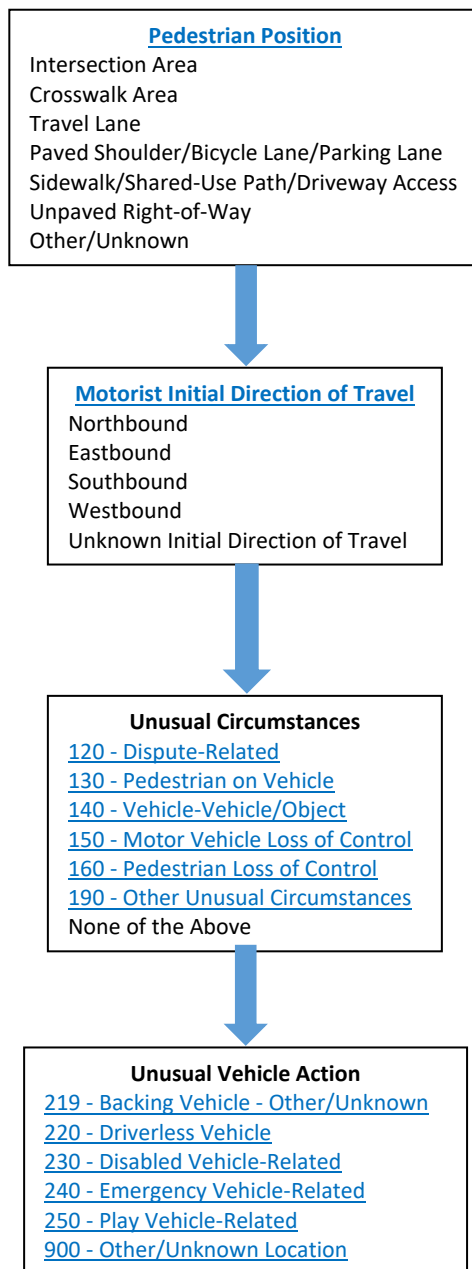
Crash Location - Not at Intersection



Crash Location - Non-Trafficway Location



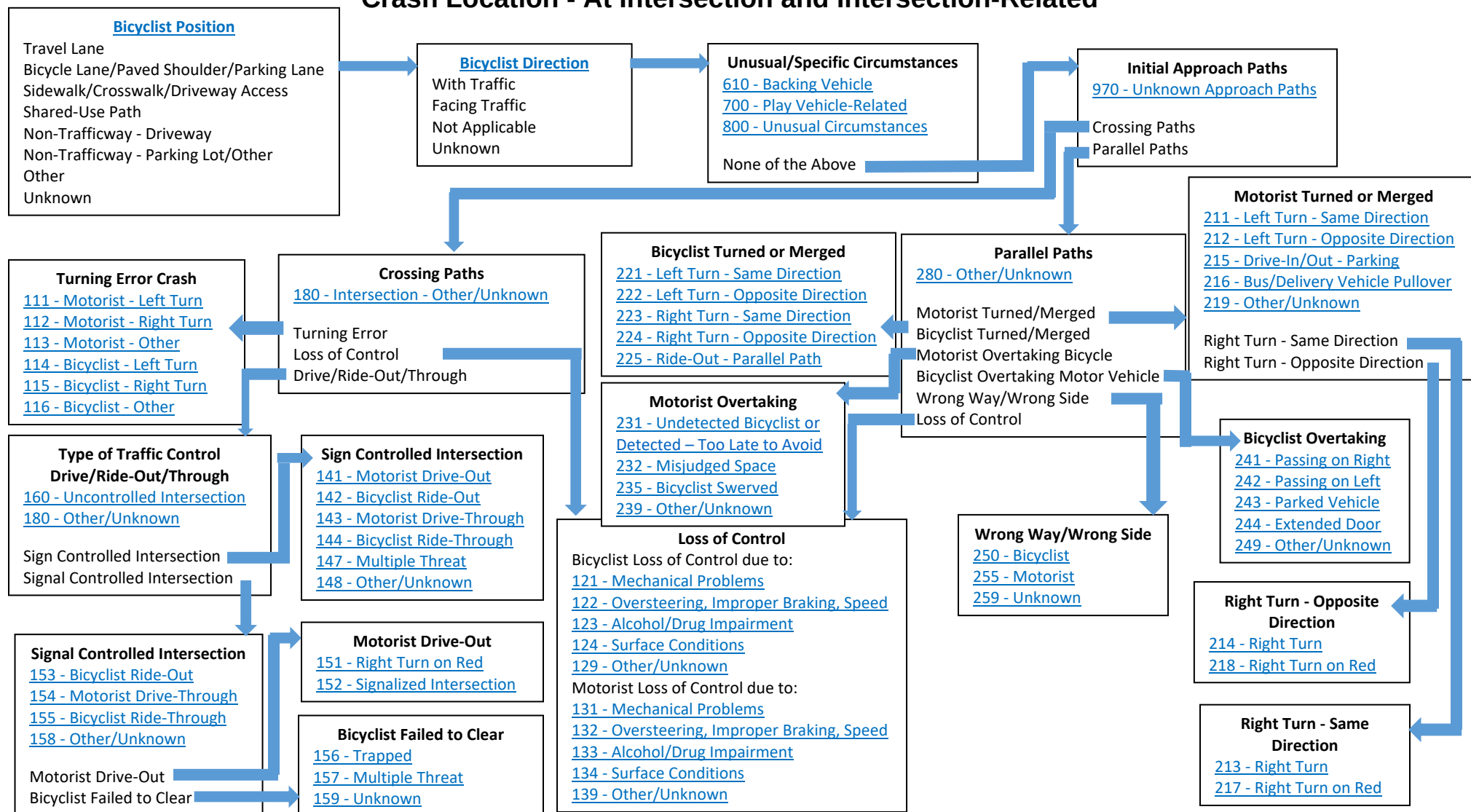
Crash Location - Unknown/Insufficient Information



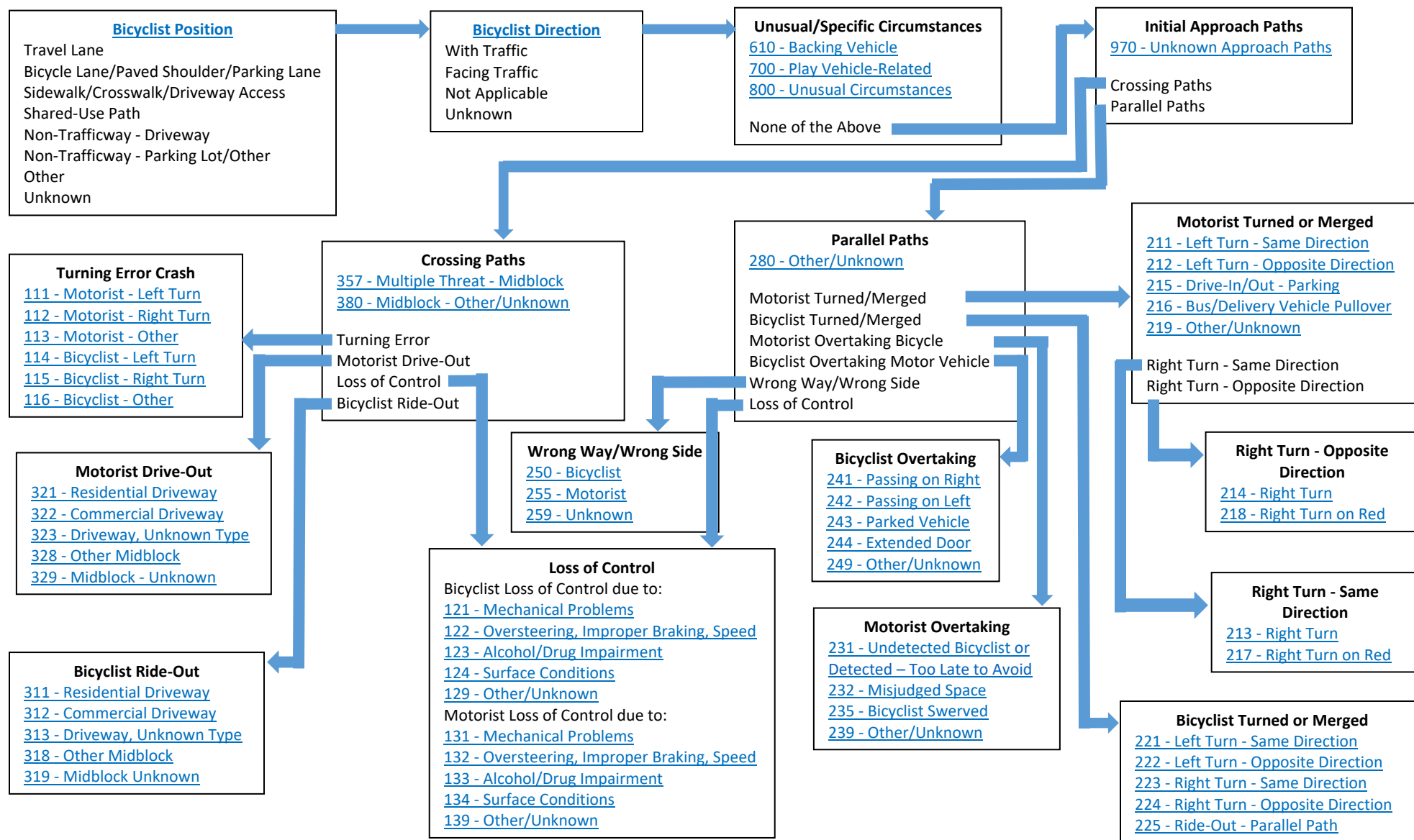
Appendix B: Bicyclist Crash Location Flowcharts

Appendix B: Bicyclist Crash Location Flowcharts

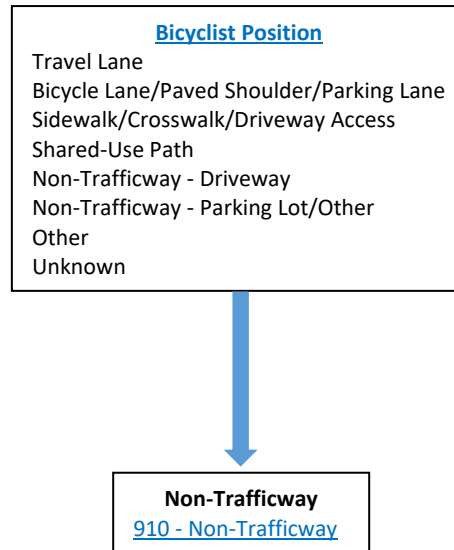
Crash Location - At Intersection and Intersection-Related



Crash Location - Not at Intersection



Crash Location - Non-Trafficway Location



DOT HS 813 745
December 2025



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

