

Researcher Dictionary  
for  
Safety Critical Event  
Video Reduction Data

Version 4.1

October 5, 2015

Virginia Tech Transportation Institute  
Blacksburg, Virginia

## Revision History

Version	Date	Comments
1.0	1/22/2009	First version of document
2.0	4/15/2009	Second version of document (following rater reliability study)
2.1	12/03/2010	Added explanation of draft status.
3.0	4/9/2014	Updated third version. Updates include new variables, additional categories, revised variable descriptions, the identification of baseline variables (*), and a more detailed Table of Contents. New variables include Variable #s 9, 10, 11, 15, 18, 19, 20, 21, 22, 23, 24, 25, 30, 31, 61, and 62)
3.1	6/23/2014	<ol style="list-style-type: none"> <li>1. Corrected typographical errors and omissions, added a new variable (Intersection Influence, Variable #59).</li> <li>2. Updated numerous variable and category definitions.</li> </ol>
3.2	9/8/2014	<ol style="list-style-type: none"> <li>1. Corrected typographical errors and omissions and updated several variable and category definitions.</li> <li>2. Updated text in Figure 2.</li> </ol>
3.3	12/3/2014	<ol style="list-style-type: none"> <li>1. Updated the definition of Precipitating Event for Baseline events to occur 1 second prior to the end of the baseline.</li> <li>2. Updated and enhanced the definitions of Event Severity (V14, 20) and its categories.</li> </ol>
3.4	2/4/2015	<ol style="list-style-type: none"> <li>1. Divided Event Severity = Baseline category into “Balanced-Sample Baseline” and “Additional Baseline” categories.</li> <li>2. Removed “Cognitive, other” category from Secondary Task list.</li> <li>3. Operationally combined Secondary Tasks “Talking/singing, not with passenger” and “Cell Phone, Talking/Listening, hands-free” into a single “Talking/Singing, audience unknown” category. “Cell Phone, Talking/Listening, hands-free” remains as an item in the dictionary for use by future studies with the necessary resources to properly code it.</li> </ol>
4.0	5/21/15	<p>Updated version 4.0. Major edits including 20 new variables plus new categories within existed variables. Variables were renumbered and reordered to allow the most efficient video analysis. This version is the first version intended for use with heavy vehicles and motorcycles in addition to light passenger vehicles. New variables include:</p> <ul style="list-style-type: none"> <li>• Impact or Proximity Time 2</li> <li>• Driver Behavior 4</li> <li>• Secondary Task 4</li> <li>• Rider Helmet Use (Motorcycle</li> <li>• Driver/Rider Eye Protection</li> <li>• Surface Type</li> <li>• Motorist/Non-Motorist 1</li> <li>• Motorist/Non-Motorist 1</li> <li>• Motorist/Non-Motorist 1</li> </ul>

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		<ul style="list-style-type: none"> <li>• Secondary Task 4 Start</li> <li>• Secondary Task 4 End</li> <li>• Secondary Task 4 Outcome</li> <li>• Driving Tasks</li> <li>• Roadway Feature</li> <li>• Parking Lot Demand</li> <li>• Object/Animal Type 2</li> <li>• Object/Animal Type 3</li> <li>• Motorist/Non-Motorist 3</li> <li>• Motorist/Non-Motorist 3</li> <li>• Motorist/Non-Motorist 3</li> </ul>
4.1	10/5/15	<ol style="list-style-type: none"> <li>1. New variables added: V1 Lane Position (motorcycles only)</li> <li>2. Variable removed: Maneuver Judgment</li> <li>3. New categories added to variables: Driving Tasks; Driver Behavior 1,2,3,4; Secondary Task 1,2,3,4; V2,3 Location; Precipitating Event; Event Nature; V2,3 Driver Behavior 1,2,3.</li> <li>4. Updated Figure 5 to include lane sharing options for motorcycles.</li> <li>5. Updated definitions of variables and categories to allow for analysis of motorcycle data. NOTE: Any reference to a “driver” in this document can be assumed to reference the “rider” in motorcycle cases.</li> <li>6. Corrected typographical errors and omissions and updated several variable and category definitions.</li> </ol>

## ***Introduction & Contents***

The following data dictionary has been adapted for use in the SHRP2 Naturalistic Driving Study. This dictionary is subject to potential modifications as further work with the Crash, Near Crash, and Baselines data progresses. As updates to this dictionary are made, updated versions will be provided on the data dissemination site. This data dictionary describes the video reduction variables available in the SHRP2 Naturalistic Driving Study dataset for use by the research community. In addition to this introduction, the data dictionary includes six parts:

**Revision History** –This data dictionary should be considered a working document that will evolve over time. The revision history shown on the previous page provides a table which describes updates to the document.

**Page 4: Related Reading.** A list of related subject areas and specific documents that may be of value to users of this data dictionary.

**Page 5: List of Dictionary Fields.** A description of the components or fields used throughout this dictionary to provide information about each variable and category included.

**Page 6: Background Information.** Includes important information to consider when interpreting the dictionary entries as well as charts and diagrams to aid in the utilization of the data dictionary for specific variables. Each figure is referenced in the Variable Definitions where applicable.

**Page 11: List of Variables.** A list of the entries (Data Variables) in the dictionary which can be used as a table of contents to locate specific variables in the document by their unique Variable IDs.

**Page 12: Data Dictionary Entries.** Includes three sub-sections that combined define all the variables and categories used in the video analysis of crashes, near crashes, and baselines, plus hints and tips for interpreting the results and references to related GES variables. The three sub-sections are as follows:

**Page 12: Variable Definitions.** A listing of each variable included in the crash and near crash video reduction along with a detailed definition of each variable and listing of related GES variables.

**Page 21: Category Definitions.** A detailed definition of each category used for each variable described in Variable Definitions.

**Page 101: Secondary Task Start/End Times.** A listing of each type of Secondary Task defined in the Category Definitions along with a description of how the start and end of these secondary tasks was determined in the video.

## ***Related Reading***

This dictionary is intended to be utilized with a particular type of data—specifically, video data of drivers in the process of a naturalistic driving task. It is ideal to also have access to the corresponding time series data from vehicle sensors, such as forward radar, lateral and longitudinal accelerometers, gyro, GPS, and other internal vehicle network data such as speed. The dictionary has provided guidance in the analysis of many cases of crash and near-crash events. Individuals working with this dictionary are encouraged to become familiar with the entire document before using it as a basis for video reduction. Depending upon specific user reduction tools, modifications to the variables or methods may be advantageous. The following references are provided as starting points to assist the researcher in his or her efforts.

### Secondary Data Analysis

Use of data collected by other organizations is becoming increasingly common in this digital age. In some fields, such as the social sciences or business, the use of previously collected data is more common than, for example, in psychology or product development. The primary benefit of this approach is cost savings. There are also risks that can threaten the validity of analyses conducted in this manner. The following references include discussion related to and recommendations for such secondary analyses.

Akerstrom, M., Jacobsson, K., Wasterfors, D. (2004). “Reanalysis of previously collected material” in Clive Seale, Giampietro Gobo, Jaber Gubrium, and David Silverman (eds), *Qualitative Research Practice*, Thousand Oaks, CA. Sage Publications Ltd.

Corti, L. Thompson, P. (2004). “Secondary analysis of archived data”, in Clive Seale, Giampietro Gobo, Jaber Gubrium, and David Silverman (eds), *Qualitative Research Practice*, Thousand Oaks, CA. Sage Publications Ltd.

Dale, A. Arber, S., and Procter, M. (1988). *Doing Secondary Analysis*, Unwin Hyman Ltd., London.

Hyman, H. (1972). *Secondary Analysis of Sample Surveys*, Wesleyan University Press, Middletown, Connecticut.

Kiecolt, K. and Nathan, L. (1985). *Secondary Analysis of Survey Data – Sage University Paper Series on Quantitative Applications in the Social Sciences*, 53. Sage Publications, Beverly Hills, CA.

### Video Reduction

The General Estimates System (GES) is a database compiled by the National Highway Traffic Safety Administration, and is utilized to extract and code information relevant to traffic crashes from reports of police agencies. The GES system was used as a starting point and also as an ongoing reference for the development and use of this data dictionary—specifically, as a model for the development of variables to be collected via review of video from in-vehicle cameras. Changes in the GES variable definitions were necessary, in large part because of the differences between the GES intent and perspective (crash information only, gleaned from police accident reports based on post-event site visits, crash reconstruction, and interviews with involved parties) and the intent and perspective of general naturalistic driving data analysis (crash and near crash information, gleaned from video analysis while watching events unfold from the perspective of only one driver). Therefore the definitions included in this dictionary are usually modified from the GES model, and the GES variable references are provided only as a general guide rather than as a direct link.

National Highway Traffic Safety Administration (2014). National Automotive Sampling System (NASS General Estimates System (GES) Analytical User’s Manual 1988-2012. Highway Traffic Safety Administration. Washington, DC.

## ***List of Dictionary Fields***

For each of the variables, the dictionary provides the following nine fields:

### All Sections:

1. Variable # – A number used for referencing the variables in the dictionary. All variables are applicable to Crash and Near Crash analyses. An asterisk (\*) indicates variables that also apply to baseline analyses.
2. Variable Name – A brief name for the variable.

### Variable Definitions Section:

3. Variable Definition – A detailed definition of the variable.
4. GES Related Variable(s) – GES variable(s) from which a category was derived, if applicable, and often modified.

### Category Definitions Section:

5. Category – The possible categories for the coding of each variable during video analysis.
6. Category Definition – The definitions for each category.
7. Examples and Hints – Special cases and/or additional guidance in assigning categories.

### Secondary Task Start/End Time Section:

8. Category – The possible categories for the Secondary Task variable.
9. Secondary Task Start Time – Specific guideline for determination of point in time when a secondary task begins, if applicable.
10. Secondary Task End Time – Specific guideline for determination of point in time when a secondary task ends, if applicable.

## ***Background Information***

Analysts who intend to utilize this dictionary for naturalistic driving video analysis are encouraged to read through the entire dictionary before beginning. Users should read and have a thorough understanding of all variable definitions and should be familiar with the categories within each variable. It is especially important to have a clear concept of the variable Precipitating Event (V7), because the proper coding of many other variables depends upon an accurate identification of the Precipitating Event (V7) and the point in time at which it begins (Conflict Begin, V2). The identification of the Precipitating Event and Conflict Begin should be the first task following the general classification of the incident as a crash, near crash, or crash relevant conflict that is to be analyzed. Variables that are defined in relation to the Precipitating Event should be very carefully identified and located in time relative to this specific predetermined Precipitating Event start point. This Conflict Begin is the anchor point for the incident and all variables are populated related to that anchor point.

While there is a large set of data obtained in naturalistic data that otherwise would be unknown in standard crash analysis (such as the timing of events and subject driver's behaviors), it is also important to recognize the limitations of naturalistic driving data. There are some factors of the incident that often cannot be determined due to the limited perspective of the naturalistic driving data (one vehicle only, referred to as the subject vehicle) and video data (from the perspective of a camera(s) inside the subject vehicle looking out). There often is very little known about the behaviors, secondary tasks, reactions, impairments, etc., of the drivers of other non-subject vehicles involved in the incident or about some of the non-visual elements of an incident (such as certain types of vehicle malfunction). While many of the variables included in this dictionary provide the ability to code some of this information when it can be clearly confirmed, it is from this limited perspective that these answers must be provided.

Baseline analysis utilizes a subset of the variables included in this dictionary (denoted with an asterisk, \*). Rather than use a Precipitating Event or Conflict Begin (which do not apply to baseline driving) as the anchor points for many variables, the anchor point for baselines is defined to occur one (1) second prior to the end (last timestamp) of the baseline epoch. Therefore, variables that reference the time of the Precipitating Event or Conflict Begin for crash and near crash analyses instead reference the endpoint of the baseline epoch minus 1,000 timestamps (milliseconds) in Baseline analyses.

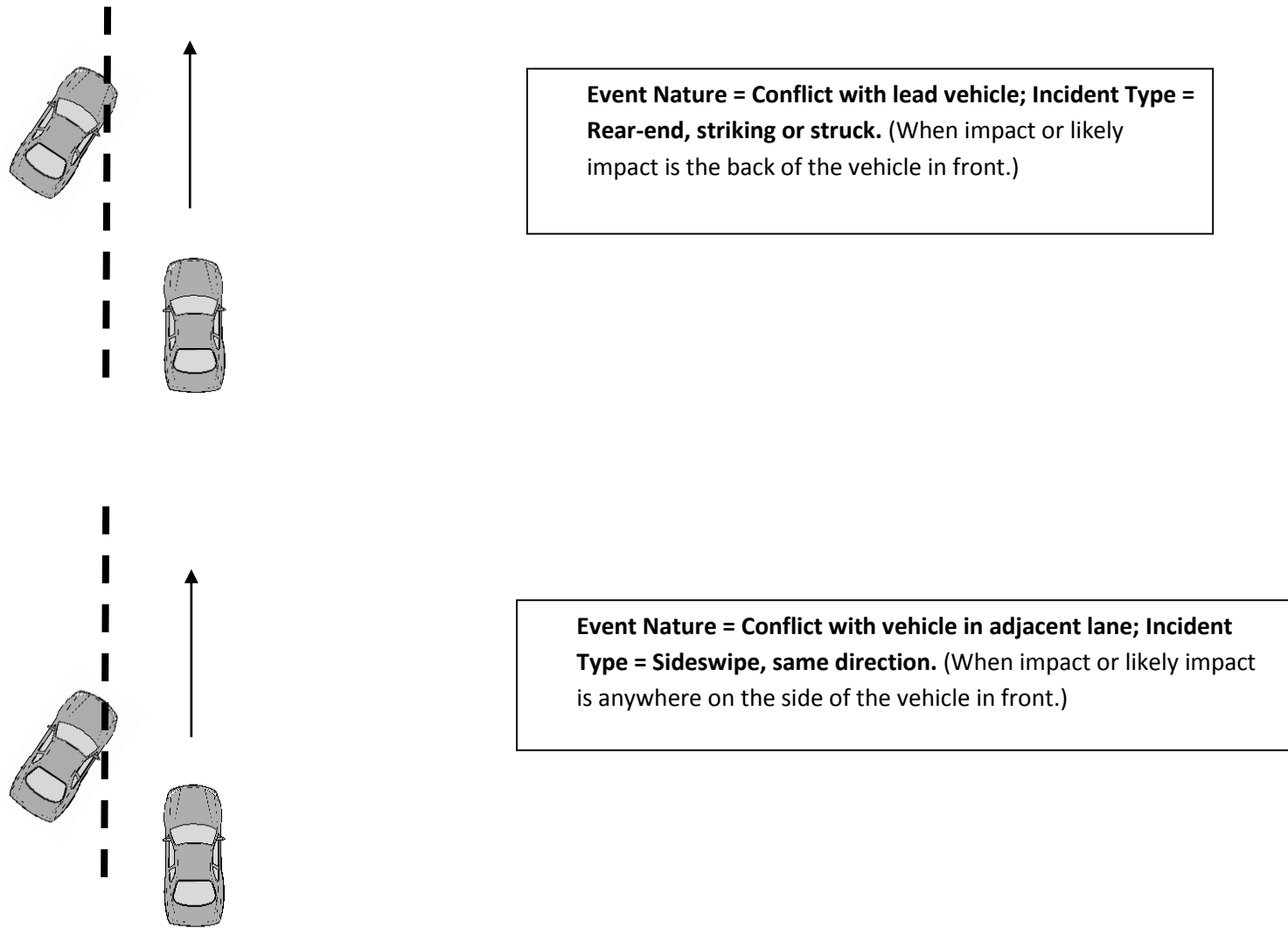
The figures on the following pages include background information utilized to evaluate the variables Event Nature (V11, V18), Incident Type (V12, V19), Relation to Junction (V71), and Motorist/Non-Motorist/Animal/Object Location (V81, V89). Figures 1, 3, and 4 are adapted from the General Estimates System Coding and Editing Manual. Figure 2 is a visual aid in the discernment of two different types of Event Nature/Incident Type combinations. Figure 5 is a pictorial representation of the locations described in the Motorist/Non-Motorist/Animal/Object 2 and 3 Location variables.

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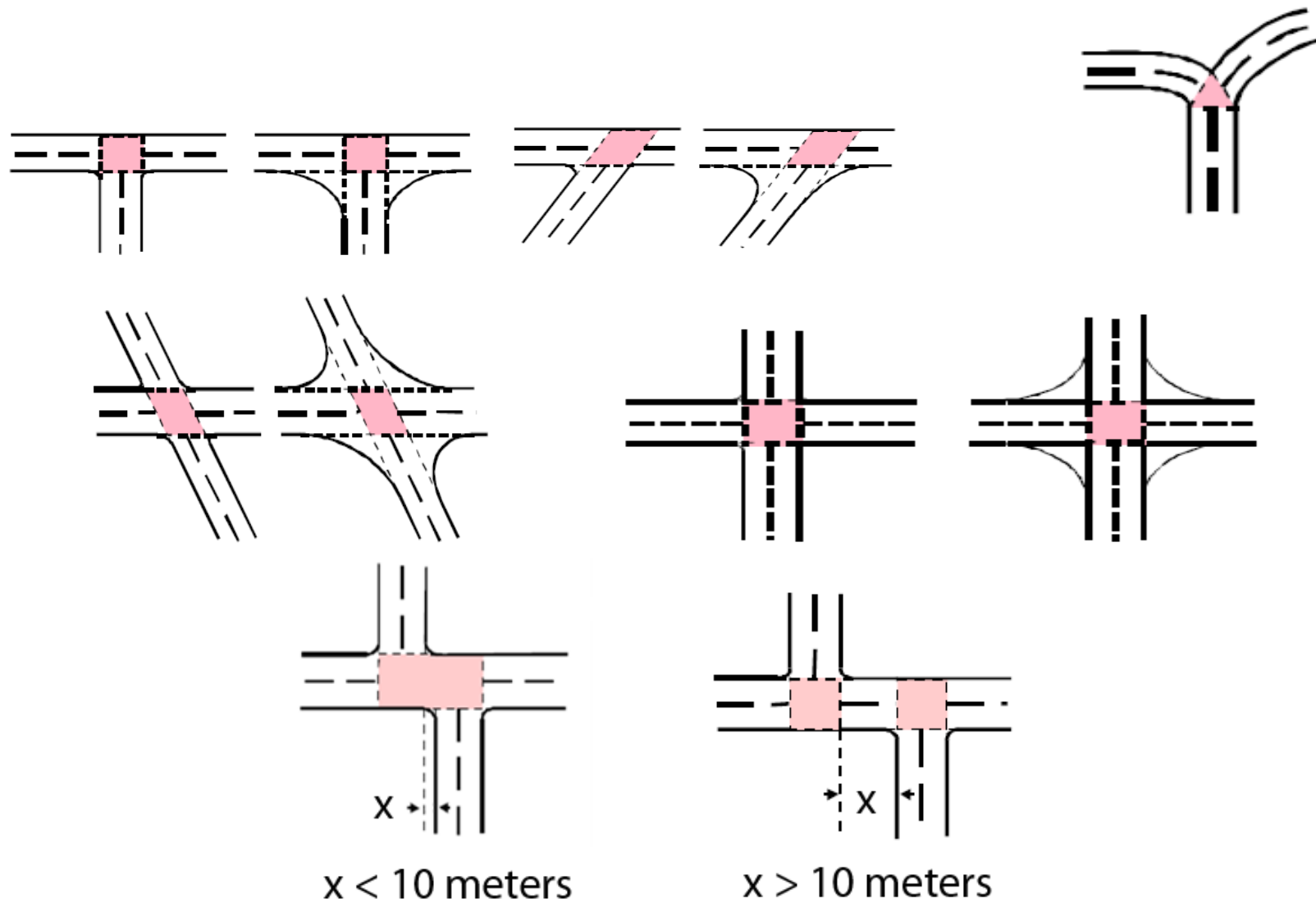
Category	Configuration	CRASH TYPES (includes intent)									
I Single Driver	A Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN					
	B Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN					
	C Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN				
II Same Trafficway Same Direction	D Rear End	20 STOPPED 21, 22, 23	22 23	24 SLOWER 25, 26, 27	25 26 27	26 27	28 DECEL. 29, 30, 31	29 30 31	(EACH - 32) SPECIFICS OTHER	(EACH - 33) SPECIFICS UNKNOWN	
	E Forward Impact	34 CONTROL/ TRACTION LOSS	35 CONTROL/ TRACTION LOSS	36 CONTROL/ TRACTION LOSS	37 CONTROL/ TRACTION LOSS	38 AVOID COLLISION WITH VEH.	39 AVOID COLLISION WITH VEH.	40 AVOID COLLISION WITH OBJECT	41 AVOID COLLISION WITH OBJECT	(EACH - 42) SPECIFICS OTHER	(EACH - 43) SPECIFICS UNKNOWN
	F Angle, Sideswipe	44 45	45	46 47	47	46 47	46 47	46 47	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On	50 51	51	50 51	50 51	50 51	50 51	(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN		
	H Forward Impact	54 CONTROL/ TRACTION LOSS	55 CONTROL/ TRACTION LOSS	56 CONTROL/ TRACTION LOSS	57 CONTROL/ TRACTION LOSS	58 AVOID COLLISION WITH VEH.	59 AVOID COLLISION WITH VEH.	60 AVOID COLLISION WITH OBJECT	61 AVOID COLLISION WITH OBJECT	(EACH - 62) SPECIFICS OTHER	(EACH - 63) SPECIFICS UNKNOWN
	I Angle, Sideswipe	64 Lateral Moves	65 Lateral Moves	64 65	64 65	64 65	64 65	64 65	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN	
IV Change Trafficway Vehicle Turning	J Turn Across Path	68 Initial Opposite Directions	69 Initial Opposite Directions	70 Initial Same Directions	71 Initial Same Directions	72 Initial Same Directions	73 Initial Same Directions	72 Initial Same Directions	(EACH - 74) SPECIFICS OTHER	(EACH - 75) SPECIFICS UNKNOWN	
	K Turn Into Path	76 Turn Into Same Direction	77 Turn Into Same Direction	78 Turn Into Same Direction	79 Turn Into Same Direction	80 Turn Into Opposite Direction	81 Turn Into Opposite Direction	82 Turn Into Opposite Direction	83 Turn Into Opposite Direction	(EACH - 84) SPECIFICS OTHER	(EACH - 85) SPECIFICS UNKNOWN
V Intersect Paths	L Straight Paths	86 Striking from the Right	87 Struck on the Right	88 Striking from the Left	89 Struck on the left	86 87	88 89	86 87	(EACH - 90) SPECIFICS OTHER	(EACH - 91) SPECIFICS UNKNOWN	
VI Misc. Etc.	M Backing, Etc.	92 Backing Veh.	93 Other Veh. or Object	92 93	92 93	92 93	92 93	92 93	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

**Figure 1. Regarding Event Nature, Incident Type, and Vehicle Configuration. Select the configurations that most accurately represent each vehicles (V1, V2, V3) role in the incident. From GES Variable V23, from GES p. 324.**

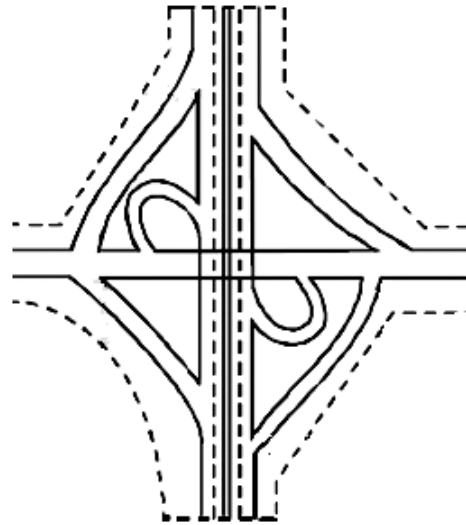




**Figure 2. Regarding Event Nature and Incident Type. Distinguishing rear-end, striking or struck from sideswipe, same direction.**



**Figure 3. Regarding Relation to Junction (Intersections). Shaded areas are coded "Intersection." GES Variable A09, adapted from GES p. 36.**



**Figure 4. Regarding Relation to Junction (Interchange Area). Pictured region is coded “Interchange Area.” Interchange area must feature either an acceleration or deceleration lane. GES Variable A09, adapted from GES p. 36.**



**Figure 5. Regarding Motorist/Non-Motorist/Animal/Object Location. Subject vehicle is pictured. Location of conflicting vehicle, person, animal, or object is coded A-J in relation to subject vehicle. “S” is denoted for lane-sharing motorcycles. K is used for top of vehicle.**

## List of Variables

The following variables are included in this dictionary. \* denotes the subset of variables included in Baseline analyses.

<u>Variable#</u>	<u>Variable Name</u>	<u>Variable#</u>	<u>Variable Name</u>	<u>Variable#</u>	<u>Variable Name</u>
1*	Subject Number	33*	Secondary Task 1	64*	Contiguous Travel Lanes
2	Conflict Begin	34*	Secondary Task 1 Start Time	65*	Through Travel Lanes
3	Subject Reaction Start	35*	Secondary Task 1 End Time	66*	V1 Lane Occupied
4	Conflict End	36	Secondary Task 1 Outcome	67*	V1 Lane Position (MC Only)
5*	Pre-Incident Maneuver	37*	Secondary Task 2	68*	Traffic Density
6	Precipitating Event	38*	Secondary Task 2 Start Time	69*	Parking Lot Demand
7	Vehicle 1 (Subject) Configuration	39*	Secondary Task 2 End Time	70*	Traffic Control
8	Vehicle 2 Configuration	40	Secondary Task 2 Outcome	71*	Relation to Junction
9	Vehicle 3 Configuration	41*	Secondary Task 3	72*	Intersection Influence
10	Event Nature 1	42*	Secondary Task 3 Start Time	73*	Roadway Feature
11	Incident Type 1	43*	Secondary Task 3 End Time	74*	Locality
12*	Event Severity 1	44	Secondary Task 3 Outcome	75*	Construction Zone
13	Crash Severity 1	45*	Secondary Task 4	76	Number of Other Motorists/Non-Motorists
14	Impact or Proximity Time 1	46*	Secondary Task 4 Start Time	77	Number of Objects/Animals
15	V1 Evasive Maneuver 1	47*	Secondary Task 4 End Time	78	Fault
16	V1 Post-Maneuver Control 1	48	Secondary Task 4 Outcome	79	Motorist/Non-Motorist 2 Type
17	Event Nature 2	49*	Driving Tasks	80	Object/Animal 2 Type
18	Incident Type 2	50*	Hands on the Wheel	81	Motorist/Non-Motorist/Animal/Object 2 Location
19	Event Severity 2	51*	Driver Seatbelt Use	82	Motorist/Non-Motorist 2 Pre-Incident Maneuver
20	Crash Severity 2	52*	Rider Helmet Use (MC Only)	83	Motorist/Non-Motorist 2 Evasive Maneuver
21	Impact or Proximity Time 2	53*	Driver/Rider Eye Protection	84	Motorist/Non-Motorist 2 Behavior 1
22	V1 Evasive Maneuver 2	54	Vehicle Contributing Factors	85	Motorist/Non-Motorist 2 Behavior 2
23	V1 Post-Maneuver Control 2	55	Infrastructure Contributing Factors	86	Motorist/Non-Motorist 2 Behavior 3
24	Airbag Deployment	56	Visual Obstructions	87	Motorist/Non-Motorist 3 Type
25	Vehicle Rollover	57*	Lighting	88	Object/Animal 3 Type
26*	Driver Behavior 1	58*	Weather	89	Motorist/Non-Motorist/Animal/Object 3 Location
27*	Driver Behavior 2	59*	Surface Type	90	Motorist/Non-Motorist 3 Pre-Incident Maneuver
28*	Driver Behavior 3	60*	Surface Condition	91	Motorist/Non-Motorist 3 Evasive Maneuver
29*	Driver Behavior 4	61*	Roadway Alignment	92	Motorist/Non-Motorist 3 Behavior 1
30*	Driver Impairments	62*	Roadway Grade	93	Motorist/Non-Motorist 3 Behavior 2
31*	Front Seat Passengers	63*	Traffic Flow	94	Motorist/Non-Motorist 3 Behavior 3
32*	Rear Seat Passengers			95*	Final Narrative/Additional Comment

NOTE: Any reference to a “driver” in this document can be assumed to reference a “rider” if the indicated vehicle is a motorcycle.

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
<b>1*</b>	<b>Subject Number</b>	All consented drivers (primary and secondary) are assigned a unique numeric ID number, which can be used for cross-referencing demographic information, etc. For SHRP2, subject numbers are between 1 and 7 digits.	
<b>2*</b>	<b>Conflict Begin</b>	<p>The point in the video when the sequence of events defining the occurrence of the incident, near-crash, or crash begins. Defined as the point at which the Precipitating Event begins (see Precipitating Event [V7]). Value is a timestamp, in milliseconds after the start of the file.</p> <p>NOTE 1: For road departures with no other associated event types, the conflict begins when the vehicle first starts to move (or drift) towards the edge of the road in "going straight" scenarios OR begins the maneuver that ultimately leads to the road departure (e.g., left or right turn, entering parking space). This maneuver is also the Precipitating Event even though it did not begin until the Conflict Begin time.</p> <p>NOTE 2: For cases in which the origin of the Precipitating Event is not visible in the video (e.g., "Other vehicle ahead - stopped on roadway more than 2 seconds" or "Pedestrian in roadway"), the start point for the Precipitating Event would be when the event is first visible in the forward view of the subject vehicle.</p> <p>NOTE 3: For "loss of control" cases, the conflict begins at the point where the driver/rider just begins to lose control.</p> <p>NOTE 4: For Baseline events, the Conflict Begin is defined as 1 second (1,000 timestamps) prior to the end of the baseline epoch.</p>	
<b>3</b>	<b>Subject Reaction Start</b>	The timestamp, in milliseconds after the start of the file, when the driver is first seen to recognize and begin to react to the safety critical incidents occurring. Defined as the first change in facial expression to one of alarm or surprise or the first movement of a body part in a way that indicates awareness and/or the start of an evasive maneuver, whichever occurs first. In most cases, this occurs before Impact or Proximity Time, but Subject Reaction Start can be coded after the time of impact in low-risk tire strikes if the driver is acting to prevent a worse collision and for certain rear-end, struck (or similar) collisions if the driver is acting to prevent a second (e.g., rear-end, striking) incident. For motorcycles, this relies more heavily on body movement and evasive maneuver begin than on facial expressions due to obstruction of the face by the helmet.	
<b>4</b>	<b>Conflict End</b>	The timestamp in the video, milliseconds from the start of the file, when the sequence of events defining the occurrence of the incident, near-crash, or crash ends. Defined as the point at which final evasive maneuvers have been completed and all vehicles, objects, pedestrians, animals, etc., involved have either stopped or returned to normal patterns of road use, whichever occurs first.	

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
5*	<b>Pre-Incident Maneuver</b>	This represents the last type of action or driving maneuver that the subject vehicle driver engaged in or was engaged in just prior to or at the time of the Precipitating Event, beginning anywhere up to 5 seconds before the Precipitating Event (V7). This variable is independent of the driver's engagement in secondary tasks and the Precipitating Event, but should be determined after the precipitating event is defined. It is a vehicle kinematic measure--based on what the vehicle does (movement and position of the vehicle), not on what the driver is doing inside the vehicle. For Baselines, this is the action or driving maneuver that the subject is engaged in immediately before (or up to 5 seconds before) the baseline anchor point (Conflict Begin, V2), which occurs 1 second before the end of the baseline event. NOTE: For road departures, Pre-Incident Maneuver is coded somewhat differently. In these cases, Pre-incident Maneuver is instead coded as that maneuver that ultimately led to the road departure, even though that maneuver begins at Conflict Begin instead of being in progress before it. This allows the Precipitating Event to be coded as "road departure" while still providing the context of the maneuver.	V21 (Vehicle Maneuver/Movement Prior to Critical Event (Precrash 1))
6	<b>Precipitating Event</b>	The state of environment or action that began the event sequence under analysis. What environmental state or what action by the subject vehicle, another vehicle, person, animal, or non-fixed object was critical to this vehicle becoming involved in the crash or near-crash? This is a vehicle kinematic measure (based on what the vehicle does--an action, not a driver behavior). It does not include factors such as driver distraction, fatigue, or disciplining a child. This is the critical event which made the crash or near-crash possible. It may help to use the "but for" test; "but for this action, would the crash or near-crash have occurred?" This is independent of fault. For example, Vehicle A is speeding when Vehicle B crosses Vehicle A's path causing a crash, the Precipitating Event would be Vehicle B crossing Vehicle A's path. If two possible Precipitating Events occur simultaneously, choose the event that imparted the greatest effect on the crash or near-crash. If more than one sequential event contributed to the crash or near-crash, determination of which is the Precipitating Event depends upon whether the driver had enough time or vehicular control to avoid the latter event. If the driver avoids one event and immediately encounters another potentially harmful event (with no time or ability to avoid the latter), then the Precipitating Event is the first obstacle or event that was successfully avoided (this is where the critical envelope begins, and is the reference point for the other variables). If the driver had ample time or vehicular control to avoid the latter event, then that latter event would be coded as the Precipitating Event (the critical envelope would begin here, and all other variables would be coded based on this event). Note that a parking lot is considered a roadway--thus a barrier or light pole in the parking lot would be considered an object in the roadway.	V26 (Critical Event-Precrash 2 (Event))
7,8,9	<b>Vehicle 1 (Subject),2,3 Configuration</b>	A numerical designation of the role and configuration of the vehicle or other non-motorists or objects at the time of their first involvement in the sequence of events. Configurations are depicted in Figure 1 at the beginning of this dictionary and in the Accident Types chart in GES (2014). Vehicle 1 is the subject vehicle, Vehicle 2 is the first other vehicle involved in the study, and vehicle 3 is the last vehicle to become involved. If more than 3 vehicles are involved, code the three vehicles at greatest risk.	V23 (Accident Type)

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
<b>10,17</b>	<b>Event Nature 1,2</b>	Identifies the other object(s) of conflict (e.g., lead vehicle, following vehicle) for the crash or near-crash, or safety-related incident that occurred. If multiple Event Natures apply list them in sequential order by time. If more than 2 apply, select the two most severe (most harmful or potentially most harmful). Determination of the nature of the event and the envelope surrounding it will lead to the determination of other variables such as pre-incident maneuver (V5) and precipitating event (V7). (Example 1: Subject vehicle that rear-ends a lead vehicle may then be rear-ended by a following vehicle. 1 = Conflict with lead vehicle; 2 = Conflict with following vehicle. Example 2: Subject vehicle avoids rear-ending a lead vehicle (near crash) by steering off the road into a ditch (a crash). 1 = Conflict with lead vehicle; 2 = Single vehicle conflict. Example 3: Motorcyclist either avoids or fails to avoid rear-ending a lead vehicle by braking hard (near crash or crash) followed by skidding and the motorcycle going down (crash). 1 = Conflict with lead vehicle; 2 = Single vehicle conflict). Figures 1 and 2 in the Research Dictionary for Video Reduction Data should be referenced when coding this variable.	A06 (First Harmful Event), A07 (Manner of Collision), E03 (Point of Impact (This Vehicle)), E05 (Point of Impact (Other Vehicle)), E06 (Action), V20 (Most Harmful Event), V23 (Accident Type (Category))
<b>11,18</b>	<b>Incident Type 1,2</b>	Identifies the type of conflict(s) that the subject vehicle has with other objects of conflict for the most severe type of crash, near-crash, or safety-related incident that occurred. If multiple Incident Types apply, list them in sequential order by time, correlating with the Event Natures listed in Variables 11 and 18. If more than 2 apply, select the two most severe (most harmful or potentially most harmful). For categories not involving pedestrians, pedal cyclists, or animals, the orientation of the vehicle(s) is also indicated. However, unless the subject vehicle is specified, "vehicle" may refer to any vehicle involved in the event. (Example 1: A subject vehicle that rear-ends a lead vehicle may then be rear-ended by a following vehicle. 1 = Rear-end, striking; 2 = Rear-end, struck. Example 2: Subject vehicle avoids rear-ending a lead vehicle (near crash) by steering off the road into a ditch (a crash). 1 = Rear-end, striking (the near crash); 2 = Run-off-road (the crash). Figures 1 and 2 in the Research Dictionary for Video Reduction Data should be referenced when coding this variable.	A07 (Manner of Collision), V23 (Accident Type (Category))
<b>12*, 19</b>	<b>Event Severity 1,2</b>	General term describing the outcome of the event/incident type(s) listed. Denotes the outcome of each event/incident type as a Crash, Near Crash, Crash Relevant, Non-Conflict, or Non-Subject Conflict. For Baselines, only one variable is listed, and it is coded Baseline.	GES codes only crashes-- groups them according to type of vehicle(s) involved, vehicle damage, and individual injury type.
<b>13, 20</b>	<b>Crash Severity 1,2</b>	A ranking of crash severity for the referenced event/incident type(s) based on the magnitude of vehicle dynamics, the presumed amount of property damage, knowledge of human injuries (often unknown in this dataset) and the level of risk posed to the drivers and other road users. This variable is coded only for events that include a Crash.	
<b>14, 21</b>	<b>Impact or Proximity Time 1,2</b>	The timestamp, in milliseconds after the start of the file, when the subject vehicle and other object of conflict first make impact for the portion of the event (1 or 2) in question. In the case of a near crash, this is the timestamp when the subject vehicle and other object of conflict are at their closest distance to each other. If only one Event Type occurs, Impact or Proximity Time 2 is left blank. Impact or Proximity Times are always after Conflict Begin but prior to Conflict End. When Event Severity = Unintentional Lane Deviation, this value is the timestamp of the most severe point in the Lane Deviation.	

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
15, 22	<b>V1 Evasive Maneuver 1,2</b>	The subject driver's reaction or avoidance maneuver (if any) in response to the event/incident(s) coded in Variables 12-15 and 18-21. This is independent of maneuvers associated with or caused by the resulting crash or near-crash. This is a vehicle kinematic measure--based on what the vehicle does. Analysts may use both video and kinematic data charts to fully characterize the evasive maneuver. If two or more types of maneuvers are performed in response to the corresponding conflict, include them all here; they do not need to occur simultaneously.	V27 (Corrective Action Attempted - Precrash 3)
16, 23	<b>V1 Post-Maneuver Control 1,2</b>	Ability of subject vehicle driver to maintain control of the vehicle during evasive maneuver(s), if any. Consider the time between the start of the evasive maneuver and either Conflict End or start of the evasive maneuver for the second Incident Type (if any), whichever is first. Subject's level of vehicle control prior to the evasive maneuver or after impact should not be considered. NOTE that this variable addresses control only until the point of the referenced Event Nature. In cases where the vehicle or motorcycle rear-ends a lead vehicle (Event Nature 1) and then loses control and falls to the ground (motorcycle) (Event Nature 2), Post-Maneuver Control 1 will be coded "control maintained." The loss of control after the rear-end crash will be considered as Post-Maneuver Control 2.	V28 (Vehicle Control - Precrash 4)
24	<b>Airbag Deployment</b>	An indication of whether the driver side airbag or any other airbag in the vehicle was deployed during the crash. If Yes, the event is also classified as a Level 1 Crash in Crash Severity.	
25	<b>Vehicle Rollover</b>	An indication of whether the subject vehicle rolled over during the crash. If Yes, the event is also classified as a Level 1 Crash in Crash Severity.	
26*, 27*, 28*, 29*	<b>Driver Behavior 1,2,3,4</b>	Driver behaviors (those that either occurred within seconds prior to the Precipitating Event or those resulting from the context of the driving environment) that include what the driver did to cause or contribute to the crash or near-crash. Behaviors may be apparent at times other than the time of the Precipitating Event, such as aggressive driving at an earlier moment which led to retaliatory behavior later. If there are more than 4 behaviors present, select the most critical or those that most directly impact the event as defined by event outcome or proximity in time to the event occurrence. Populate this variable in numerical order. (If there is only one behavior, name it Behavior 1; if there are two, name them Behaviors 1 and 2.) NOTE: that the Driver Behavior category "Distracted" is only used for Critical Event analysis in cases where a secondary task (V34, V38, V42, V46) is believed to have contributed to the event. The Distracted category is omitted from Baseline analysis.	no GES/VA PAR Variable 17/18
30*	<b>Driver Impairments</b>	Possible reasons for the observed driver behavior(s), judgment, or driving ability. More than one category may be assigned.	P18 (Person's Physical Impairments (Drivers)), P11 (Police-Reported Alcohol Involvement), P17 (Police-Reported Drug Involvement) [NOTE: GES does not account for the conditions "anger" and "other emotional state"]



Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
<b>31*</b>	<b>Front Seat Passengers</b>	The number of human occupants present in the front seat of the subject vehicle at the time of the event, including the driver. Zero passengers means the vehicle has no human occupants in the front seat(s). Number of passengers is observed from the cabin snapshot taken closest in time to the event, if available, and from subjective analysis of the video and driver behaviors if suitable snapshots are not available. For Motorcycles, this will always be "1" unless there is a passenger in front of the rider.	
<b>32*</b>	<b>Rear Seat Passengers</b>	The number of human occupants present in the rear seat(s) of the subject vehicle at the time of the event. Zero passengers, means the vehicle has no human occupants in the rear seat(s). Number of passengers is observed from the cabin snapshot taken closest in time to the event, if available, and from subjective analysis of the video and driver behaviors if suitable snapshots are not available. For Motorcycles, rear seat passengers are those sitting behind the rider.	
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Observable driver engagement in any of the listed secondary tasks, beginning at any point during the 5 seconds prior to the Precipitating Event time (Conflict Begin, Variable 2) through the end of the conflict (Conflict End). For Baselines, secondary tasks are coded for the last 6 seconds of the baseline epoch, which corresponds to 5 seconds prior to "Conflict Begin" through one second after "Conflict Begin" (to the end of the baseline). Distractions include non-driving related glances away from the direction of vehicle movement. Does not include tasks that are critical to the driving task, such as speedometer checks, mirror/blind spot checks, activating wipers/headlights, or shifting gears. (These are instead coded in the Driving Tasks variable.) Other non-critical tasks are included, including radio adjustments, seatbelt adjustments, window adjustments, and visor and mirror adjustments. Note that there is no lower limit for task duration. If there are more than 4 secondary tasks present, select the most critical or those that most directly impact the event, as defined by event outcome or proximity in time to the event occurrence. Populate this variable in numerical order. (If there is only one distraction, name it Secondary Task 1; if there are two, name them Secondary Task 1 and 2. Enter "No Additional Secondary Tasks" for remaining Secondary Task variables.)	D07 (Driver Distracted By)
<b>34*, 38*, 42*, 46*</b>	<b>Secondary Task 1,2,3,4 Start Time</b>	The time at which the driver began to engage in the secondary task. This is a specific integer value for the video timestamp in milliseconds from the start of the file. Only secondary tasks that occur during or overlap the period of time starting 5 seconds prior to the Precipitating Event through Conflict End are included. If the secondary task began more than 5 seconds before the Precipitating Event), then enter the Conflict Begin (Variable 2) timestamp minus 5 seconds (5,000 timestamps).	
<b>35*, 39*, 43*, 47*</b>	<b>Secondary Task 1,2,3,4 End Time</b>	The time at which the driver disengaged from the secondary task or the driver's attention returned to the driving task or another activity. This is a specific integer value for the video timestamp in milliseconds from the start of the file. Only distractions that occur during or overlap the period of time starting 5 seconds prior to the Precipitating Event through Conflict End are included. If the secondary task continued after the Conflict End, then enter the Conflict End (Variable 4) timestamp.	
<b>36, 40, 44, 48</b>	<b>Secondary Task 1,2,3,4 Outcome</b>	Determination of whether the Secondary Task contributed to the event sequence and severity. (Not whether the factor actually caused the event, but contributed to it.)	
<b>49*</b>	<b>Driving Tasks</b>	An indication of whether the subject vehicle driver engaged in any driving-related tasks, beginning at any point during the 5 seconds prior to the Precipitating Event time (Conflict Begin, Variable 2) through the end of the conflict (Conflict End). For Baselines, secondary tasks are coded for the last 6 seconds of the baseline epoch, which corresponds to 5 seconds prior to "Conflict Begin" through one second after "Conflict Begin" (to the end of the baseline). Multiple options can be selected.	

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
50*	<b>Hands on the Wheel (Handlebars for MC Only)</b>	A description of how many and/or which hands the driver had on the steering wheel (or handlebars for motorcycles) at the start of the Precipitating Event (some part of the hand or arm must be touching the wheel).	
51*	<b>Driver Seatbelt Use (Truck/Car Only)</b>	Driver's use of seatbelt at the time of the start of the Precipitating Event. If video is available, information from the times surrounding the time of the precipitating event may clarify whether seatbelt is in use. If driver is in the process of putting a seatbelt on at the time of the Precipitating Event, this is considered NOT wearing a seatbelt.	P15 (Restraint System Use (Occupants))
52*	<b>Rider Helmet Use (MC only)</b>	Motorcycle Only: Riders use of a helmet at the time of the Precipitating Event. If rider is in the process of putting a helmet on at the time of the Precipitating Event, this is considered NOT wearing a helmet.	
53*	<b>Driver Eye Protection (Rider for MC)</b>	Driver's/Rider's use of eye protection at the time of the Precipitating Event. If driver/rider is in the process of putting on eye protection at the time of the Precipitating Event, this is considering NOT wearing eye protection.	
54	<b>Vehicle Contributing Factors</b>	Factors related to the mechanical functioning or flaws in subject vehicle that may have contributed to the Precipitating Event or to the ability of the subject driver to respond effectively to the Precipitating Event. Only include if factor can be seen as clearly contributing to the severity or presence of an event or is known to have been reported by the driver.	V12 Vehicle Contributing Factors
55	<b>Infrastructure Contributing Factors</b>	Judgment providing a possible environmental reason or contributing factor to the occurrence and severity of the event, wherein some aspect of the roadway design impacted the driver's ability to safely navigate the roadway, recognize potential safety risks, or respond effectively to the Precipitating Event. These categories are not in order of importance or level of effect.	
56	<b>Visual Obstructions</b>	Visual factors relating to sight distance or blind spots in the roadway infrastructure that may have contributed to the occurrence and severity of the event or impacted the ability of the subject to recognize potential safety risks or respond effectively to the Precipitating Event. Visual obstructions must be clearly present from the video, or known to have been reported by the driver.	D04 (Driver's Vision Obscured By)
57*	<b>Lighting</b>	Lighting condition at the time of the start of the Precipitating Event. If inside a tunnel or parking facility, code the conditions inside the facility, regardless of the lighting conditions outside.	A19 (Lighting Condition)
58*	<b>Weather</b>	Weather condition at the time of the start of the Precipitating Event. If inside a tunnel or parking facility, code the conditions inside the facility, regardless of the weather conditions outside.	A20 (Atmospheric Condition)
59*	<b>Surface Type</b>	The type of road surface applicable to the subject vehicle at the time of the Precipitating Event. Includes pavement, gravel, etc.	
60*	<b>Surface Condition</b>	The type of roadway surface condition that would affect the vehicle's coefficient of friction at the start of the Precipitating Event. Includes weather-related surface conditions as well as non-paved surface descriptions. If inside a tunnel or parking facility, code the conditions inside the facility, regardless of the surface conditions outside.	A15 (Roadway Surface Condition)
61*	<b>Roadway Alignment</b>	Description of the roadway curvature in the subject vehicle's direction of travel that best suits the condition at the time of the start of the Precipitating Event.	A13 (Roadway Alignment)
62*	<b>Roadway Grade</b>	Description of the roadway profile (e.g., uphill, downhill) in the subject vehicle's direction of travel that best suits the condition at the time of the start of the Precipitating Event.	A14 (Roadway Profile)

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
63*	<b>Traffic Flow</b>	Roadway design, including the presence or lack of a median, present at the start of the Precipitating Event. If the event occurs at an intersection, the traffic flow conditions just prior to the intersection are recorded.	A11 (Trafficway Flow)
64*	<b>Contiguous Travel Lanes</b>	The total number of contiguous travel lanes at the time of the Precipitating Event. Includes all lanes that the subject vehicle could easily maneuver into, including any turn lanes, acceleration/deceleration lanes, oncoming lanes, etc., not taking into account any occupants of these lanes. High Occupancy Vehicle (HOV) lanes are included in this count, as are lanes of a drive-through station if the subject is in a drive-through lane. All lanes that are separated only by pavement and paint should be counted. For divided trafficways, this is the number of lanes in the subject vehicle's direction of travel; for undivided trafficways, this is the number of lanes in all directions (total). If the event occurs at an intersection, the traffic lanes just prior to the intersection should be recorded. Number of lanes does not include those rendered unusable by restriction of the right-of-way (e.g., closed due to construction, being used for parking).	A12 (Number of Travel Lanes)
65*	<b>Through Travel Lanes</b>	The number of travel through lanes present in the subject vehicle's direction of travel at the time of the Precipitating Event. This will be a subset of the Contiguous Travel Lanes, and includes only through lanes in the subject's direction of travel, and does NOT include non-through lanes just as dedicated turn lanes, or dedicated acceleration/deceleration lanes. This number will never be greater than the number of contiguous lanes. High Occupancy Vehicle (HOV) lanes are included in this count unless they are also a dedicated deceleration/exit lane. Lanes of a drive-through station are also included if the subject is in a drive-through lane. If the event occurs at an intersection, the traffic lanes just prior to the intersection should be recorded (not including dedicated turn lanes). If the event occurs in an interchange area, only through lanes are included; deceleration and acceleration lanes are NOT included. Number of lanes does not include those rendered unusable by restriction of the right-of-way (e.g., closed due to construction, being used for parking).	
66*	<b>V1 Lane Occupied</b>	A number indicating which lane the subject vehicle is in at the time of the Precipitating Event. Lanes are numbered by starting with the left-most through lane closest to the median or double yellow line (direction of travel only) and starting with "1", counting out towards the right shoulder of the road, and stopping with the right-most through lane. Turn lanes and acceleration/deceleration lanes are noted as such, and are not included in the lane numbering. High Occupancy Vehicle (HOV) lanes are included in this count unless they are also a dedicated deceleration/exit lane. Lanes of a drive-through station are also included if the subject is in a drive-through lane. This number will never be greater than the number of through lanes. For motorcycles, this variable will also indicate lane splitting when present by including a "L" or "R" suffix to the lane number. Note that lane splitting is legal for motorcycles in some locations.	
67*	<b>V1 Lane Position (MC only)</b>	The general left-to-right position in the lane of the motorcycle at the time of the Precipitating Event. If lanes are not marked, this assignment should be assigned by referring to "implied" lane lines.	
68*	<b>Traffic Density</b>	The level of traffic density at the time of the start of the Precipitating Event. Based entirely on number of vehicles present in the subject's travel lane and other lanes in the subject's direction of travel, and the ability of the subject vehicle driver to maneuver between lanes and select the driving speed. In Variable Speed zones, consider a reduced speed limit to be an indicator of traffic density (e.g., a variable speed limit of 30mph on an Interstate should be interpreted as a 50% reduction in travel speeds). Note that this variable is "Not Applicable" in Parking Lot (except for parking lot entrance/exit areas that are still influenced by through traffic) and other non-road situations.	

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
69*	<b>Parking Lot Demand</b>	A measure of the demand placed on a driver traveling through a parking lot based on a subjective combination of the estimated percent of parking spaces occupied and the level of activity present from other motorists and non-motorists (e.g., into/out of parking spaces, up and down aisles, across aisles) at the time of the Precipitating Event and in the vicinity of the Subject vehicle. Note that this variable is "Not Applicable" outside of Parking Lot situations. Parking lot entrance/exit areas that are influenced by through traffic should be coded using the Traffic Density variable.	
70*	<b>Traffic Control</b>	Type of traffic control applicable to <u>the subject vehicle's direction of travel</u> at the time of the start of the Precipitating Event. Applicability of categories is determined by the proximity in space of the subject vehicle to the traffic control. Generally defined by the vehicle in question being no further than 3 vehicle-lengths away from the specified traffic control. If more than one of the categories applies, code the one that is most relevant to the event.	A16 (Traffic Control Device)
71*	<b>Relation to Junction</b>	The spatial (rather than causal) relation of the subject vehicle to a junction at the time of the start of the Precipitating Event. A junction is defined as a point in space where two or more roads or trafficways with different travel speeds or direction of travel meet. If the incident occurs off of the roadway, the relation to junction is determined by the point of departure. Note that this is different than GES in that this database records Relation to Junction at the beginning of the Precipitating Event whereas the GES manual will code this variable at the beginning of the First Harmful Event.	A09 (Relation to Junction (Specific Location))
72*	<b>Intersection Influence</b>	A judgment call as to whether the subject vehicle's safe movement, travel path, and travel speed, are under the influence of an intersection at the time of the event (at any time between Conflict Begin through Conflict End). This can include the subject or other involved vehicle(s) accelerating or decelerating in relation to an intersection or intersecting trafficway, accelerating or decelerating prior to a turn onto a new roadway or into a parking lot or driveway, waiting in a queue of traffic, moving between through lanes and turn lanes or through lanes and acceleration/deceleration lanes, yielding to oncoming or cross traffic, etc. Note that a "Yes" option can be coded here even if Relation to Junction is Non-junction if the vehicle(s) are too far from the intersection to code Relation to Junction categories but are still being influenced in a manner described here by an intersection (e.g., a longer queue of traffic at a signal, or a long process of deceleration prior to a turn).	
73*	<b>Roadway Feature</b>	Description of the any special roadway feature that may be influencing the vehicle's direction of travel at time of the Precipitating Event. Includes features that are not captured by other variables, such as traffic circles, toll booths, bridges, tunnels, etc.	
74*	<b>Locality</b>	Best description of the surroundings that influence or may influence the flow of traffic at the time of the start of the precipitating event. If there are ANY commercial buildings, indicate as business/industrial or urban area as appropriate (these categories take precedence over others except for church, school, and playground). Indicate school, church, or playground if the driver passes one of these areas (or is imminently approaching one) at the same time as the beginning of the Precipitating Event (these categories take precedence over any other categories except urban, and divided highway).	No GES/VA PAR Variable 8
75*	<b>Construction Zone</b>	An indication of whether the Precipitating Event occurs in or in relation to a Construction Zone.	

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
76	<b>Number of Other Motorists/ Non-Motorists</b>	This is the number of motorists or non-motorists (any vehicle involving a human occupant, including pedestrians), other than the subject vehicle, involved in the crash or near-crash, or that restrict the subject vehicle's ability to maneuver at the time of the start of the precipitating event (Vehicle 1 is subject vehicle). This number includes not only those vehicles directly involved in the crash (those with physical contact), but also other vehicles that may have been involved in precipitating the event or affected by the evasive maneuvers of the event. It therefore, may include vehicles that were both part of the "crash" and part of any "near crash(es)" that may have occurred at the same time. Parked vehicles with occupants would be included in this category, whereas parked vehicles with no occupants would be included in the category "Number of objects/animals". Note: animals and objects are not included in this category. For motorcycles, if other motorcycle is lane sharing (riding side by side with the subject motorcycle in the same lane), always include other motorcycle as other motorist.	A03 (Number of Motor Vehicles), A04 (Number of Non-Motorists)
77	<b>Number of Objects/ Animals</b>	Number of objects or animals involved in the crash or near-crash, or that restrict the subject vehicle's ability to maneuver at the time of the start of the Precipitating Event. Includes curbs, medians, barriers, as well as other fixed and non-fixed objects. Also includes animals, both dead and alive. Note: motorists and non-motorists are not included in this category.	
78	<b>Fault</b>	Indicates which driver or non-motorist (if any) committed an error that led to the event. If another motorist or non-motorist (other than the subject) committed the error leading to the event, label that other vehicle or non-motorist as Driver 2 or 3, in accordance with the Vehicle Configurations (V8, V9, V10). Only code a fault if there is observable evidence. Note: Objects and animals cannot be assigned fault. Such events are always coded as either Driver Fault or No Fault.	
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Specification of other vehicle, pedestrian, cyclist, or other person or person-operated vehicle that is involved in the event or that restricts the subject vehicle's ability to maneuver at the time of the start of the Precipitating Event.	V5 (Body Type), E04/A06 Non-Collision Category or Object Contacted / Harmful Event
80, 88	<b>Object/Animal 2,3 Type</b>	Specification of other animal or object that is involved in the event or that restricts the subject vehicle's ability to maneuver at the time of the start of the Precipitating Event.	
81, 89	<b>Motorist/Non-Motorist/Object/Animal 2, 3 Location</b>	Position of other vehicle, pedestrian, animal, or object that is involved in the event or that restricts the subject vehicle's ability to maneuver at the time of the start of the Precipitating Event. (Vehicle 1 is subject vehicle and is coded in earlier questions.) Refer to Figure 5 in the beginning of this dictionary for location definitions.	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Ongoing actions of the other motorist(s) or non-motorist(s) immediately prior to the start of the Precipitating Event. Only vehicles in clear view of a subject vehicle camera are included. If the other vehicle(s) initiated the Precipitating Event (ex. by encroaching into the subject vehicle's lane during lane change), the Vehicle 2 maneuver would be the maneuver that initiated that action (ex. changing lanes). Note: If coding for pedestrian, use one of the four options for pedestrians; if coding for animal or object, use the option "Not applicable".	
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	The other motorist(s) or non-motorist(s)'s reaction or avoidance maneuver (if any) in response to the Precipitating Event. Only reactions that are clearly evident in the video are included. If the Vehicle 2/3 initiated the Precipitating Event, this category would be the immediate reaction to the result(s) of the Precipitating Event. This is a vehicle kinematic measure-based on what the vehicle does. Note: If coding for pedestrian, use one of the two options for pedestrians; if the coding for animal or object, use the option "Not applicable".	

Variable Definitions

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Variable Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>GES Related Variable(s) (modified from GES)</b>
84, 85, 86, 92, 93, 94	<b>Motorist/Non-Motorist 2, 3 Behavior 1,2,3</b>	Driver behaviors (those that either occurred within seconds prior to the Precipitating Event or those resulting from the context of the driving environment) that include what the Motorist or Non-Motorist 2 or 3 did to cause or contribute to the crash or near-crash. Behaviors may be apparent at times other than the time of the Precipitating Event, such as aggressive driving at an earlier moment which led to retaliatory behavior later. If there are more than 3 behaviors present, select the most critical or those that most directly impact the event as defined by event outcome or proximity in time to the event occurrence. Populate this variable in numerical order. (If there is only one behavior, name it Behavior 1; if there are two, name them Behaviors 1 and 2.) NOTE: that the several of the Driver Behavior categories coded for the Subject vehicle are not included in this category due to lack of context in the video to make such determinations. Categories not included here are "Distracted", "Drowsy, sleepy, asleep, fatigued", "Did not see other vehicle", and "Use of cruise control".	no GES/VA PAR Variable 17/18
95*	<b>Final Narrative/Additional Notes</b>	<p>For critical event reduction, this is a "Final Narrative", or a short, open-ended description of the event. This variable provides context and descriptions in sufficient detail so as to fill any gaps in reconstructing the event if video were not available. It should always be clear in the written narrative which vehicle is the subject vehicle (SV, Vehicle 1, V1, or "subject vehicle") and which are the other vehicle(s) (POV or Vehicle 2/3).</p> <p>The narrative includes the following:</p> <ol style="list-style-type: none"> <li>1. A description of the most relevant aspects of the environment and traffic dynamics prior to the crash,</li> <li>2. A description of the sequence of events, focusing in particular on discrepancies between the subject vehicle driver's activity/state (e.g., driver expectations, eyes off road, impairment) and the environmental context (e.g., the driver looks away while the lead vehicle brakes), and</li> <li>3. Any other relevant aspects that are not covered by other variables.</li> </ol> <p>For Baselines, this variable is "Additional Notes", only completed when additional information is needed that was not captured in the previous variables.</p>	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
1*	Subject Number	N/A - Unique ID number		
2*	Conflict Begin	N/A - Video Timestamp		
3	Subject Reaction Start	N/A - Video Timestamp	If Subject does not react at all, code as -1 (negative 1). If unable to determine Subject reaction time with confidence, code as -99 (negative 99).	Note that Subject Reaction Start can only be after the Impact or Proximity Time (Variable 15,22) in tire-strike situations and some road departures. In all other types of events, if the driver does not react until after impact, then code as -1 (no reaction).
4	Conflict End	N/A - Video Timestamp	If unable to determine conflict end (e.g., video cuts out), code as -99 (negative 99).	
5*	Pre-Incident Maneuver	Going straight, constant speed	Subject vehicle (V1) is traveling straight at a relatively constant speed, and no other category listed below applies. (Straight travel path need not be very long.)	
5*	Pre-Incident Maneuver	Going straight, but with unintentional "drifting" within lane or across lanes	Subject vehicle is traveling generally straight, but with occasional (and clearly unintentional) variance within travel lane or into adjacent lane.	
5*	Pre-Incident Maneuver	Going straight, accelerating	Subject vehicle is traveling straight and accelerating, and no other category listed below applies. (Straight travel path need not be very long.)	If the driver was also involved in any other maneuver (ex. starting in traffic), code that maneuver.
5*	Pre-Incident Maneuver	Going Straight, decelerating	Subject vehicle is traveling in lane and decelerating, and no other category listed below applies. Include slowing prior to a turn or curve or slowing/stopping for traffic.	If the driver was also involved in any other maneuver (ex. passing or overtaking), code that maneuver.
5*	Pre-Incident Maneuver	Starting in traffic lane	Subject vehicle is in the process of accelerating from a stopped position in the travel lane. (Car was idling.)	Ex. starting from a stop at a traffic signal or in heavy traffic
5*	Pre-Incident Maneuver	Stopped in traffic lane	Subject vehicle is stopped in travel lane, and the speed indicator reads 0 mph. Vehicle is not parked or disabled, but car is idling.	Ex. stopped at red light or in traffic
5*	Pre-Incident Maneuver	Passing or overtaking another vehicle	Subject vehicle is traveling straight ahead and is in the process of deliberately moving ahead of another vehicle on the left or right with intent to pass.	
5*	Pre-Incident Maneuver	Disabled or parked in travel lane	Subject vehicle is stopped in travel lane, and the speed indicator reads 0 mph due to being parked or disabled. Driver is not required to be in the vehicle to use this category.	
5*	Pre-Incident Maneuver	Parked, not in travel lane	Subject vehicle is parked with a speed of 0 in a designated or otherwise legal parking space. Driver is not required to be in the vehicle to use this category.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
5*	<b>Pre-Incident Maneuver</b>	Leaving a parking position, moving forward	Subject vehicle is in the process of moving into the travel lane from a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) and is moving forward.	Include cases when the vehicle is pulling forward out of a parking space. "Moving forward" applies until the vehicle has been shifted back into a reverse gear. Once the shift to reverse is completed, code as "Leaving a parking position, backing" or other category as appropriate.
5*	<b>Pre-Incident Maneuver</b>	Leaving a parking position, backing	Subject vehicle is in the process of moving into the travel lane from a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) and is moving backward.	Include cases when the vehicle is backing out of a parking space. "Backing" applies until the vehicle has been shifted into a forward gear. Once the shift to forward is completed, code as "Leaving a parking position, moving forward" or other category as appropriate.
5*	<b>Pre-Incident Maneuver</b>	Entering a parking position, moving forward	Subject vehicle is in the process of moving from a travel lane into a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) from the travel lane and is moving forward.	If vehicle is decelerating in preparation for parking, code as "Decelerating in traffic lane". Include cases when the vehicle is entering the parking space moving forward but may be in the process of changing gears from forward to backward. Code as forward until the shift to reverse is complete. NOTE: If a road departure occurs while entering a parking space, "Entering a parking position" should be coded as the Pre-Incident Maneuver.
5*	<b>Pre-Incident Maneuver</b>	Entering a parking position, backing	Subject vehicle is in the process of moving from a travel lane into a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) from the travel lane and is moving backward.	If vehicle is decelerating in preparation for parking, code as "Decelerating in traffic lane". Include cases when the vehicle is entering the parking space moving in reverse, but may be in the process of changing gears from backward to forward. Code as backing until the shift to forward is complete NOTE: If a road departure occurs while entering a parking space, "Entering a parking position" should be coded as the Pre-Incident Maneuver.
5*	<b>Pre-Incident Maneuver</b>	Turning right	Subject vehicle is making a right turn after traveling forward, intending to travel in that new direction on a different roadway. (Does not include steering maneuvers to avoid an animal, pedestrian, pedal cyclist, or other vehicle.)	Ex. vehicle turning from or into a driveway, parking lot, or intersection NOTE: If a road departure occurs during a right turn, "Turning right" should be coded as the Pre-Incident Maneuver.
5*	<b>Pre-Incident Maneuver</b>	Turning left	Subject vehicle is making a left turn after traveling forward, intending to travel in that new direction on a different roadway (Does not include steering maneuvers to avoid an animal, pedestrian, pedal cyclist, or other vehicle.)	Ex. vehicle turning from or into a driveway, parking lot, or intersection NOTE: If a road departure occurs during a left turn, "Turning left" should be coded as the Pre-Incident Maneuver.
5*	<b>Pre-Incident Maneuver</b>	Making U-turn	Subject vehicle is making a 180-degree directional turn in the roadway, intending to travel in the opposite direction.	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
5*	Pre-Incident Maneuver	Backing up (other than for parking purposes)	Subject vehicle is traveling backwards within the trafficway for a purpose other than entering or exiting a parked position.	
5*	Pre-Incident Maneuver	Negotiating a curve	Subject vehicle is in the process of traveling on a roadway that has (at that point) significant curvature to the right or left such that special attention is needed to maintain lane position and vehicle control.	
5*	Pre-Incident Maneuver	Changing lanes	Subject vehicle is traveling straight and is in the process of changing from one travel lane to the adjacent one (left or right). Subject may or may not intend to pass a lead vehicle. (If lane change was unplanned and performed to avoid an animal, pedestrian, pedal cyclist, or other vehicle, code as the appropriate avoidance maneuver, listed below.)	
5*	Pre-Incident Maneuver	Merging	Subject vehicle is moving forward and in the process of merging from the left or right into a traffic lane.	Ex. roadway narrows and lane drops, entrance/exit ramps
5*	Pre-Incident Maneuver	Maneuvering to avoid an animal	Subject vehicle engages in a steering action with the sole purpose to avoid contact with a live animal, whether that animal is in motion or stationary.	
5*	Pre-Incident Maneuver	Maneuvering to avoid a pedestrian/pedal cyclist	Subject vehicle engages in a steering action with the sole purpose to avoid contact with a pedestrian or pedal cyclist. A pedestrian is any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorized or motorized conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle. A pedal cyclist is a person on any type of self-propelled pedaled cycle, as either the driver or a passenger, including bicycles, tricycles, and unicycles. This includes pedal cyclists who hold onto a motor vehicle in motion.	A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, but does NOT include pedal cyclists). Any of these examples should be coded as "Other".
5*	Pre-Incident Maneuver	Maneuvering to avoid an object	Subject vehicle engages in a steering action with the sole purpose to avoid contact with any type of inanimate obstacle or object (other than another vehicle) including dead animals.	
5*	Pre-Incident Maneuver	Maneuvering to avoid a vehicle	Subject vehicle engages in a steering action with the sole purpose to avoid contact with another vehicle.	Other vehicle can be moving or not, occupied or not.
5*	Pre-Incident Maneuver	Other	Other action not included in previous categories.	Ex. vehicle travels the wrong way on a one-way street, vehicle is pushed by another vehicle or pedestrian, vehicle is turning around in a cul-de-sac.
5*	Pre-Incident Maneuver	Unknown	Cannot determine the Pre-Incident Maneuver due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination
6	Precipitating Event	This vehicle lost control - blow-out or flat tire	Driver of subject vehicle loses some amount of vehicular control related to tire "air out".	

Researcher Dictionary for Safety Critical Event Video Reduction Data, October 5 2015, Version 4.1  
 Category Definitions and Hints

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	This vehicle lost control - stalled engine	Driver of subject vehicle loses some amount of vehicular control related to loss of engine power.	Stalled engine must precipitate the event, rather than have been ongoing for some time before the event, such as a vehicle stopped in the road due to a stalled engine.
6	Precipitating Event	This vehicle lost control - disabling vehicle failure	Driver of subject vehicle loses some amount of vehicular control related to a mechanical malfunction of a component (other than stalled engine), which prevents the vehicle from being drivable.	Ex. wheel fell off, steering or suspension system failure
6	Precipitating Event	This vehicle lost control - minor vehicle failure	Driver of subject vehicle loses some amount of vehicular control related to a mechanical abnormality (other than stalled engine), but vehicle is still drivable.	Ex. car hood flew up, car overheated
6	Precipitating Event	This vehicle lost control - poor road conditions	Driver of subject vehicle loses some amount of vehicular control related to poor environmental or structural conditions of the roadway surface. The poor road conditions must have caused a loss of control, and does not qualify as a Precipitating Event on its own.	Condition must precipitate the event, and not simply be present as an ongoing condition. Example: puddle, pothole, an isolated patch of ice, oil residue, road contraction. Not an ice-covered or wet roadway, which may be categorized as excessive speed for conditions below.
6	Precipitating Event	This vehicle lost control - excessive speed	Driver of subject vehicle loses some amount of vehicular control related to traveling too fast for the driving conditions (including traffic and roadway design). This excessive speed must have caused a loss of control, and does not qualify as a Precipitating Event on its own.	Excessive speed is considered more than 10 mph above the posted speed limit or too fast for driving conditions if they warrant a lower speed.
6	Precipitating Event	This vehicle lost control - insufficient speed (MC Only)	Rider of subject vehicle loses some amount of vehicular control related to traveling too slowly for the riding situation or not executing the low speed maneuver correctly.	Includes making a turn too slowly or stopping without putting the foot or side stand on the ground, losing balance as starting or stopping
6	Precipitating Event	This vehicle lost control - jack-knife	Driver of subject vehicle loses some amount of vehicular control related to a trailer or other articulated vehicle body part jack-knifing in relation to the driver cabin.	
6	Precipitating Event	This vehicle lost control - cargo shift	Driver of subject vehicle loses some amount of vehicular control related to a shifting of cargo somewhere on or in the vehicle or trailer.	
6	Precipitating Event	This vehicle lost control - other cause	Driver of subject vehicle loses some amount of vehicular control, and the loss of control was related to some recognized reason not described in previous categories.	Ex. Driver takes foot off brake at a red light and doesn't realize it.
6	Precipitating Event	This vehicle lost control - unknown cause	Driver of subject vehicle loses some amount of vehicular control, but the cause (ex. vehicular or environmental cause) cannot be determined due to limitations in video views, lighting, visual obstructions, or limited perspective.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Subject over left lane line	Subject vehicle departs its lane to the left and is entering or has entered an adjoining lane or shoulder (first harmful or potentially harmful event occurs out of trafficway). (Note: Use this category only if other categories do not apply, including Subject lane change - left behind vehicle/left in front of vehicle/left, sideswipe threat/left, other".) This includes a motorcycle departing lane or riding edge of lane in order to lane split to the left.	Crash or near-crash occurs before vehicle leaves the roadway (not past the shoulder area or onto median.) Code only if lane departure is a direct factor in the event. For example, if vehicle crosses lane line, then an animal runs in its path, the factor would be "animal in roadway".
6	Precipitating Event	Subject over right lane line	Subject vehicle departs its lane to the right and is entering or has entered an adjoining lane or shoulder (first harmful or potentially harmful event occurs out of trafficway). (Note: Use this category only if other categories do not apply, including Subject lane change - right behind vehicle/right in front of vehicle/right, sideswipe threat/right, other".) This includes a motorcycle departing lane or riding edge of lane in order to lane split to the right.	Crash or near-crash occurs before vehicle leaves the roadway (not past the shoulder area or onto median). Code only if lane departure is a direct factor in the event. For example, if vehicle crosses lane line, then an animal runs in its path, the factor would be "animal in roadway".
6	Precipitating Event	Subject over left edge of road	Subject vehicle departs the roadway beyond the left side shoulder area or onto a median (first harmful or potentially harmful event occurs OFF of roadway).	Crash or near-crash occurs after vehicle has left the shoulder area or entered median to the left. Code only if road departure is a direct factor in the event. For example, if vehicle departs the road to the left in order to avoid hitting an animal, the factor would be "animal in roadway".
6	Precipitating Event	Subject over right edge of road	Subject vehicle departs the roadway beyond the right side shoulder area or onto a median (first harmful or potentially harmful event occurs OFF of roadway).	Crash or near-crash occurs after vehicle has left the shoulder area or entered median to the right. Code only if road departure is a direct factor in the event. For example, if vehicle departs the road to the right in order to avoid hitting an animal, the factor would be "animal in roadway".
6	Precipitating Event	Subject vehicle - end departure	Subject vehicle departs the end of a roadway.	Ex. vehicle runs off of road at a "T" intersection
6	Precipitating Event	Subject in intersection - turning left	Subject vehicle (V1) attempts a left turn from its roadway to another roadway, driveway, or ramp, and the act of performing this turn precipitates the crash or near crash.	
6	Precipitating Event	Subject in intersection - turning right	Subject vehicle (V1) attempts a right turn from its roadway to another roadway, driveway, or ramp, and the act of performing this turn precipitates the crash or near crash.	
6	Precipitating Event	Subject in intersection - passing through	Subject vehicle (V1) is proceeding through an intersection without planning to make a turn, and the act of crossing through the intersection precipitates the crash or near crash.	
6	Precipitating Event	Subject from driveway/parking lot - straight across path	Subject vehicle (V1) is entering other vehicle's (V2) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal) and intends to continue straight across to another driveway or roadway. Subject crosses V2's travel lane.	

Researcher Dictionary for Safety Critical Event Video Reduction Data, October 5 2015, Version 4.1  
 Category Definitions and Hints

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Subject from driveway/parking lot - turning into opposite direction	Subject vehicle (V1) is entering Subject vehicle's (V2) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal) and intends to turn into the opposite travel direction of other vehicle. Subject crosses V2's travel path.	
6	Precipitating Event	Subject from driveway/parking lot - turning into same direction	Subject vehicle (V1) is entering other vehicle's (V2) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal), and intends to turn into V2's path to travel in the same direction. Subject enters V2's travel path.	
6	Precipitating Event	Subject from driveway/parking lot - intended path unknown	Subject vehicle (V1) is entering other vehicle's (V2) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal), entering or crossing other vehicle's travel path, but details about Subject's intended path are unknown.	
6	Precipitating Event	Subject ahead, but decelerating	Subject vehicle (V1) is the lead vehicle and is decelerating, traveling in the same lane ahead of (and in same direction as) other vehicle (V2). The deceleration of the Subject vehicle precipitates the crash or near crash.	
6	Precipitating Event	Subject ahead, but at a slower constant speed	Subject vehicle (V1) is the lead vehicle and is traveling at a lower constant speed in front of and in the same lane as the other vehicle (V2). The lower constant speed precipitates the event.	
6	Precipitating Event	Subject ahead, stopped on roadway more than 2 seconds	Subject vehicle (V1) is the lead vehicle and has been stopped on the roadway for more than 2 seconds at the time when the subject driver begins to react to the event (Variable 3).	Subject vehicle (V1) is stopped, parked, or disabled.
6	Precipitating Event	Subject ahead, slowed and stopped 2 seconds or less	Subject vehicle (V1) is the lead vehicle and is decelerating to a stop or has just stopped (has been stopped for 2 seconds or less) at the time when the subject driver begins to react to the event (Variable 3).	Subject vehicle (V1) is nearly or completely stopped, rather than in a longer process of decelerating (in that case, code as "Subject ahead, but decelerating").
6	Precipitating Event	Subject lane change - left behind vehicle	Subject vehicle (V1) departs its lane to the left and is entering or has entered adjacent lane behind a leading vehicle (V2) in that lane, contacting or nearly contacting the rear portion of that lead vehicle. Both vehicles are traveling in the same direction.	Usually seen with passing vehicles or lane change.
6	Precipitating Event	Subject lane change - right behind vehicle	Subject vehicle (V1) departs its lane to the right and is entering or has entered adjacent lane behind a leading vehicle (V2) in that lane, contacting or nearly contacting the rear portion of that lead vehicle. Both vehicles are traveling in the same direction.	Usually seen with passing vehicles or lane change.
6	Precipitating Event	Subject lane change - left in front of vehicle	Subject vehicle (V1) departs its lane to the left and is entering or has entered adjacent lane in front of another vehicle (V2) in that lane, contacting or nearly contacting the front portion of that following vehicle. Both vehicles are traveling in the same direction.	Usually seen with passing vehicles or lane change.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Subject lane change - right in front of vehicle	Subject vehicle (V1) departs its lane to the right and is entering or has entered adjacent lane in front of another vehicle (V2) in that lane, contacting or nearly contacting the front portion of that following vehicle. Both vehicles are traveling in the same direction.	Usually seen with passing vehicles or lane change.
6	Precipitating Event	Subject lane change - left, sideswipe threat	Subject vehicle is traveling in the adjacent right lane, beside and in the same direction as other vehicle. Subject vehicle (V1) crosses left lane line (i.e., other vehicle's right lane line), resulting in contact or near-contact between the left side of Subject vehicle (V1) and the right side of the other vehicle (V2). Both vehicles are traveling in the same direction.	
6	Precipitating Event	Subject lane change - right, sideswipe threat	Subject vehicle is traveling in the adjacent left lane, beside and in the same direction as other vehicle. Subject vehicle (V1) crosses right lane line (i.e., other vehicle's left lane line), resulting in contact or near-contact between the right side of Subject vehicle (V1) and the left side of the other vehicle (V2). Both vehicles are traveling in the same direction.	
6	Precipitating Event	Subject lane change - left, other	Subject vehicle (V1) is traveling in the adjacent right lane, in the same direction as other vehicle (V2), and crosses left lane line (i.e., other vehicle's right lane line) in a manner not described in other categories. Both vehicles are traveling in the same direction.	
6	Precipitating Event	Subject lane change - right, other	Subject vehicle (V1) is traveling in the adjacent left lane, in the same direction as other vehicle (V2), and crosses right lane line (i.e., other vehicle's left lane line) in a manner not described in other categories. Both vehicles are traveling in the same direction.	
6	Precipitating Event	Subject vehicle making a U-turn	Subject vehicle makes a U-turn, intending to proceed in the opposing lane of travel. Performing this U-turn precipitates the crash or near crash.	
6	Precipitating Event	Subject vehicle from parallel/diagonal parking lane	Subject vehicle (V1) enters or crosses other vehicle's (V2) lane line while departing some type of parking space. (Moving forward or backward)	
6	Precipitating Event	Subject vehicle backing, other than parking	Subject vehicle (V1) is in the process of backing up while in or into another vehicle's (V2) travel lane or path of travel for purposes other than entering or exiting a parking space.	
6	Precipitating Event	Subject vehicle, other	State or action by Subject vehicle (V1) was critical to the vehicle becoming involved in the crash or near-crash in a manner not described in other categories.	
6	Precipitating Event	Other vehicle lost control	Another vehicle lost control and is traveling in an out of control or unpredictable manner that affects subject vehicle's intended path	Example: motorcycle in front of subject vehicle experiences a slideout
6	Precipitating Event	Other vehicle ahead - stopped on roadway more than 2 seconds	Another vehicle (V2) is ahead of subject vehicle (V1) in the same lane and in the same direction, and has been stopped for more than 2 seconds at the time when the subject driver begins to react.	Other vehicle (V2) is stopped, parked, or disabled.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Other vehicle ahead - slowed and stopped 2 seconds or less	Another vehicle (V2) is ahead of subject vehicle (V1) in the same lane traveling in the same direction as subject vehicle. V2 is decelerating to a stop or has just stopped ahead in subject vehicle's lane (has been stopped for 2 seconds or less) at the time when the subject driver begins to react.	Other vehicle (V2) is nearly or completely stopped, rather than in a longer process of decelerating (in that case, code as "Other vehicle ahead, but decelerating").
6	Precipitating Event	Other vehicle ahead, but at a slower constant speed	Other vehicle (V2) is the lead vehicle and is traveling at a lower constant speed as the subject vehicle (V1) in the same lanes ahead of (and traveling in the same direction as) subject vehicle. The lower constant speed precipitates the event.	
6	Precipitating Event	Other vehicle ahead, but decelerating	Other vehicle (V2) is the lead vehicle and is decelerating, traveling in the same lane ahead of (and traveling in same direction) as subject vehicle. The deceleration of the lead vehicle precipitates the event.	If both the lead vehicle and subject vehicle are initially decelerating at the same rate, the Precipitating Event would begin when the lead vehicle begins decelerating at a higher rate (thus decreasing the headway between lead and subject vehicle). If lead vehicle is still decelerating but still in motion at the point where subject vehicle acted to avoid the rear-end striking, use this code (even if lead ends up eventually stopping). If lead is stopped at the point of subject acting to avoid the rear-end, code "Other vehicle ahead – slowed and stopped 2 seconds or less" or "Other vehicle ahead - stopped on roadway more than 2 seconds."
6	Precipitating Event	Other vehicle ahead, and accelerating	Other vehicle (V2) is the lead vehicle and is accelerating or traveling at a higher speed, ahead of (and in same lane and direction) as subject vehicle. The acceleration precipitates the event.	
6	Precipitating Event	Other vehicle - traveling in opposite direction	Other vehicle (V2) is in subject vehicle's (V1) travel lane and traveling head-on in the opposite direction of subject vehicle. Other vehicle may have just crossed or be in the process of crossing the double yellow line or otherwise maneuvered into the oncoming path of subject vehicle.	
6	Precipitating Event	Other vehicle - in crossover	Other vehicle (V2) enters a crossover already occupied by subject vehicle (V1). A crossover is a designated opening in a median used primarily for U-turns.	
6	Precipitating Event	Other vehicle making U-turn	Other vehicle (V2) makes a U-turn, intending to proceed in the opposite direction. V2 may initially be a lead vehicle in front of subject vehicle (V1) or may initially be traveling in the opposite or perpendicular direction of V1 when the U-Turn causes V2 to be in the path of V1.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Other vehicle - backing	Other vehicle (V2) is in the process of backing up while in subject vehicle's (V1) travel lane or path of travel.	This includes a vehicle backing out of a parking space into the subject vehicle's path. If the vehicle movement also fits the description of another category (such as "Other vehicle from driveway - straight across path"), code as such, rather than using this category.
6	Precipitating Event	Other vehicle lane change - left in front of subject	Other vehicle (V2) is traveling in the adjacent lane on the left side of the subject vehicle (V1), in the same direction and ahead. V2 crosses subject vehicle's left lane line (i.e., other vehicle crosses its right lane line), resulting in contact or near-contact between the front of subject vehicle and rear of the other vehicle. Includes other vehicle crossing in front of lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle lane change - right in front of subject	Other vehicle (V2) is traveling in the adjacent lane on the right side of the subject vehicle (V1), in the same direction and ahead. V2 crosses subject vehicle's right lane line (i.e., other vehicle crosses its left lane line), resulting in contact or near-contact between the front of subject vehicle and rear of the other vehicle. Includes other vehicle changing lanes in front of lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle lane change - left behind subject	Other vehicle (V2) is traveling in the adjacent lane on the left side of the subject vehicle (V1), in the same direction and behind. V2 crosses subject vehicle's left lane line (i.e., other vehicle crosses its right lane line), resulting in contact or near-contact between the front of subject vehicle and rear of the other vehicle. Includes other vehicle changing lanes behind lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle lane change - right behind subject	Other vehicle (V2) is traveling in the adjacent lane on the right side of the subject vehicle (V1), in the same direction and behind. V2 crosses subject vehicle's right lane line (i.e., other vehicle crosses its left lane line), resulting in contact or near-contact between the front of subject vehicle and rear of the other vehicle. Includes other vehicle changing lanes behind lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle lane change - left, sideswipe threat	Other vehicle (V2) is traveling in the adjacent lane on the left side of the subject vehicle (V1), in the same direction and beside the subject vehicle. V2 crosses subject vehicle's left lane line (i.e., other vehicle crosses its right lane line), resulting in contact or near-contact between the left side of subject vehicle and right side of the other vehicle. Includes other vehicle changing lanes next to lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Other vehicle lane change - right, sideswipe threat	Other vehicle (V2) is traveling in the adjacent lane on the right side of the subject vehicle (V1), in the same direction and beside the subject vehicle. V2 crosses subject vehicle's right lane line (i.e., other vehicle crosses its left lane line), resulting in contact or near-contact between the right side of subject vehicle and left side of the other vehicle. Includes other vehicle changing lanes next to lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle lane change - left other	Other vehicle (V2) is traveling in the adjacent lane on the left side of the subject vehicle (V1), in the same direction as subject vehicle, and crosses subject vehicle's left lane line in a manner not described in other categories.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle lane change - right other	Other vehicle (V2) is traveling in the adjacent lane on the right side of the subject vehicle (V1), in the same direction as subject vehicle, and crosses subject vehicle's right lane line in a manner not described in other categories.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle oncoming - over left line	Other vehicle (V2) crosses subject vehicle's (V1) left lane line while traveling in the opposite direction from subject vehicle. Includes other vehicle crossing lane line next to lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle oncoming - over right line	Other vehicle (V2) crosses subject vehicle's (V1) right lane line while traveling in the opposite direction from subject vehicle. Includes other vehicle crossing lane line next to lane splitting motorcycle.	Lane lines are from subject vehicle's point of view (left or right).
6	Precipitating Event	Other vehicle from parallel/diagonal parking lane	Other vehicle (V2) enters or crosses subject vehicle's (V1) lane line while departing some type of parking lane.	
6	Precipitating Event	Other vehicle entering intersection - turning same direction	Other vehicle (V2) is turning from another roadway (left or right) onto subject vehicle's (V1) roadway with the intention of traveling in the same direction as subject vehicle, crossing or entering subject vehicle's lane line.	
6	Precipitating Event	Other vehicle entering intersection - straight across path	Other vehicle (V2) is continuing straight through an intersection moving in a perpendicular direction to the subject vehicle's (V1) travel lane and attempts to cross over subject vehicle's roadway, crossing subject vehicle's travel lane.	
6	Precipitating Event	Other vehicle entering intersection - turning onto opposite direction	Other vehicle (V2) is entering an intersection from another roadway and is turning or attempting to turn onto subject vehicle's (V1) roadway, intending to travel in the opposite travel direction of subject vehicle. V2 crosses subject vehicle's travel lane.	
6	Precipitating Event	Other vehicle entering intersection - left turn across path	Other vehicle (V2) is on the same roadway as subject vehicle (V1) and is entering an intersection to make a left turn across the path of the subject vehicle. V2 could have originally been traveling in either the same direction (in an adjacent lane) or opposite direction (in an oncoming lane) as the subject vehicle.	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Other vehicle entering intersection - right turn across path	Other vehicle (V2) is on the same roadway as subject vehicle (V1) and is entering an intersection to make a right turn across the path of the subject vehicle. V2 was originally traveling in the same direction (in left adjacent lane) as the subject vehicle.	
6	Precipitating Event	Other vehicle entering intersection - intended path unknown	Other vehicle (V2) enters an intersection, crossing subject vehicle's (V1) travel lane, but the other vehicle's travel direction (intended path) could not be determined.	
6	Precipitating Event	Other vehicle from driveway - turning into same direction	Other vehicle (V2) is turning from a driveway (a roadway providing access from some property adjacent to the trafficway) onto subject vehicle's (V1) roadway, intending to travel in the same direction as subject vehicle. V2 crossed or enters subject vehicle's travel lane.	
6	Precipitating Event	Other vehicle from driveway/parking lot - straight across path	Other vehicle (V2) is entering subject vehicle's (V1) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal) and intends to continue straight across to another driveway or roadway. V2 crosses subject vehicle's travel lane.	
6	Precipitating Event	Other vehicle from driveway/parking lot - turning into opposite direction	Other vehicle (V2) is entering subject vehicle's (V1) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal) and intends to turn into the opposite travel direction of subject vehicle. V2 crosses subject vehicle's travel path.	
6	Precipitating Event	Other vehicle from driveway/parking lot - turning into same direction	Other vehicle (V2) is entering subject vehicle's (V1) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal), and intends to turn into the subject's path to travel in the same direction. V2 enters the subject's travel path.	
6	Precipitating Event	Other vehicle from driveway/parking lot - intended path unknown	Other vehicle (V2) is entering subject vehicle's (V1) roadway from a driveway or parking lot (a roadway providing access from some property adjacent to the trafficway that is NOT controlled by a traffic signal), entering or crossing subject vehicle's travel path, but details about other vehicle's intended path are unknown.	
6	Precipitating Event	Emergency vehicle approaching - giving way required	An in-service emergency service vehicle is approaching the path of either V1 or another motorist or non-motorist. Either this approach in itself or the act of giving way by V1 or other motorist or non-motorist precipitates the event.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Pedestrian in roadway	A pedestrian is present somewhere on the roadway (not necessarily walking). A pedestrian is any person who is on a trafficway or a sidewalk/path contiguous with a trafficway, and who is not in or on either a motorized or non-motorized conveyance. Also includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle (e.g., walking a bike, pushing a stroller).	Person can be sitting, standing, walking, running, etc. A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, but does NOT include pedal cyclists). Any of these examples should be coded as "Pedal cyclist/other non-motorist".
6	Precipitating Event	Pedestrian approaching roadway	A pedestrian is within or adjacent to the trafficway and moving toward the roadway or attempting to enter the roadway, but is not yet on the roadway. A pedestrian is any person who is on a trafficway or a sidewalk/path contiguous with a trafficway, and who is not in or on either a motorized or non-motorized conveyance. Also includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle (e.g., walking a bike, pushing a stroller).	A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, but does NOT include pedal cyclists). Any of these examples should be coded as "Pedal cyclist/other non-motorist".
6	Precipitating Event	Pedestrian entering/exiting vehicle	A pedestrian is entering or exiting a parked vehicle in or adjacent to the trafficway and either the pedestrian or the vehicle (e.g., open door) is encroaching into the travel path of another vehicle.	
6	Precipitating Event	Pedestrian in unknown location	The presence or action of a pedestrian is a critical factor in the crash or near-crash, but the location and/or action of the pedestrian is unknown. A pedestrian is any person who is on a trafficway or a sidewalk/path contiguous with a trafficway, and who is not in or on either a motorized or non-motorized conveyance. Also includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.	A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, but does NOT include pedal cyclists). Any of these examples should be coded as "Pedal cyclist/other non-motorist".
6	Precipitating Event	Pedal cyclist/other non-motorist in roadway	A pedal cyclist (person riding a pedal-powered conveyance such as a bicycle or tricycle) or other non-motorist (person riding on or in a conveyance not pedal-powered or motorized such as a baby carriage, skateboard, roller blades, etc.) is present somewhere on the roadway.	Relative motion of the pedal cyclist or non-motorist is not a factor. Non-motorist conveyance includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. Non-motorist includes persons riding on an animal or animal-powered conveyance and any person outside a sidewalk or path contiguous with a trafficway.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
6	Precipitating Event	Pedal cyclist/other non-motorist approaching roadway	A pedal cyclist (person riding a pedal-powered conveyance such as a bicycle or tricycle) or other non-motorist (person riding on or in a conveyance not pedal-powered or motorized such as a baby carriage, skateboard, roller blades, etc.) is within the trafficway or a sidewalk/path contiguous with a trafficway and moving toward the roadway or attempting to enter the roadway, but is not yet on the roadway.	Non-motorist conveyance includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skateboard, skis, sled, wheel chair, rickshaw, etc. Non-motorist includes persons riding on an animal or animal-powered conveyance and any person outside a sidewalk or path contiguous with a trafficway.
6	Precipitating Event	Pedal cyclist/other non-motorist in unknown location	The presence or action of a pedal cyclist (person riding a pedal-powered conveyance such as a bicycle or tricycle) or other non-motorist (person riding on or in a conveyance not pedal-powered or motorized such as a baby carriage, skateboard, roller blades, etc.) is a critical factor in the crash or near-crash, but the location and/or action of the pedal cyclist/non-motorist is unknown.	Non-motorist conveyance includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skateboard, skis, sled, wheel chair, rickshaw, etc. Non-motorist includes persons riding on an animal or animal-powered conveyance and any person outside a sidewalk or path contiguous with a trafficway.
6	Precipitating Event	Animal in roadway	A live animal (stationary or moving) is present somewhere on the roadway.	
6	Precipitating Event	Animal approaching roadway	A live animal is within the trafficway and moving toward the roadway or attempting to enter the roadway, but is not yet on the roadway.	
6	Precipitating Event	Animal in unknown location	The presence or action of a live animal is a critical factor in the crash or near-crash, but the location and/or action of the animal is unknown.	
6	Precipitating Event	Object in roadway	An inanimate object (either fixed or non-fixed) is present somewhere on the roadway, or such an object is encroaching into the roadway or driving space but may or may not be on the road. May include overhead objects. Does not include barriers or curbs along the side of the roadway (code as road departure).	Object can be a dead animal. Also includes objects falling off the back of a truck in front of the subject, low bridges, and tree branches.
6	Precipitating Event	Object approaching roadway	An inanimate object is within the trafficway and moving toward the roadway or attempting to enter the roadway, but is not on the roadway.	Object can be a dead animal (for example, if it has been hit into driver's roadway). Also includes objects being blown or thrown onto roadway from sidewalk. Also includes overhead hanging objects.
6	Precipitating Event	Object in unknown location	The presence or movement of an inanimate object (either fixed or non-fixed) is a critical factor in the crash or near-crash, but the location and/or specific movement of the object is unknown.	Object can be a dead animal.
6	Precipitating Event	Other event not attributed to subject vehicle	Precipitating event is not described in any other category and is not attributed to the subject vehicle	
6	Precipitating Event	Unknown	Cannot determine the Precipitating Event due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
<b>7,8,9</b>	<b>Vehicle 1 (Subject),2,3 Configuration</b>	Numerals 00-99	A number assigned to each vehicle, pedestrian, pedal cyclist, animal, or object involved in the incident that represents its role in the incident. Numbers correspond to the incident diagrams in Figure 1 of the Researcher Dictionary for Video Reduction. If less than 3 parties are involved, enter 9999 in remaining configurations.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with a lead vehicle	Interaction with a vehicle in front of the subject vehicle (traveling in the same direction as the subject vehicle or stopped).	See Figures 1 and 2 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with a following vehicle	Interaction with a vehicle behind the subject vehicle (traveling in the same direction as the subject vehicle).	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with oncoming traffic	Interaction with a vehicle traveling toward the subject vehicle (traveling in the opposite direction as the subject vehicle).	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with vehicle in adjacent lane	Interaction with a vehicle traveling in the same direction in the lane next to the subject vehicle. Includes conflict with a vehicle next to a motorcycle that is lane splitting.	See Figures 1 and 2 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with merging or weaving vehicle	Interaction involving a vehicle merging into another vehicle's lane from or to an entrance or exit ramp. Includes conflict with a vehicle next to a motorcycle that is lane splitting.	See Figure 1 in Researcher Dictionary for Video Reduction Data. Code only if the other vehicle or subject is merging from an entrance ramp. If the conflict occurs in an interchange area, but none of the involved vehicles is on a ramp in the process of merging, call it adjacent lane (or other appropriate situation).
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with vehicle turning across another vehicle path (same direction)	Interaction involving a vehicle crossing in front of the path of another vehicle, Both vehicles originally traveling in the same direction.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with vehicle turning across another vehicle path (opposite direction)	Interaction with a vehicle crossing in front of the path of another vehicle. Vehicles originally traveling in opposite directions.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with vehicle turning into another vehicle path (same direction)	Interaction with a vehicle turning into the path of another vehicle. Vehicles originally traveling in perpendicular directions and intending to travel in the same direction and on the same roadway.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with vehicle turning into another vehicle path (opposite direction)	Interaction with a vehicle turning into the path of another vehicle. Vehicles originally traveling in perpendicular directions and intending to travel in opposite directions and on the same roadway.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
<b>10,17</b>	<b>Event Nature 1,2</b>	Conflict with vehicle moving across another vehicle path (through intersection)	Interaction with a vehicle crossing through the path of another vehicle. Vehicles originally traveling in perpendicular directions and intending to continue traveling in perpendicular directions.	See Figure 1 in Researcher Dictionary for Video Reduction Data.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
10,17	Event Nature 1,2	Conflict with parked vehicle	Interaction with a vehicle that is neither on the roadway nor in motion, or is entering or exiting a parked position (and does not fit into any other category).	A vehicle parked off the roadway with its door open over a roadway is not in-transport and is included in this category if there is no pedestrian entering or exiting (or about to enter/exit) the vehicle. If a pedestrian is entering/exiting the vehicle, code as "Conflict with pedestrian entering/exiting vehicle". If situation fits into another category, code that category (e.g., lead vehicle slows to enter a parking place, code as Conflict with lead vehicle).
10,17	Event Nature 1,2	Conflict with pedestrian	Interaction with a pedestrian. A pedestrian is any person who is on a trafficway or a sidewalk/path contiguous with a trafficway, and who is not in or on either a motorized or non-motorized conveyance. Also includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.	If a pedestrian is entering/exiting a vehicle, code as "Conflict with pedestrian entering/exiting vehicle". A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, but does NOT include pedal cyclists). Any of these examples should be coded as "Other".
10,17	Event Nature 1,2	Conflict with pedestrian entering/exiting vehicle	Interaction with a pedestrian/vehicle combination where a pedestrian is entering or exiting (or about to enter/exit) a parked vehicle in or adjacent to the trafficway. The potential impact may be involve either the pedestrian and/or the vehicle in this case.	
10,17	Event Nature 1,2	Conflict with pedal cyclist	Interaction with a person on any type of self-propelled pedaled cycle, as either the driver or the passenger, including bicycles, tricycles, and unicycles. Also include pedal cyclists who hold onto a motor vehicle in motion.	
10,17	Event Nature 1,2	Conflict with animal	Interaction with any type of living animal. Does not include animals being used as transportation or to draw some type of transportation device; these would be coded as "Other".	
10,17	Event Nature 1,2	Conflict with obstacle/object in roadway	Interaction with any type of inanimate obstacle or object other than another vehicle. Includes dead animals in the roadway. Object must be in the roadway in the vehicle's intended path of travel.	If object or obstacle is not on roadway, do not include (e.g., conflict with object off of shoulder, such as a barrier, would be coded as single vehicle conflict).
10,17	Event Nature 1,2	Conflict with out of control vehicle in roadway	Interaction with a vehicle in motion that has lost control and is not intentionally or predictably following a path	Example: motorcycle in front of subject vehicle experiences a slideout
10,17	Event Nature 1,2	Single vehicle conflict	Any conflict that is not described in previous categories and involves only the subject vehicle or the subject vehicle plus another object off the roadway.	Includes interaction with barriers/curbs, signs, and trees as well as driving off of the road.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
10,17	Event Nature 1,2	Other	Interaction with any non-motorist conveyance, non-motorist, or motorist not included in the other categories.	Non-motorist conveyance includes baby carriage, coaster wagon, ice/roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. Non-motorist includes persons riding on an animal or animal-powered conveyance and any person outside a sidewalk or path contiguous with a trafficway.
10,17	Event Nature 1,2	No known conflict (non-conflict incidents)	Incident that increases the level of risk associated with driving, but does not result in a crash, near-crash, or conflict.	Ex. tailgating, speeding, distraction, not resulting in crash, near-crash, or conflict
10,17	Event Nature 1,2	Unknown conflict	Cannot determine full Event Nature due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. subject vehicles swerves, but the analyst can't see anything in the road (crash-relevant) with the video views available. Also includes events where part of the video is missing or there is insufficient information in the video to make a determination.
10,17	Event Nature 1,2	None	Code Event Nature 2 as None when only one Event Nature applies and is coded as Event Nature 1. (Event Nature 2 only)	
11,18	Incident Type 1,2	Lane deviation (left or right) (Truck Only)	Any tire on the subject vehicle leaves the intended travel lane and moves into a shoulder or adjacent lane, but does not leave the roadway, and has no interaction with any other motorist, non-motorist, or object	This category generally only and always applies to Event Severity = Unintentional Lane Deviation.
11,18	Incident Type 1,2	Road departure (left or right)	Any tire on the subject vehicle leaves the roadway, beyond the shoulder or onto median, on the left or right side of the roadway. Includes interaction with roadside barriers and curbs.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Road departure (end)	Any tire on the subject vehicle leaves the end of the roadway.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Ground impact - low speed (MC ONLY)	Two-wheeled vehicle falls coincident with low or no speed (even if in gear), due to issue not defined in other Incident Type categories. The rider allows the bike to lean while it is being stopped, just beginning to move from a stop, or making a turn at low speed. Vehicle upright stability is lost due to lack of input by the rider to counteract the effect of gravity.	Includes low/no speed loss of balance and rider losing control through trying to avoid other incident type (such as lead vehicle stopped). Includes tipping while stopping at a stop light, stop sign or driveway exit (especially if you're planning on making a turn after the stop), pulling into a parking space (especially one that requires a turn like nose in parking), maneuvering by pushing the bike (especially backing up) either astride or from the side, aborted roll stops or false starts, stopping on road camber or banking, poor surface for planting foot or side stand, application of brakes during slow turn, just beginning to move forward.
11,18	Incident Type 1,2	Ground impact - while underway (MC Only)	Two-wheeled vehicle upright orientation is lost and vehicle goes to ground while moving, initially near roadway speeds. Scenario is not typical of a low speed maneuvering situation and is due to an issue not defined in other Incident Type categories.	Includes rider losing control when hard braking to avoid lead vehicle's sudden stop, rider losing control on a curve at excessive speeds, etc.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
11,18	Incident Type 1,2	Rear-end, striking	Subject vehicle (V1) makes contact or nearly makes contact with any portion of the back of the vehicle in front (V2). Point of impact is or would have been the back plane of the lead vehicle (V2).	See Figures 1 and 2 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Rear-end, struck	Vehicle behind (V2) makes contact or nearly makes contact with any portion of the back of the Subject vehicle (V1). Point of impact is or would have been the back plane of the Subject vehicle (V1).	See Figures 1 and 2 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Sideswipe, same direction (left or right)	Subject vehicle (V1) is struck or nearly struck by another vehicle (V2) or strikes or nearly strikes another vehicle (V2) on either the driver or passenger side of the vehicle (V1 or V2) when the vehicles were traveling in the same direction. Point of impact is or would have been the side plane of either vehicle.	See Figures 1 and 2 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Opposite direction (head-on or sideswipe)	Subject vehicle (V1) and other vehicle (V2) make or nearly make contact when the vehicles were traveling in opposite directions. Point of impact is/would have been front plane of both vehicles.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Straight crossing path	Vehicle (Subject or V2) crosses another vehicle path perpendicularly. Both vehicles intending to proceed straight across each other's paths.	See Figure 1 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Turn across path	Vehicle (Subject or V2) crosses in front of the path of another vehicle. Vehicles were initially on the same roadway, either in the same or opposite directions. Vehicle turning across path intends to turn right or left onto another trafficway and drove in front of the other vehicle.	See Figure 1 in Researcher Dictionary for Video Reduction Data; Should be reserved only for crashes/near-crashes that occur in intersections (not, for example, in parking lots)—Incident Type "Other" should be used otherwise
11,18	Incident Type 1,2	Turn into path (same direction)	Vehicle (Subject or V2) turns into the path of another vehicle. Vehicles were initially on different trafficways traveling perpendicular to each other. One vehicle turns into the path of the other vehicle, intending to be on the same roadway and traveling in the same direction.	See Figure 1 in Researcher Dictionary for Video Reduction Data; Should be reserved only for crashes/near-crashes that occur in intersections (not, for example, in parking lots, which would be "Other").
11,18	Incident Type 1,2	Turn into path (opposite direction)	Vehicle (Subject or V2) turns into the path of another vehicle. Vehicles were initially on different trafficways, traveling perpendicular to each other. One vehicle turns into the path of the other vehicle, intending to be in the same lane or trafficway as the other vehicle but traveling in the opposite direction.	See Figure 1 in Researcher Dictionary for Video Reduction Data; Should be reserved only for crashes/near-crashes that occur in intersections (not, for example, in parking lots)—Incident Type "Other" should be used otherwise.
11,18	Incident Type 1,2	Backing into traffic	Vehicle backs into traffic flow	See Figure 1 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Backing, fixed object	Vehicle backs into a non-moving, fixed object	See Figure 1 in Researcher Dictionary for Video Reduction Data.
11,18	Incident Type 1,2	Pedestrian-related	Subject vehicle makes contact or nearly makes contact with a pedestrian. A pedestrian is any person who is on a trafficway or a sidewalk/path contiguous with a trafficway, and who is not in or on either a motorized or non-motorized conveyance. Also includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle. This includes pedestrians who are entering/exiting a vehicle.	A non-motorist conveyance is a human-powered device by which a person may move or may move another person (e.g., baby carriage, wagon, ice/roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, but does NOT include pedal cyclists). Any of these examples should be coded as "Other".

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
11,18	Incident Type 1,2	Pedal cyclist-related	Interaction with a person on any type of self-propelled pedaled cycle, as either the driver or the passenger, which is on a trafficway or on a sidewalk or path contiguous with a trafficway including bicycles, tricycles, and unicycles. Also include pedal cyclists who hold onto a motor vehicle in motion.	
11,18	Incident Type 1,2	Animal-related	Subject vehicle makes contact or nearly makes contact with any type of living animal which is on a trafficway or on a sidewalk or path contiguous with a trafficway.	
11,18	Incident Type 1,2	Other	Interaction with any non-motorist conveyance, non-motorist, or motorist not included in the other categories.	Non-motorist conveyance includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. Non-motorist includes persons riding on an animal or animal-powered conveyance and any person outside a sidewalk or path contiguous with a trafficway. This category also includes incidents involving dead animals and objects in the roadway.
11,18	Incident Type 1,2	Unknown	Cannot determine full Incident Type due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
11,18	Incident Type 1,2	None	Code Incident Type 2 as None when only one Incident Type applies and is coded as Incident Type 1. (Incident Type 2 only)	
12*, 19	Event Severity 1,2	Crash	Any contact that the subject vehicle has with an object, either moving or fixed, at any speed. Also includes non-premeditated departures of the roadway where at least one tire leaves the paved or intended travel surface of the road. For motorcycles, this also include any contact between the ground and the bike (other than tires) or ground and rider (other than foot). Events classified as Crashes generally undergo further analysis.	Includes contact with other vehicles, roadside barriers (including curbs), objects on or off of the roadway, pedestrians, cyclists, or animals.  Roadway departures resulting from evasive maneuvers are considered non-premeditated and are also classified as crashes.



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
12*, 19	Event Severity 1,2	Near Crash	<p>Any circumstance that requires a rapid evasive maneuver by the subject vehicle or any other vehicle, pedestrian, cyclist, or animal to avoid a crash. Near Crashes must meet the following four criteria:</p> <ol style="list-style-type: none"> <li>1. Not a Crash. The vehicle must not make contact with any object, moving or fixed, and the maneuver must not result in a road departure.</li> <li>2. Not pre-meditated. The maneuver performed by the subject must not be pre-meditated. This criterion does not rule out Near Crashes caused by unexpected events experienced during a pre-meditated maneuver (e.g., a premeditated aggressive lane change resulting in a conflict with an unseen vehicle in the adjacent lane that requires a rapid evasive maneuver by one of the vehicles).</li> <li>3. Evasion required. An evasive maneuver to avoid a crash was required by either the subject or another vehicle, pedestrian, animal, etc. An evasive maneuver is defined as steering, braking, accelerating, or combination of control inputs that is performed to avoid a potential crash.</li> <li>4. Rapidity required. The required evasive maneuver must also require rapidity. Rapidity refers to the swiftness of the response required given the amount of time from the beginning of the subject's reaction and the potential time of impact.</li> </ol> <p>Events classified as Near Crashes generally undergo further analysis.</p>	<p>Evasive maneuvers can occur with varying degrees of severity and thus will not always seem extreme. Also, evasive maneuvers are sometimes made that are greater in severity than what is really required to avoid a collision. The Near Crash classification is concerned with the type of maneuver that is required, not the type of maneuver that is made. If the driver over-reacts with a rapid maneuver when a less severe maneuver would have been sufficient, the event would NOT be a Near Crash unless the evasive maneuver itself contributed further to the event (e.g., leading to a loss of control or creating a new conflict).</p> <p>To distinguish between a Near Crash and Crash Relevant conflict, the deciding factor is the amount of time necessary for the driver to avoid a crash. A braking evasive maneuver reaching -0.3g can be a near crash if the object being avoided is extremely close, whereas a brake reaching 0.8g performed 20 meters away might not meet the rapidity requirement. The required rapidity and urgency depends on a combination of several factors, including proximity, relative speeds, trajectories, and other environmental factors.</p> <p>For light 4-wheeled vehicles, a good guideline for determining Near Crashes is a less-than-2-second "Time to Collision" measurement. For example, if the subject is</p>

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
12*, 19	Event Severity 1,2	Crash Relevant	<p>Any circumstance that requires an evasive maneuver on the part of the subject vehicle or any other vehicle, pedestrian, cyclist, or animal that is less urgent than a rapid evasive maneuver (as defined above in Near Crash), but greater in urgency than a "normal maneuver" to avoid a crash. A crash avoidance response can include braking, steering, accelerating, or any combination of control inputs. Crash Relevant Conflicts must meet the following four criteria</p> <ol style="list-style-type: none"> <li>1. Not a Crash. The vehicle must not make contact with any object, moving or fixed, and the maneuver must not result in a road departure.</li> <li>2. Not pre-meditated. The maneuver performed by the subject must not be pre-meditated. This criterion does not rule out Crash Relevant Conflicts caused by unexpected events experienced during a pre-meditated maneuver (e.g., a premeditated aggressive lane change resulting in a conflict with an unseen vehicle in the adjacent lane that requires a non-rapid evasive maneuver by one of the vehicles).</li> <li>3. Evasion required. An evasive maneuver to avoid a crash was required by either the subject or another vehicle, pedestrian, animal, etc. An evasive maneuver is defined as steering, braking, accelerating, or combination of control inputs that is performed to avoid a potential crash.</li> <li>4. Rapidity NOT required. The evasive maneuver must not be required to be rapid. Rapidity refers to the swiftness of the response required given the amount of time from the beginning of the subject's reaction to the</li> </ol>	<p>Ex. Any conflict with another vehicle, object, pedestrian, etc. that requires a response from the involved parties but the response required is not rapid. Also includes the driver loses control of vehicle in the snow or rain, but regains control with little risk of impact and does not rotate more than 30 degree in either direction.</p>
12*, 19	Event Severity 1,2	Unintentional Lane Deviation (Truck Only)	<p>Any single-vehicle situation where the subject vehicle unintentionally drifts or crosses over a lane line (e.g., into the shoulder or adjacent lane) where there is NOT a hazard present (e.g., guardrail, steep ditch, vehicle, etc.) or the hazard is never closer than 1 lane width to the subject . If the hazard is closer than 1 lane width away, the event should be classified as a Crash Relevant, Near Crash, or Crash as appropriate.</p>	<p>Typically a result of some type of driver inattention or impairment (e.g., drowsy) or poor roadway conditions (e.g., icy). If there is a guardrail, steep ditch, vehicle, or other hazard present in the direction of the deviation and such hazard is less than 1 lane width away, then the event should be classified as either Crash-Relevant, Near Crash, or Crash as appropriate.</p>

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
<b>12*, 19</b>	<b>Event Severity 1,2</b>	Non-Conflict	<p>Any incident or maneuver that is within the bounds of "normal" driving behaviors and scenarios and is accurately represented by the time series data that created the flagged. The driver may react to situational conditions and events, but the reaction is not evasive and the situation does not place the subject or other involved parties at higher-than-normal risk.</p> <p>Non-Conflict events would not meet the first, third, or fourth criteria listed for a near crash (not a crash, no evasive maneuver is required, maneuver is not required to be rapid). Non-Conflict events may be either pre-meditated or non-premeditated</p> <p>Events classified as Non-Conflicts generally do not undergo further analysis.</p>	<p>A "normal maneuver" refers to the vast majority of control inputs experienced in the course of driving such as a gradual braking in traffic.</p> <p>Non-conflict events may include hard braking by a driver in the absence of a specific crash threat or a high swerve value from a lane change not resulting in any loss-of-control, lane departure, or proximity to other vehicles. While such situations sometimes reflect at-risk driving habits and styles, they do not result in a discernible crash-relevant conflict.</p> <p>Events resulting from normal driving over normal roadway infrastructure are also classified as Non-Conflict. (e.g., speed bumps, parking lot thresholds, bridge seams, etc.).</p>
<b>12*, 19</b>	<b>Event Severity 1,2</b>	Non-subject Conflict	Any incident that gets captured on video, crash-relevant, near-crash, or crash, that does not involve the subject driver.	
<b>12*, 19</b>	<b>Event Severity 1,2</b>	Balanced-Sample Baseline	<p>An epoch of data selected for comparison to any of the conflict types listed above rather than due to the presence of conflict. Refer to the unique baseline selection criteria for the set of baselines being analyzed.</p> <p><i>**For SHRP2, these baselines are 21 seconds long and were randomly selected with a goal of 20,000 baselines, a minimum of 1 baseline per driver, and the number of baselines for each driver proportional to the total driving time &gt;5mph for each driver. Baselines were selected only if vehicle speed did not dip below 5mph for more than 2 consecutive seconds and only if they contained no crashes, or near crashes.</i></p> <p><i>**For OBMS FOT, these baselines are 21 seconds long and were randomly selected with a minimum of 1 baseline per driver, and the number of baselines for each driver proportional to the total miles driven for each driver. Baselines were selected only if vehicle speed did not dip below 5mph for more than 2 consecutive seconds and only if they contained no crashes, or near crashes.</i></p>	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
<b>12*, 19</b>	<b>Event Severity 1,2</b>	Additional Baseline	An epoch of data selected for comparison to any of the conflict types listed above rather than due to the presence of conflict. Refer to the unique baseline selection criteria for the set of baselines being analyzed.  <i>**For SHRP2, these baselines are in addition to the balanced sample above, providing additional 21-second baselines for some drivers. As above, these baselines were selected only if vehicle speed did not dip below 5mph for more than 2 consecutive seconds.</i>	
<b>12*, 19</b>	<b>Event Severity 1,2</b>	Not Applicable	Code Event Severity as Not Applicable when only one Event Nature and Incident Type are coded. (Event Severity 2 only)	
<b>13, 20</b>	<b>Crash Severity 1,2</b>	I - Most Severe	Severe Crash. Any crash that includes an airbag deployment; any injury of driver, pedal cyclist, or pedestrian; a vehicle roll over; a high Delta V; or that requires vehicle towing. Injury if present should be sufficient to require a doctor's visit, including those self-reported and those apparent from video. A high Delta V is defined as a change in speed of the subject vehicle in any direction during impact greater than 20mph (excluding curb strikes) or acceleration on any axis greater than +/-2g (excluding curb strikes).	
<b>13, 20</b>	<b>Crash Severity 1,2</b>	II - Police-reportable Crash	Police-Reportable Crash. A police-reportable crash that does not meet the requirements for a Level I crash. Includes sufficient property damage that it is police reportable (minimum of ~\$1500 worth of damage, as estimated from video). Also includes crashes that reach an acceleration on any axis greater than +/-1.3g (excluding curb strikes). If there is a police report this will be noted. Most large animal strikes and sign strikes are included here.	
<b>13, 20</b>	<b>Crash Severity 1,2</b>	III - Minor Crash	Physical Contact with Another Object. Most crashes not included above are Level III crashes. Includes physical contact with another object but with minimal damage. Includes most road departures (unless criteria for a more severe crash are met), small animal strikes, all curb and tires strikes potentially in conflict with oncoming traffic, and other curb strikes with an increased risk element (e.g., would have resulted in worse had curb not been there, usually related to some kind of driver behavior or state).  For motorcycles, this category includes "Ground impact - low speed" if rider recuperates quickly (gets back on the motorcycle to resume trip within a minute). Describe in the Final Narrative how long it took to get back on the bike (or if rider did not get back on or turned the bike off). If recovery and ability to resume trip are not immediate or if the rider turns the ignition off following the incident (for purposes other than planned parking), code as higher level Crash Severity II.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
13, 20	Crash Severity 1,2	IV - Low-risk Tire Strike	Tire Strike, Low Risk. Tire strike only with little/no risk element (e.g., clipping a curb during a tight turn). Distraction may or may not also be present.  For motorcycles, low-risk parking block strikes and other low-risk curb strikes (such as associated with parking) may be coded as IV. Most other motorcycle curb strikes will be at least Level III (or more severe) depending on factors listed for each level.	
13, 20	Crash Severity 1,2	Not a Crash	Includes all Event Severity (V13,20) levels except for Crash. Includes Near Crashes and Baselines.	
13, 20	Crash Severity 1,2	Not Applicable	Code Crash Severity 2 (only) as Not Applicable when only one Event Nature and Incident Type are coded.	
14, 21	Impact or Proximity Time 1,2	N/A - Video Timestamp	If unable to determine impact or proximity time (e.g., video cuts out), code as -99 (negative 99). If only one Event Type occurs, then Impact or Proximity Time 2 is blank.	
15, 22	V1 Evasive Maneuver 1,2	No driver present (No rider present for MC Only)	No driver or rider was present in the subject vehicle (V1) at the time of the event.	
15, 22	V1 Evasive Maneuver 1,2	No reaction	No change in the driving behavior of the subject vehicle (V1) driver due to the Precipitating Event was evident.	
15, 22	V1 Evasive Maneuver 1,2	Braked Only (Car, Truck Only)	Subject driver activated brake pedal. Did not include evasive steering.	
15, 22	V1 Evasive Maneuver 1,2	Activated front brake only (MC Only)	Rider activated front brake (right hand), without lateral input, throttle, or clutch input. Both brakes were inactivated previously; Rear brake remains inactivated.	
15, 22	V1 Evasive Maneuver 1,2	Activated rear brake only (MC Only)	Rider activated rear brake (right foot), without lateral input, throttle, or clutch input. Both brakes were inactivated previously; Front brake remains inactivated.	
15, 22	V1 Evasive Maneuver 1,2	Activated both front and rear brake only (MC Only)	Rider activated both front and rear brake (right hand and right foot), without lateral input, throttle, or clutch input. Either no brake or only one brake was active previously; Both brakes now activated.	
15, 22	V1 Evasive Maneuver 1,2	Released brakes only (Car, Truck Only)	Subject driver released brake pedal. Did not include evasive steering.	
15, 22	V1 Evasive Maneuver 1,2	Released front brake only (MC Only)	Rider released front brake (right hand), without lateral input, throttle, or clutch input. Both brakes were previously activated; Rear brake remains activated.	
15, 22	V1 Evasive Maneuver 1,2	Released rear brake only (MC Only)	Rider released rear brake (right foot), without lateral input, throttle, or clutch input. Both brakes were previously activated; Front brake remains activated.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Released both front and rear brake only (MC Only)	Rider released both front and rear brakes (right hand and right foot hands) without lateral input, throttle, or clutch input. One or both brakes may have been previously activated; No brakes remain activated.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Steered to left	Subject driver steered (or leaned to steer for motorcycles) to left of initial travel direction. No brake, throttle, or clutch input.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Steered to right	Subject driver steered (or leaned to steer for motorcycles) to right of initial travel direction. No brake, throttle, or clutch input.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Braked and steered left (Car, Truck Only)	Subject driver activated brake pedal and steered to left of initial travel direction.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Activated front brake and steered left (MC Only)	Rider activated front brake (right hand) and steered/leaned to go to left of traveling direction, without throttle or clutch input. Both brakes were inactivated previously; Rear brake remains inactivated.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Activated rear brake and steered left (MC Only)	Rider activated rear brake (right foot) and steered/leaned to go to left of traveling direction, without throttle or clutch input. Both brakes were inactivated previously; Front brake remains inactivated.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Activated both front and rear brakes and steered left (MC Only)	Rider activated both front and rear brakes (right hand and right foot) and steered or leaned to go to left of traveling direction, without throttle or clutch input. Either no brake or only one brake was active previously; Both brakes now active.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Braked and steered right (Car, Truck Only)	Subject driver activated brake pedal and steered to right of initial travel direction.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Activated front brake and steered right (MC Only)	Rider activated front brake (right hand) and steered/leaned to go to right of traveling direction, without throttle or clutch input. Both brakes were inactivated previously; Rear brake remains inactivated.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Activated rear brake and steered right (MC Only)	Rider activated rear brake (right foot) and steered/leaned to go to right of traveling direction, without throttle or clutch input. Rider activated rear brake, without lateral input, throttle, or clutch input. Both brakes were inactivated previously; Front brake remains inactivated.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Activated both front and rear brakes and steered right (MC Only)	Rider activated both front and rear brakes (right hand and right foot) and steered/leaned to go to right of traveling direction, without throttle or clutch input. Either no brake or only one brake was active previously; Both brakes now active.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Released brakes and steered left (Car, Truck Only)	Subject driver released the brake pedal and steered to left of initial travel direction.	
15, 22	<b>V1 Evasive Maneuver 1,2</b>	Released front brake and steered left (MC Only)	Rider released front brake (right hand) and steered/leaned to go to left of traveling direction, without throttle or clutch input. Both brakes were activated previously; Rear brake remains activated.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
15, 22	V1 Evasive Maneuver 1,2	Released rear brake and steered left (MC Only)	Rider released rear brake (right foot) and steered/leaned to go to left of traveling direction, without throttle or clutch input. Both brakes were activated previously; Front brake remains activated.	
15, 22	V1 Evasive Maneuver 1,2	Released both front and rear brakes and steered left (MC Only)	Rider released both front and rear brakes (right hand and right foot) and steered/leaned to go to left of traveling direction, without throttle or clutch input. Either one or both brakes were active previously; Both brakes now inactive.	
15, 22	V1 Evasive Maneuver 1,2	Released brakes and steered right (Car, Truck Only)	Subject driver released the brake pedal and steered to right of initial travel direction.	
15, 22	V1 Evasive Maneuver 1,2	Released front brake and steered right (MC Only)	Rider released front brake (right hand) and steered/leaned to go to right of traveling direction, without throttle or clutch input. Both brakes were activated previously; Rear brake remains activated.	
15, 22	V1 Evasive Maneuver 1,2	Released rear brake and steered right (MC Only)	Rider released rear brake (right foot) and steered/leaned to go to right of traveling direction, without throttle or clutch input. Both brakes were activated previously; Front brake remains activated.	
15, 22	V1 Evasive Maneuver 1,2	Released both front and rear brakes and steered right (MC Only)	Rider released both front and rear brakes (right hand and right foot) and steered/leaned to go to right of traveling direction, without throttle or clutch input. Either one or both brakes were active previously; Both brakes now inactive.	
15, 22	V1 Evasive Maneuver 1,2	Accelerated	Subject driver activated or increased pressure on throttle to accelerate. (May or may not have released brake first.) No braking, steering/leaning, or clutch input.	Generally, longitudinal acceleration greater than + 0.25 g would be noted.
15, 22	V1 Evasive Maneuver 1,2	Accelerated and steered left	Subject driver activated or increased pressure on throttle to accelerate and steered (or leaned for motorcycles) to go to left of initial travel direction. (May or may not have released brake first.) No braking or clutch input.	Generally, lateral/longitudinal acceleration greater than +/- 0.25 g (lateral) or + 0.25 (longitudinal) would be noted.
15, 22	V1 Evasive Maneuver 1,2	Accelerated and steered right	Subject driver activated or increased pressure on throttle to accelerate and steered (or leaned for motorcycles) to go to right initial travel direction. (May or may not have released brake first.) No braking, or clutch input.	Generally, lateral/longitudinal acceleration greater than +/- 0.25 g (lateral) or + 0.25 (longitudinal) would be noted.
15, 22	V1 Evasive Maneuver 1,2	Released throttle only	Subject driver released or decreased pressure on throttle to decelerate with no steering/leaning or brake input. (Does not brake after.)	
15, 22	V1 Evasive Maneuver 1,2	Released throttle and steered left	Subject driver released or decreased pressure on throttle to decelerate and steers (or leans for motorcycles) to go to the left. (Does not brake after.) No brake or clutch input.	
15, 22	V1 Evasive Maneuver 1,2	Released throttle and steered right	Subject driver released or decreased pressure on throttle to decelerate and steers (or leans for motorcycles) to go to the right. (Does not brake after.) No brake or clutch input.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
15, 22	V1 Evasive Maneuver 1,2	Decreased speed only (unknown source) (MC Only)	Subject rider decelerated, but the source of deceleration is unknown (front brake, rear brake, engine brake). No steering or leaning maneuver was made.	
15, 22	V1 Evasive Maneuver 1,2	Decreased speed (unknown source) and steered left (MC Only)	Subject rider decelerated, but the source of deceleration is unknown (front brake, rear brake, engine brake). Also steered or leaned to go to the left.	
15, 22	V1 Evasive Maneuver 1,2	Decreased speed (unknown source) and steered right (MC Only)	Subject rider decelerated, but the source of deceleration is unknown (front brake, rear brake, engine brake). Also steered or leaned to go to the right.	
15, 22	V1 Evasive Maneuver 1,2	Other actions	Subject driver performed other corrective action not included in previous categories.	
15, 22	V1 Evasive Maneuver 1,2	Unknown if action was attempted	Cannot determine if the Subject driver attempted an evasive maneuver or the nature of the evasive maneuver due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video or other data to make a determination.
15, 22	V1 Evasive Maneuver 1,2	Not Applicable	Code V1 Evasive Maneuver 2 as Not Applicable when only one Event Nature and Incident Type are coded. (V1 Evasive Maneuver 2 only)	
16, 23	V1 Post-Maneuver Control 1,2	Control maintained	Vehicle did not exhibit rotation, sliding, skidding, or any other loss of control as a result of the avoidance maneuver.	Ex. vehicle stopped, turned, maintained constant speed, backed up.
16, 23	V1 Post-Maneuver Control 1,2	Rotated clockwise, no ground impact (MC Only)	Vehicle spun about a vertical axis (yawed) in a clockwise direction with no other movement. (MC Only - bike remained upright.)	
16, 23	V1 Post-Maneuver Control 1,2	Rotated counterclockwise, no ground impact (MC Only)	Vehicle spun about a vertical axis (yawed) in a counterclockwise direction with no other movement. (MC Only - bike remained upright.)	
16, 23	V1 Post-Maneuver Control 1,2	Skidded longitudinally, no ground impact (MC Only)	Vehicle slid or skidded forward or backward (in travel direction) with no rotation. (MC Only - bike remained upright.)	
16, 23	V1 Post-Maneuver Control 1,2	Skidded laterally, no ground impact (MC Only)	Vehicle slid or skidded to the left or right side (perpendicular to travel direction) with no rotation. (MC Only - bike remained upright.)	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
16, 23	V1 Post-Maneuver Control 1,2	Capsize (MC Only)	The bike fell over without oscillation or rotation.	During capsize, an uncontrolled front wheel usually steers in the direction of lean, but never enough to stop the increasing lean, until a very high lean angle is reached, at which point the steering may turn in the opposite direction. A capsize can happen very slowly if the bike is moving forward rapidly. Capsize is basically a loss of the center of gravity and subsequent falling of the bike.
16, 23	V1 Post-Maneuver Control 1,2	Wobble (MC Only)	Bike exhibits a rapid (4-10 Hz) oscillation of primarily just the front end (front wheel, fork, and handlebars)	Also involved is the yawing of the rear frame which may contribute to the wobble when too flexible. This instability occurs mostly at high speed and is similar to that experienced by shopping cart wheels, airplane landing gear, and automobile front wheels.
16, 23	V1 Post-Maneuver Control 1,2	Weave (MC Only)	Bike exhibits a slow (0-4 Hz) oscillation between leaning left and steering right, and vice-versa (a relatively slow oscillation of the rear of the motorcycle)	The entire bike is affected with significant changes in steering angle, lean angle (roll), and heading angle (yaw). The steering is 180° out of phase with the heading and 90° out of phase with the leaning.
16, 23	V1 Post-Maneuver Control 1,2	Lost wheelie (MC Only)	Rider lost control while attempting to execute a wheelie (riding with front wheel raised off of the ground)	
16, 23	V1 Post-Maneuver Control 1,2	Slide out (MC Only)	Also called low side, results from front (sometimes rear) overbraking in which the tire skids (rear loses traction), causing bike to fall and slide	Bike falls in direction of turn (rider falls on side closest to ground)  Check Gyro_X to check for slide out/low vs. high side (high will have variation then directional change about the zero).
16, 23	V1 Post-Maneuver Control 1,2	High side (MC Only)	Bike exhibits a motion which is caused by a rear wheel gaining traction when it is not facing in the direction of travel, usually after slipping sideways in a curve; it can take the form of a single slip-then-flip or a series of violent oscillations	Bike flips to direction opposite from turn or lean. Often starts like a low side but rear wheel regains traction (rider is often flipped over the bike). This can occur under heavy braking, acceleration, a varying road surface, or suspension activation, especially due to interaction with the drive train.  Check Gyro_X to check for slide out/low vs. high side (high will have variation then directional change about the zero).
16, 23	V1 Post-Maneuver Control 1,2	Wide on turn (MC Only)	Usually related to excess speed entering a turn and undercornering rather than sliding out (usually running off of the travel path)	

Researcher Dictionary for Safety Critical Event Video Reduction Data, October 5 2015, Version 4.1  
 Category Definitions and Hints

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
16, 23	V1 Post-Maneuver Control 1,2	End over (MC Only)	An end over end reaction of the bike resulting from torque at the rear wheel and stopping force at the front wheel, lifting the rear wheel off of the ground	Derived from front wheelie in BMX riding, commonly called an "endo"
16, 23	V1 Post-Maneuver Control 1,2	Rotated unknown direction	Vehicle rotated about a vertical axis (yawed), could not tell whether direction was clockwise or counterclockwise.	
16, 23	V1 Post-Maneuver Control 1,2	Combination of previous	Vehicle moved in any combination of the other factors (rotation, longitudinal sliding/skidding, and/or lateral sliding/skidding).	
16, 23	V1 Post-Maneuver Control 1,2	Other	Vehicle lost control during an evasive maneuver in a way not described in previous categories.	Ex., brakes or steering failed and Subject unable to decelerate or steer in a normally controlled manner.
16, 23	V1 Post-Maneuver Control 1,2	Unknown	Cannot determine if the driver maintained control of the vehicle due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
16, 23	V1 Post-Maneuver Control 1,2	Not Applicable	Code V1 Post-Maneuver Control 2 as Not Applicable when only one Event Nature and Incident Type are coded. (V1 Post-Maneuver Control 2 only)	
24	Airbag Deployment	Yes	Airbag was seen in video as deployed, or was reported by the participant to have been deployed.	
24	Airbag Deployment	No	Airbag was not seen in the video as deployed, and was not reported by the participant to have been deployed. For motorcycles, code as "Not applicable" unless it is known that an airbag is installed.	
24	Airbag Deployment	Unknown	Cannot determine if airbag was deployed due to limitations in video views, lighting, visual obstructions, or limited perspective.	
24	Airbag Deployment	Not Applicable	Event was not a crash, or subject vehicle is a motorcycle with no airbag or unknown airbag presence.	
25	Vehicle Rollover	Yes	The Subject vehicle rolled over during the event as evident in the available video data or as reported by participant.	
25	Vehicle Rollover	No	Vehicle was not seen to have rolled over and was not reported as such by the participant.	
25	Vehicle Rollover	Unknown	Cannot determine if Subject vehicle rolled over due to limitations in video views (e.g., video cuts out), lighting, visual obstructions, or limited perspective.	
25	Vehicle Rollover	Not Applicable	Event was not a crash.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	None (or No Additional Driver Behaviors)	Subject vehicle driver engages in no apparent behavior(s) related to causing or contributing to the crash or near-crash.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Distracted	Subject vehicle driver is not maintaining acceptable attention to the driving task due to engagement in one or more secondary tasks. Includes times when any Secondary Task has an Outcome that is not No. This is a subjective judgment call by the video analyst indicating whether any secondary tasks the driver might be involved in (Variables 34, 38, 42, 46) contributed to the crash or near crash (Variables 37, 41, 45, 47). NOTE: This category is excluded from Baseline analysis.	See categories under Secondary Task variable. If there is any entry in the "Secondary Task" variable and the "Secondary Task Outcome" variable is anything except "No," then this category is applicable.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Drowsy, sleepy, asleep, fatigued	Subject vehicle driver exhibits obvious signs of being asleep or tired, or is actually asleep while driving, degrading performance of the driving task. This should also be coded as Drowsy, sleepy, asleep, fatigued under Driver Impairment.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Lane Drifting	Subject vehicle driver fails to maintain appropriate and safe lane position and unintentionally drifts towards and/or over one or more lane lines.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Exceeded speed limit	Subject vehicle traveling at a speed greater than the posted speed limit (not in a work zone). In Variable Speed Zones, this is relative to the speed limit in effect at the time of the event.	>= 10 mph above posted speed limit.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Exceeded safe speed but not speed limit	Subject vehicle traveling at a speed close to or under the posted speed limit, but still too fast to maintain a safe driving environment given current environmental conditions (e.g., weather, traffic, lighting). (Not in a work zone.)	Ex. during conditions that may require slower speeds such as weather, traffic situation, etc.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Driving slowly: below speed limit	Subject vehicle traveling at a speed much lower than the posted speed limit when higher speeds are appropriate.	>= 10 mph under posted speed limit.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Driving slowly in relation to other traffic: not below speed limit	Subject vehicle traveling much slower than other vehicles in traffic stream (but not substantially below the posted speed limit).	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Passing on right	Subject vehicle deliberately passes another vehicle in the lane (or shoulder, etc.) immediately to the right of the other vehicle.	This variable is not applicable in heavy traffic. In addition to standard "passing on right", this includes moving into exit lane to pass a vehicle on the right and then re-entering roadway ahead of that vehicle, or passing a vehicle in an area not intended for traffic.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Lane Splitting (MC Only)	Subject vehicle is starting to, in the process of, or coming out of lane splitting to pass one or more other vehicles.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Illegal passing	Subject vehicle passes another vehicle in an unsafe or illegal manner (other than on the right).	Ex. passing across double line, going straight through turn lane, using shoulder. Passing in a High Occupancy Vehicle (HOV) lane, would NOT be considered illegal passing, even if the driver is the only passenger in the vehicle.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other improper or unsafe passing	Subject vehicle passes another vehicle in an improper manner not included in previous categories. Does not include passing by lane splitting for motorcycles. (Code as other relevant category.)	Ex. passing on two-lane road with limited sight distance or other vehicle present.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Cutting in, too close in front of other vehicle	Subject vehicle enters lane of another vehicle too closely to the front of that vehicle.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Cutting in at safe distance but then decelerated, causing conflict	Subject vehicle enters lane in front of another vehicle at a seemingly safe distance, but then decelerated inappropriately, causing a conflict.	Ex. Subject moves into right lane at last minute to turn into parking lot and following vehicle not expecting the deceleration.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Cutting in, too close behind other vehicle	Subject vehicle enters lane of another vehicle too closely to the back of that vehicle.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Did not see other vehicle during lane change or merge	Subject vehicle enters a lane or merges into a lane without being aware of another vehicle close by that is already traveling in that lane.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other improper or unsafe merge/exit/weave	Subject vehicle executes an improper transition between a through road and exit/entrance ramp or acceleration/deceleration lanes (or vice versa) or when a lane is dropped and two lanes are forced into one, and the error is not described in other options.	Example: inappropriately stopping at the end of an entrance ramp (with no yield sign), driving on shoulder to pass merging/weaving traffic, merging out of turn (before lead vehicle), merging without sufficient gap, moving into exit lane and then back out with insufficient warning.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other improper or unsafe lane change	Subject vehicle executes an improper transition between two adjacent lanes when not in an interchange or lane drop situation, and the error is not described in other options.	Example: inappropriately moving into a third lane while changing between two (e.g. a "wide" lane change), changing lanes at an inappropriate time, or moving across multiple lanes in one maneuver.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Driving in other vehicle's blind zone	Subject vehicle is traveling close to another vehicle in such a way that the driver of the other vehicle is not expected to be able to see it. Subject vehicle must maintain this relative position for at least 5 seconds.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Aggressive driving, specific, directed menacing actions	Subject vehicle driver is driving in a purposefully aggressive manner, with actions intended for a specific recipient.	Ex. exhibiting road rage.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Aggressive driving, other	Driver is driving in an aggressive manner not described in previous categories. Includes reckless and "sporty" driving.	Ex. reckless driving without directed menacing actions, such as excessive speed, weaving in and out of traffic, tailgating.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Wrong side of road, not overtaking	Subject vehicle is traveling on the wrong side of the road with no intent of passing or overtaking another vehicle.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Following too closely	Subject vehicle is traveling at an unsafe distance (too close) behind the lead vehicle.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Failed to signal	Subject vehicle failed to properly signal its intent by not signaling at all. Applies to planned maneuvers, not sudden evasive maneuvers.	Ex. changed lanes or made a turn without signaling.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper signal	Subject vehicle failed to properly signal its intent by signaling incorrectly or signaling late. Use with planned maneuvers, not sudden evasive maneuvers.	Ex. used right turn signal when making a left turn, or activated turn signal at same time began maneuver.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Making turn from wrong lane	Subject vehicle turns left or right from a lane not intended for making that turn.	Ex. making turn across lanes.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper turn, wide right turn	Subject vehicle turned right from the initial travel path, unnecessarily encroaching into the left adjacent lane or median.	Ex. turning into oncoming traffic, turning into wrong lane on left.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper turn, cut corner on right turn	Subject vehicle turned right from the initial travel path, unnecessarily encroaching into the right adjacent lane or shoulder/curb.	Ex. turning into wrong lane on right, or going over curb.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper turn, wide left turn	Subject vehicle turned left from the initial travel path, unnecessarily encroaching into the right adjacent lane or shoulder/curb.	Ex. turning into wrong lane on right or going over curb.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper turn, cut corner on left	Subject vehicle turned left from the initial travel path, unnecessarily encroaching into the left adjacent lane or median.	Ex. cuts into adjacent lane or oncoming traffic, turning into wrong lane on left or going over median.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper U-turn	Subject vehicle executes an improper U-turn, which may cause conflict with any direction of traffic and/or unintended road departures.	Ex. Making a U-turn where U-turns are prohibited, Making a U-turn without yielding, making a U-turn with insufficient warning, making a U-turn with adequate space for vehicle's turning radius
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper turn, other	Subject vehicle turned left or right from the initial travel path in an unsafe manner not described in previous categories.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper backing, did not see	Subject vehicle traveled in reverse without obtaining a proper view of the surroundings behind the vehicle.	Ex. did not check mirrors when backing.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper backing, other	Subject vehicle traveled in reverse in an unsafe manner not described in previous categories.	Ex. backing into traffic, backing up on interstate.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Improper start from parked position	Subject vehicle moved from a parked position in an unsafe manner.	Ex. did not check mirrors.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Disregarded officer or watchman	Subject vehicle driver did not notice or obey an officer of the law or traffic guard serving to provide guidance in traffic flow and the driving task.	Ex. unaware or late to react.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Signal violation, apparently did not see signal	Subject vehicle driver did not notice and thus disobeyed (or nearly disobeyed) a traffic signal.	Ex. unaware or late to react.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Signal violation, intentionally disregarded signal	Subject vehicle driver saw a traffic signal but purposefully disregarded its instruction. (If driver was trying to beat a yellow light before it phased into red, code "Signal violation, tried to beat signal change".)	Ex. driver saw a red traffic light but proceeded through the intersection, driver failed to stop before making a right on red.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Signal violation, tried to beat signal change	Subject vehicle driver accelerated or continued at a speed intended to pass through an intersection before the traffic signal turned red.	Ex. went through (or attempted to go through) intersection while light was yellow.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Stop sign violation, apparently did not see stop sign	Subject vehicle driver did not notice and thus disobeyed or nearly disobeyed a stop sign.	Ex. unaware or late to react.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Stop sign violation, intentionally ran stop sign at speed	Subject vehicle driver saw a stop sign but purposefully drove through the intersection at a speed greater than 15 mph.	Ex. purposefully ran stop sign without decelerating below a speed of 15 mph.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Stop sign violation, "rolling stop"	Subject vehicle driver did not come to a complete stop at a stop sign (minimum speed was below 15 mph, but above 0 mph).	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other sign (e.g., Yield) violation, apparently did not see sign	Subject vehicle driver did not notice and thus disobeyed a traffic sign (other than a stop sign).	e.g., Yield, Do Not Enter, One Way
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other sign (e.g., Yield) violation, intentionally disregarded	Subject vehicle Driver saw a traffic sign (other than a stop sign) but purposefully disobeyed that sign.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other sign violation	Subject vehicle driver disobeyed a traffic sign in a manner not described in previous categories.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Non-signed crossing violation	Subject vehicle driver proceeded through a non-signed intersection in an unsafe manner.	Ex. did not check traffic when entering roadway from driveway or parking lot.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Right-of-way error in relation to other vehicle or person, apparent recognition failure	Subject vehicle driver made the incorrect decision regarding who had the right-of-way (his/her own vehicle or another vehicle or pedestrian) due to a misunderstanding of the situation.	Ex. did not see other vehicle.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Right-of-way error in relation to other vehicle or person, apparent decision failure	Driver made the incorrect decision regarding who had the right-of-way (his/her own vehicle or another vehicle or pedestrian) due to improper analysis of the situation.	Ex. did see other vehicle prior to action but misjudged gap.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Right-of-way error in relation to other vehicle or person, other or unknown cause	Subject vehicle driver made incorrect decision regarding who had the right-of-way (his/her own vehicle or another vehicle or pedestrian) for an unknown reason or for reasons not described in previous categories.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Delayed or insufficient braking	Subject vehicle driver failed to brake, braked or decelerated later than was reasonably expected, or failed to brake or decelerate at a reasonably sufficient level given the circumstances of the event. Braking may or may not have led to a complete stop.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Sudden or improper braking	Subject vehicle braked suddenly, in an unsafe manner, or at an unsafe time in the roadway, but did not come to a complete stop (i.e., speed indicator did not drop to zero). This does not include delayed or insufficient braking.	If the sudden braking leads directly to stopping (speed indicator goes to zero), code as "sudden or improper stopping on roadway"

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Sudden or improper stopping	Subject vehicle stopped (speed indicator dropped to zero) without ample warning or in an unsafe manner or at an unsafe time in the roadway.	Code only when driver speed indicator goes to zero--code "sudden or improper braking" otherwise. The only time to code braking and stopping for one event would be when the braking doesn't lead directly to the stopping (Subject brakes, then a bit later has to suddenly stop).
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Parking in improper or dangerous location	Subject vehicle parked (stopped with the intent of remaining stopped) in a location not intended for parking.	Ex. shoulder of Interstate
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Speeding or other unsafe actions in work zone	Subject vehicle traveling at a speed greater than the posted speed limit, specifically while driving in a work zone.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Failure to dim headlights	Subject vehicle traveling with high beams activated on headlights, without dimming the lights when appropriate.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Driving without lights or with insufficient lights	Subject vehicle traveling with no headlights on (or insufficient headlights) when the situation requires such lighting for safety.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Avoiding pedestrian	Subject vehicle driver behaved in a manner intended to avoid conflict with a pedestrian.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Avoiding other vehicle	Subject vehicle driver behaved in a manner intended to avoid conflict with another vehicle.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Avoiding animal	Subject vehicle driver behaved in a manner intended to avoid conflict with an animal.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Avoiding object	Subject vehicle driver behaved in a manner intended to avoid conflict with an object.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Apparent unfamiliarity with roadway	Subject vehicle driver behaved in an unsafe manner, apparently due to an unfamiliarity with the surrounding traffic situation or locality.	Ex. repeated U-turns, reading maps, papers, etc.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Apparent unfamiliarity with vehicle	Subject vehicle driver behaved in an unsafe manner, apparently due to an unfamiliarity with the vehicle.	Ex. unfamiliarity with displays and controls
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Apparent general inexperience driving	Subject vehicle driver behaved in an unsafe manner, apparently due to lack of experience with the driving task.	Ex. hyper-focused driving, overly cautious maneuvers, etc.
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Use of cruise control contributed to late braking	Subject vehicle driver delayed applying brake pedal because the cruise control was activated, resulting in an unsafe situation.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Other	Subject vehicle driver engages in other behavior not described in previous categories.	
26*, 27*, 28*, 29*	Driver Behavior 1,2,3,4	Unknown	Cannot determine the behavior(s) engaged in by the Subject vehicle driver due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
30*	Driver Impairments	None apparent	No observable impairment of Subject vehicle driver.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
30*	Driver Impairments	Asleep	Subject vehicle driver appears to have fallen asleep prior to the Precipitating Event or between the Precipitating Event and the Impact or Proximity Time. This should also be coded as "Drowsy, sleepy, asleep, fatigued" under Driver Behavior.	Alcohol or other drugs may or may not be the source of this impairment. Also code Driver behavior as "Drowsy, sleepy, asleep, fatigued," and Secondary Task as "No Secondary Task" (unless there are also other secondary tasks).
30*	Driver Impairments	Drowsy, sleepy, fatigued	Subject vehicle driver exhibits obvious signs of being drowsy, tired, or fatigued, but is not actually asleep while driving, possibly degrading performance of the driving task. This should also be coded as "Drowsy, sleepy, asleep, fatigued" under Driver Behavior.	Alcohol or other drugs may or may not be the source of this impairment. Cues throughout the file may be used to determine level of drowsiness. For Drowsy drivers: Also code Driver behavior as "Drowsy, sleepy, asleep, fatigued," and Secondary Task as "No Secondary Task" (unless there are also other secondary tasks).
30*	Driver Impairments	Ill, blackout	Subject vehicle driver exhibits obvious signs of physical illness or loss of consciousness, degrading performance of the driving task.	Alcohol or other drugs may or may not be the source of this impairment.
30*	Driver Impairments	Angry	Subject vehicle driver exhibits obvious signs of anger, whether directed at a specific target or not, degrading performance of the driving task.	Circumstances surrounding the event may be reviewed to ascertain the presence of this impairment (ex. a situation that occurred prior to the event under analysis may provide clues to the driver's emotional state).
30*	Driver Impairments	Other emotional state	Subject vehicle driver exhibits another emotional state not described in previous categories that degrades performance of the driving task.	Ex. depressed, disturbed
30*	Driver Impairments	Drugs, medication	Subject vehicle driver is obviously or suspected to be under the influence of a medication (prescription or over-the-counter) during the event. (The medication is not necessarily a cause in the event).	
30*	Driver Impairments	Drugs, alcohol	Subject vehicle driver is obviously or suspected to be under the influence of alcohol during the event. (The alcohol is not necessarily a cause in the event.)	
30*	Driver Impairments	Other illicit drugs	Subject vehicle driver is obviously or suspected to be under the influence of an illegal drug or other type of drug not described in other categories during the event. (Drug is not necessarily a cause in the event.)	
30*	Driver Impairments	Restricted to wheelchair	Subject vehicle driver must use a wheelchair for mobility.	Record if clearly seen.
30*	Driver Impairments	Impaired due to previous injury	Subject vehicle driver is physically impaired due to some type of pre-existing injury not described in previous categories.	e.g., black eye, arm in a sling, wrist brace
30*	Driver Impairments	Headphones/earbuds	Subject vehicle driver is wearing headphones or earbuds that cover one or more ears, possibly impairing the driver's ability to hear external noises. The degree of hearing impairment that results, if any, is most likely unknown.	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
30*	Driver Impairments	Other	Subject vehicle driver exhibits obvious physical or mental impairment not described in previous categories (specifics are known).	
30*	Driver Impairments	Unknown	Cannot determine whether the Subject driver is impaired, or the reason for possible impairment due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
31*	Front Seat Passengers	N/A - integer value	Enter number of people in front seat(s). If no passengers present (including no driver), coded as 0. If driver only, enter 1. If unable to determine number of passengers with confidence, coded as -99 (negative 99).  For motorcycles, this will always be 1 unless there is a passenger in front of the rider.	Determined from examining cabin snapshots shortly before or after the event, or determined from video if possible (e.g., driver is clearly interacting with a passenger(s) or passenger's hand is seen reaching to adjust radio).
32*	Rear Seat Passengers	N/A - integer value	Enter number of people in rear seat(s). If no passengers present, coded as 0. If unable to determine number of passengers with confidence, coded as -99 (negative 99).  For motorcycles, rear seat passengers are those sitting behind the rider.	Determined from examining cabin snapshots shortly before or after the event, or determined from video if possible (e.g., driver is clearly interacting with a passenger(s) or driver hands items back to back seat passenger).
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	No Secondary Tasks (or No Additional Secondary Tasks)	The Subject vehicle driver is not engaged in any (or any additional for V38, 42, 46) observable secondary tasks and is attentive to the driving task.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Talking/singing, audience unknown	Subject vehicle driver is moving lips as if talking or singing, the interaction is not believed to be with a passenger. This category includes whistling, and also includes possible or suspected cases of hands-free cell phone use. (See "Cell phone, Talking/listening, hands free" category for further information.) This category does not include the driver talking to a pedestrian or other known party outside the vehicle, which should be coded as the appropriate external distraction.	Driver may or may not also be interacting with a passenger, but this Secondary Task involves singing with radio, talking to self, using a cell phone through a hands-free medium, etc.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Dancing	Subject vehicle driver is moving his/her arms, head, or other body part seemingly in time with the beat of music.	e.g., tapping hands/fingers on steering wheel, bobbing head, "air drums" or "air guitar".
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Reading	Subject vehicle driver is reading material that is in the vehicle, but not a part of the vehicle (i.e., not reading external signs, or center stack display).	This could be reading directions, paper material, packaging. If reading a phone number, record as dialing cell phone.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Writing	Subject vehicle driver is writing with a pen/pencil or using a stylus on a tablet.	Driver could be writing on a piece of paper, making notes on a tablet, etc.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Passenger in adjacent seat - interaction	A front seat passenger is visible or not visible, but the Subject vehicle driver is clearly interacting with a passenger (other than a child) in the adjacent/front seat. This could be talking, listening, reacting to (i.e., laughing), gesturing towards, moving toward or away from the passenger, or reaching to take something from or give something to the passenger. If age of passenger is unable to estimate, use this category.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Passenger in rear seat - interaction	A rear seat passenger (other than a child, or age unable to estimate) is visible or not visible, but the driver is clearly interacting with a passenger (other than a child) in the rear seat. This could be talking, listening, reacting to (i.e., laughing), moving toward or away from the passenger, or reaching for the rear seat passenger. If age of passenger is unable to estimate, use this category.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Child in adjacent seat - interaction	Child is visible or not visible, but the driver is clearly interacting with a child in the front adjacent seat. This could be talking, listening, reacting to (i.e., laughing), or moving toward or away from the child (i.e., reaching for a child, not object, or avoiding a pat from the child). If age of passenger is unable to estimate, do not use this category; use "passenger in adjacent seat" instead.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Child in rear seat - interaction	A child is visible or not visible in the rear seat, and the driver is clearly interacting with a child in the rear seat. This could be talking, listening, reacting to (i.e., laughing), or moving toward or away from the child (i.e., reaching for a child, not object, or avoiding a pat from the child). If age of passenger is unable to estimate, do not use this category; use "passenger in rear seat" instead.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Look back in Sleeperberth (Truck Only)	The driver is looking back into the sleeperberth (e.g., to interact with a passenger or look for an item).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Moving object in vehicle, Interact (or on motorcycle)	Any interaction with an object inside the vehicle (or on the motorcycle) which is not being held by the driver or passenger(s) (if present) but is in motion, either due to the motion of the vehicle or due to another passenger throwing the object.	Ex. Driver looks at and/or reaches for an object that fell off the seat when driver stopped hard at a traffic light; or CB cord is dangling and driver reaches up to steady it.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Insect in vehicle, Interact (or around motorcycle)	Interaction with any insect in the vehicle (or around the motorcycle) (e.g., swatting at insect, moving body to avoid insect, looking around trying to locate insect).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Pet in vehicle, Interact (or on motorcycle)	Any interaction with a pet in the vehicle (or on the motorcycle), including holding, petting, talking to, or moving pet or interacting with pet carrier.	Only code if animal/pet is visible at some point in the trip file or if there is history/context with the driver and the driver is exhibiting behaviors that are appropriate to having a pet in the vehicle.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Object dropped by driver	Subject vehicle driver is initially holding something and drops it and the driver then immediately picks it back up, taking the driver's attention away from the driving task.	This category supersedes other "reaching" categories in the situation of an object being dropped and immediately retrieved.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Reaching for object, other	Subject vehicle driver reaches for an object not described in any other category. Includes objects in storage compartments.	Once the driver has finished reaching for the object and has it in hand (if not being moved for intended usage), then it becomes "object in vehicle, other," as long as it doesn't fit into any of the other categories (e.g., eating, drinking, etc.)
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Object in vehicle, other (or on motorcycle)	Subject vehicle driver clearly is looking at, handling, holding, or manipulating an object (visible or not) or thing located in the vehicle or on the motorcycle, other than those listed in other categories.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell phone, Holding	Subject is holding a cell phone but not manipulating it. Could be holding it in hand, lap, or some other way.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell phone, Talking/listening, hand-held	Subject vehicle driver is talking on a handheld phone or has phone up to ear as if listening to a phone conversation or waiting for person they are calling to pick up the phone. If driver has an earpiece or headset, the driver must be observed talking repeatedly.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell phone, Talking/listening, hands-free	Subject vehicle driver is talking or listening on a phone using a hands-free device such as a headset, in-vehicle integrated system, or hands-free speaker phone. This category is only used in studies where sufficient information exists and is not used in the current study. Instead, refer to "Talking/Singing, audience unknown" category.	This category cannot be reliably and consistently determined in many naturalistic studies due to insufficient information. Cell phone records, audio recordings, and/or extensive review of extended video footage are required to code this category, none of which were available at the time of the current coding effort.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell Phone, Texting	Subject vehicle driver is pressing buttons or a touch screen on the cell phone to create and/or send a text message.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell Phone, Browsing	Subject vehicle driver is pressing buttons or a touch screen on the cell phone to browse the internet or phone applications. May also include voice commands (e.g., Siri).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell Phone, Dialing hand-held	Subject vehicle driver is pushing number buttons on a cell phone or touch screen to dial a number or browse/check something else on their cell phone (this would also include reading the phone number from a sheet of paper).	If unsure whether driver is texting or dialing/browsing, code as dialing.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell Phone, Dialing hand-held using quick keys	Subject vehicle driver is pushing quick key buttons (e.g., speed dial) on a cell phone to dial a number or check something else on their cell phone (this would also include reading the phone number from a sheet of paper). Maximum number of buttons is 6, else code as "dialing hand-held phone".	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell Phone, Dialing hands-free using voice-activated software	Driver speaks into open or activated cell phone, headset, or in-vehicle integrated device for the purpose of dialing with long, prior delay of no speaking into device (i.e., most likely not in prior conversation) and no more than one or two button presses (e.g., push to begin) on phone, earpiece, headset, or in-vehicle integrated system are made first.	

Researcher Dictionary for Safety Critical Event Video Reduction Data, October 5 2015, Version 4.1  
Category Definitions and Hints

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell Phone, Locating/reaching/ answering	Subject vehicle driver is glancing to find cell phone, reaching towards his/her cell phone, and/or flipping phone open or pressing a button to answer a call.	If more than one distraction happens (e.g., driver looks for phone, reaches for it and then answers it), the last frame number would be the last step in this sequence (e.g., answering cell phone). Once phone is at driver's ear or conversation has clearly begun, code as the appropriate "talking" category.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Cell phone, other	Subject vehicle driver is interacting with a cell phone in some manner (e.g., looking at a cell phone or just holding it, but not necessarily manipulating the cell phone in any way), or action does not fit in any other category.	Includes plugging phone into charger, cleaning screen, putting on headset, etc.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Tablet device, Locating/reaching	Subject vehicle driver reaches or starts to glance around for an electronic tablet device (e.g., iPad).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Tablet device, Operating	Subject vehicle driver is pressing buttons on or using the touch screen on the electronic tablet device.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Tablet device, Viewing	Subject vehicle driver is holding and looking at an electronic tablet device, but not pressing any buttons.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Tablet device, Other	Subject vehicle driver is interacting with an electronic tablet device in some manner not described in other categories.	Includes plugging tablet into charger, cleaning screen, headset, holding without manipulating, etc.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	CB Radio, Interact (Car/Truck Only)	Subject vehicle driver is reaching for, manipulating, talking into, or listening to a CB Radio.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Intercom, Interact	Subject vehicle driver is reaching for, manipulating, talking into, or listening to an intercom system (e.g., announcement/PA system on a bus).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Electronic dispatching device, Interact with (Truck Only)	Subject vehicle driver is interacting in some way with an electronic dispatching device.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	DAS, Interact	Subject vehicle driver is reaching for, manipulating, or otherwise interaction with the Data Acquisition System.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Other electronic device, Interact with	Subject vehicle driver is interacting in some way with an electronic device that is not included in other categories and is not integral to the vehicle (e.g., calculator, camera, nomadic GPS).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Adjusting/monitoring climate control	Subject vehicle driver interacts with in-vehicle climate control system either by touching the climate control buttons, glancing at the climate control on dashboard, or adjusting climate control vents.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Adjusting/monitoring radio	Subject vehicle driver interacts with in-vehicle radio/audio system either by touching the radio buttons on dashboard or steering wheel, or glancing at the radio on dashboard.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Inserting/retrieving CD (or similar)	Subject vehicle driver picks up CD, cassette, or other music storage device (other than MP3 player) in vehicle and/or inserts it into radio, presses any subsequent buttons to get device to play/rewind/fast forward and then play, or driver presses button to eject device and then places it somewhere in vehicle.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Adjusting/monitoring other/unknown Instrument Panel device	Subject vehicle driver interacts with a manufacturer-installed Instrument Panel device other than those listed in other categories (or an unknown device), either by touching or glancing at the device. Does not include driving-critical tasks, such as turn signal, wipers, headlights, gear shift, speedometer. Instrument Panel can include any integral device or control on or around the steering wheel, on the dashboard, or on the center stack.	Includes integrated Navigation systems.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Adjusting/monitoring other devices integral to vehicle	Subject vehicle driver interacts with a manufacturer-installed device other than those listed in other categories, either by touching or glancing at the device. Does not include driving-critical tasks, such as turn signal, wipers, headlights, gear shift, speedometer.	Includes interaction with seat belt, door locks, window controls, sun visors, rear view mirror, etc. Does not include retrieving objects inside storage compartments.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Looking at previous crash or incident	Subject vehicle driver is looking outside of the vehicle in the direction of what is obviously an accident or similar incident.	Only mark if it is clear that the driver is tracking a specific external distraction as they drive by. Quick glances are not categorized in this category; code these according to where the driver is glancing (ex., mirror or window).
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Looking at pedestrian	Subject vehicle driver is looking outside of the vehicle in the direction of a pedestrian (not in a construction zone) either on the side of the road or in front of them (i.e., using a cross walk or riding a bike at a red light).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Looking at animal	Subject vehicle driver is looking outside of the vehicle in the direction of an animal either on the side of the road (this would not be used for an animal crossing the road).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Looking at an object external to the vehicle	Subject vehicle driver is looking outside of the vehicle in the direction of an object (not in a construction zone) on the side of the road (e.g., a box).	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Distracted by construction	Subject vehicle driver is looking outside of the vehicle in the direction of a construction zone. A construction zone would be defined as the presence of a barrel, person in a hard hat, construction equipment or vehicles.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Other external distraction	Subject vehicle driver is looking outside of the vehicle for purposes not described in previous categories, or for an unknown reason when glance is not considered to be part of the driving task.	Includes looking at vehicle ahead in adjacent lane.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Reaching for food- related or drink-related item	Subject vehicle driver is looking for or reaching for any item related to eating or drinking. If the driver is already in the process of eating, and is just picking up food repeatedly to put in mouth, code as the appropriate eating category. This reaching task is for the initial locating, reaching, and preparing food or drink to be eaten.	Ex. reaching for cup, utensils, plate, food. Once the item is in hand and being moved with the intent to use, code as appropriate usage category (e.g., eating).
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Eating with utensils	Subject vehicle driver has food that will be put in his/her mouth via a utensil like a fork, spoon, knife, chopsticks, etc.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Eating without utensils	Subject vehicle driver has food that will be put in his/her mouth and a utensil is not used to place the food in the driver's mouth.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Drinking with lid and straw	Subject vehicle driver uses a straw to drink from a container that has a cover on it and cannot easily spill if it tips over.	Ex. Fountain drink with lid and straw, sippy water bottle
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Drinking with lid, no straw	Subject vehicle driver drinks from a container that has a cover on it and cannot easily spill if it tips over (not using a straw).	Ex. coffee mug with lid that closes
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Drinking with straw, no lid	Subject vehicle driver uses a straw to drink from a container that does not have a lid.	Ex. uncovered fountain drink with a straw
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Drinking from open container	Subject vehicle driver drinks from a container that does not have a lid (not using a straw).	Ex. uncovered cup, coffee cup, water bottle with lid off, soda can
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Reaching for cigar/cigarette	Subject vehicle driver reaches or starts to glance around for cigar/cigarette or related items.	Once the item is in hand and being moved with the intent to use, code as appropriate usage category (e.g., lighting).
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Lighting cigar/cigarette	Subject vehicle driver is in some stage of the process of lighting cigar/cigarette.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Smoking cigar/cigarette	Subject vehicle driver has a lit cigar/cigarette either in their mouth or hand.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Extinguishing cigar/cigarette	Subject vehicle driver puts out his/her cigar/cigarette, hands it to someone else, or tosses it out the window.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Tobacco, other	Subject vehicle driver is using some other form of tobacco not included in other categories such as chewing tobacco (putting it in mouth, spitting).	If chewing tobacco and tobacco is simply in mouth at during the analysis window (not reaching, spitting, etc.), do not code as a secondary task.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Reaching for personal body-related item	Subject vehicle driver is reaching for any item related to personal hygiene, health, or adornment.	Ex. reaching for comb, brush, makeup, razor, dental floss, contact lenses, glasses (not currently being worn), hat (not currently being worn). Once the item is in hand and being moved with the intent to use, code as appropriate usage category.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Combing/brushing/ fixing hair	Subject vehicle driver is adjusting, or combing/brushing hair, except for quickly swiping hair out of eyes or idle twirling of hair.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Applying make-up	Subject vehicle driver is in some stage of applying any body product to body.	Ex., lotion, make-up, lip balm, perfume
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Shaving	Subject vehicle driver is using any appliance with a blade to remove hair from body.	Ex., razor (electric or manual)
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Brushing/flossing teeth	Subject vehicle driver is using any appliance to brush, floss or otherwise clean teeth or mouth.	Ex., includes toothbrush, floss, toothpick, etc.

Category Definitions and Hints

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Biting nails/cuticles	Subject vehicle driver is biting nails or cuticles.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Removing/adjusting clothing	Subject vehicle driver is removing, adjusting, or putting on clothing, including jackets, shirt, pants, shoes, socks, hats, gloves, neckties, and scarves.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Removing/adjusting helmet (MC only)	Subject rider is removing, putting on, or adjusting helmet (including visor).	Includes adjusting visor up or down, adjusting chinstrap, converting three-quarter helmet, wiping visor, applying or removing tape from visor, interacting with helmet-mounted camera. If adjustment is related to operation of other peripherals (such as cell phone or radio), code as appropriate (e.g., answering cell phone) rather than this category.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Removing/adjusting jewelry	Subject vehicle driver is removing or adjusting jewelry, including watches.	Ex., rings, necklaces, bracelets, watches, earrings or other piercings.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Removing/inserting/adjusting contact lenses or glasses	Subject vehicle driver is removing or inserting contact lens(es) from eye(s) or putting on/taking off/adjusting glasses or sunglasses.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Other personal hygiene	Subject vehicle driver is engaged in some other personal hygiene activity(ies) not described in previous categories.	Ex., checking oneself in mirror without the preceding tasks, trying to get something out of one's eye.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Other non-specific internal eye glance	Subject vehicle driver glances away from the direction of travel at something inside the Subject vehicle/on the motorcycle, but cannot determine a specific glance location.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Other known secondary task	Subject vehicle driver is engaged in a recognizable secondary task that is not listed in other categories.	Includes cases where the vehicle is traveling in reverse and the driver is looking out the forward or side windows (other than side mirrors), rather than the roadway behind the car, which is now the direction of travel.
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Unknown type (secondary task present)	Subject vehicle driver is clearly distracted from the driving task, but the specific distraction is unknown.	
33*, 37*, 41*, 45*	Secondary Task 1,2,3,4	Unknown	Cannot determine whether the Subject vehicle driver is engaged in a secondary task due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
34*, 38*, 42*, 46*	Secondary Task 1,2,3,4 Start Time	N/A - Video Timestamp	See Secondary Task Start Time column for each type of distraction in the next section of this dictionary (Secondary Task Start and End Times).	
35*, 39*, 43*, 47*	Secondary Task 1,2,3,4 End Time	N/A - Video Timestamp	See Secondary Task Stop Time column for each type of distraction in the next section of this dictionary (Secondary Task Start and End Times).	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
36, 40, 44, 48	Secondary Task 1,2,3,4 Outcome	Yes	The referenced secondary task was judged by the analyst to be a contributing factor to the occurrence of the Precipitating Event or event outcome.	
36, 40, 44, 48	Secondary Task 1,2,3,4 Outcome	No	The referenced secondary task clearly did not contribute in any way to the Precipitating Event or event outcome.	
36, 40, 44, 48	Secondary Task 1,2,3,4 Outcome	Unable to determine	Difficult to make a judgment whether the referenced secondary task was a contributing factor to the Precipitating Event or event outcome (although all information is available). Most likely partially contributing to the occurrence of the event.	
36, 40, 44, 48	Secondary Task 1,2,3,4 Outcome	Unknown	Can't tell or make judgment whether the referenced secondary task contributed to the Precipitating Event or event outcome (not all information is available).	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
36, 40, 44, 48	Secondary Task 1,2,3,4 Outcome	Not applicable	There is no secondary task referenced, thus no outcome to categorize.	
49*	Driving Tasks	None	Subject vehicle driver does not perform any driving-related tasks.	
49*	Driving Tasks	Left mirror/Windows	Subject vehicle driver looks at left side mirror or out a left side window for a driving-related purpose at least once.	
49*	Driving Tasks	Right mirror/Windows	Subject vehicle driver looks at right side mirror or out a right side window for a driving-related purpose at least once.	
49*	Driving Tasks	Rear-view mirror (Car, Truck Only)	Subject vehicle driver looks the rear-view mirror for a driving-related purpose.	
49*	Driving Tasks	Speed check	Subject vehicle driver looks at speedometer for a driving-related purpose.	
49*	Driving Tasks	Gear shift	Subject vehicle driver looks at or manipulates the gear shift for a driving-related purpose. Includes clutch (left hand) and shift pedal (left foot) for motorcycles.	
49*	Driving Tasks	Turn signals	Subject vehicle driver looks at or manipulates the turn signal control for a driving-related purpose.	
49*	Driving Tasks	Headlights	Subject vehicle driver looks at or manipulates the headlight or high-beam controls for a driving-related purpose.	
49*	Driving Tasks	Wipers	Subject vehicle driver looks at or manipulates the windshield wipers or windshield washer fluid for a driving-related purpose.	
49*	Driving Tasks	Horn	Subject vehicle driver looks at or manipulates the horn for a driving-related purpose.	
49*	Driving Tasks	Parking Brake	Subject vehicle driver looks at or manipulates the parking brake for a driving-related purpose.	
49*	Driving Tasks	Kickstand or Center Stand (MC Only)	Subject vehicle driver looks at or manipulates the kickstand or center stand for a driving-related purpose.	
49*	Driving Tasks	Voice/Hand Signals	Subject vehicle driver interacts with other road users via voice or hand signals for a driving-related purpose.	
49*	Driving Tasks	Jake Brake	Subject vehicle driver looks at or manipulates the jake brake for a driving-related purpose.	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
49*	Driving Tasks	Bus Door (Bus Only)	Subject vehicle driver looks at or manipulates the bus door for a driving-related purpose.	
49*	Driving Tasks	Other	Subject vehicle driver engages in some other driving-related task not listed above.	
49*	Driving Tasks	Unknown	Can't tell or make judgment whether the subject vehicle driver engages in a driving-related task.	
50*	Hands on the Wheel (Handlebars for MC Only)	None	Subject vehicle driver was not touching the steering wheel/handlebars with any part of the body at the start of the Precipitating Event.	
50*	Hands on the Wheel (Handlebars for MC Only)	None - Knees	Subject vehicle driver was not touching the steering wheel/handlebars with either hand/arm at the start of the Precipitating Event, but was attempting to maintain steering control with knees or other body part other than hands or arms.	
50*	Hands on the Wheel (Handlebars for MC Only)	Left hand off at least	Subject vehicle driver was not touching the steering wheel/handlebars with the left hand/arm at the start of the Precipitating Event, and the location of the right hand/arm is unknown.	
50*	Hands on the Wheel (Handlebars for MC Only)	Left hand only	Subject vehicle driver was touching the steering wheel/handlebars with the left hand/arm only at the start of the Precipitating Event.	
50*	Hands on the Wheel (Handlebars for MC Only)	Left hand at least	Subject vehicle driver was touching the steering wheel/handlebars with the left hand/arm at the start of the Precipitating Event, and the location of the right hand/arm is not known (may or may not be on wheel).	
50*	Hands on the Wheel (Handlebars for MC Only)	Both hands	Subject vehicle driver was touching the steering wheel/handlebars with both the right and left hands/arms at the start of the Precipitating Event.	
50*	Hands on the Wheel (Handlebars for MC Only)	Right hand at least	Subject vehicle driver was touching the steering wheel/handlebars with the right hand/arm at the start of the Precipitating Event, and the location of the left hand/arm is not known (may or may not be on wheel).	
50*	Hands on the Wheel (Handlebars for MC Only)	Right hand only	Subject vehicle driver was touching the steering wheel/handlebars with the right hand/arm only at the start of the Precipitating Event.	
50*	Hands on the Wheel (Handlebars for MC Only)	Right hand off at least	Subject vehicle driver was not touching the steering wheel/handlebars with the right hand/arm at the start of the Precipitating Event, and the location of the left hand/arm is unknown.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
50*	<b>Hands on the Wheel (Handlebars for MC Only)</b>	Unknown	Cannot determine the location of any hands or arms due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
51*	<b>Driver Seatbelt Use (Truck/Car Only)</b>	Lap/shoulder belt properly worn	The subject vehicle driver is properly restrained by a lap/shoulder belt combination at the time of the Precipitating Event.	
51*	<b>Driver Seatbelt Use (Truck/Car Only)</b>	Lap/shoulder belt worn improperly	The subject vehicle driver is improperly restrained by a lap/shoulder belt combination at the time of the Precipitating Event. Driver may be using only the lap or only the shoulder belt, or may have lap belt on and shoulder belt behind back or looped under arm.	
51*	<b>Driver Seatbelt Use (Truck/Car Only)</b>	None used	The subject vehicle driver does not appear to be using any form of seatbelt at the time of the Precipitating Event.	
51*	<b>Driver Seatbelt Use (Truck/Car Only)</b>	Unknown if used	Cannot determine the driver's seatbelt use at the time of the Precipitating Event due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
51*	<b>Driver Seatbelt Use (Truck/Car Only)</b>	Not Applicable	There is no driver or no seatbelt.	
52*	<b>Rider Helmet Use (MC only)</b>	Full Face, includes chin	The subject vehicle rider is wearing a full face helmet at the time of the Precipitating Event.	
52*	<b>Rider Helmet Use (MC only)</b>	Three-quarter, no chin	The subject vehicle rider is wearing a three-quarter helmet at the time of the Precipitating Event. A three-quarter helmet has full coverage of the back and sides of the head, but no chin coverage.	
52*	<b>Rider Helmet Use (MC only)</b>	Half	The subject vehicle rider is wearing a half helmet at the time of the Precipitating Event. A half helmet has only partial coverage of the back and sides of the head, but no chin coverage.	
52*	<b>Rider Helmet Use (MC only)</b>	No Helmet	The subject vehicle rider is not wearing a helmet of any kind at the time of the Precipitating Event.	
52*	<b>Rider Helmet Use (MC only)</b>	Other	The subject vehicle rider is wearing a type of helmet or other head protection not included in other categories at the time of the Precipitating Event.	
52*	<b>Rider Helmet Use (MC only)</b>	Unknown	The type of head protection worn by the rider cannot be determined due to limitations in video views, lighting, visual obstructions, or limited perspective.	
52*	<b>Rider Helmet Use (MC only)</b>	Not Applicable	There is no rider.	
53*	<b>Driver Eye Protection (Rider for MC)</b>	Face Shield, helmet (MC Only)	The subject vehicle rider is wearing a helmet with a face shield to protect the eyes at the time of the Precipitating Event. This may be with or without glasses, sunglasses, or goggles as well.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
53*	Driver Eye Protection (Rider for MC)	Goggles (MC Only)	The subject vehicle rider is wearing goggles (but no face shield) to protect the eyes at the time of the Precipitating Event. Goggles include a wrap-around head strap and prevent wind from entering the sides of the lenses. If these two features are not present, code as appropriate glasses option.	
53*	Driver Eye Protection (Rider for MC)	Sunglasses	The subject vehicle driver (or rider) is wearing tinted sunglasses (but no face shield) to protect the eyes at the time of the Precipitating Event.	
53*	Driver Eye Protection (Rider for MC)	Glasses, regular	The subject vehicle driver (or rider) is wearing untinted glasses (but no face shield) to protect the eyes at the time of the Precipitating Event.	
53*	Driver Eye Protection (Rider for MC)	Other	The subject vehicle driver (or rider) is wearing some other form of eye protection (but no face shield) to protect the eyes at the time of the Precipitating Event.	
53*	Driver Eye Protection (Rider for MC)	Unknown	The type of eye protection worn by the driver or rider cannot be determined due to limitations in video views, lighting, visual obstructions, or limited perspective.	
53*	Driver Eye Protection (Rider for MC)	Not Applicable	There is no driver or rider.	
54	Vehicle Contributing Factors	None	No subject vehicle defect or factor appeared to contribute to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Tires	An obvious defect or malfunction in the subject vehicle's tires may have contributed to the occurrence of the Precipitating Event.	If the factor involves a wheel (e.g. a lug nut came off), then code as Wheels.
54	Vehicle Contributing Factors	Wheels	An obvious defect or malfunction in the subject vehicle's wheels may have contributed to the occurrence of the Precipitating Event.	Includes loss of lug nuts.
54	Vehicle Contributing Factors	Brake system	An obvious defect or malfunction in the subject vehicle's braking system may have contributed to the occurrence of the Precipitating Event.	Includes the parking brake.
54	Vehicle Contributing Factors	Steering system	An obvious defect or malfunction in the subject vehicle's steering system may have contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Suspension	An obvious defect or malfunction in the subject vehicle's suspension may have contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Cargo Shift	Shifting of vehicle cargo somewhere on or in the vehicle or trailer contributed to the event.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
54	Vehicle Contributing Factors	Jack-knife	Driver of subject vehicle loses some amount of vehicular control related to a trailer or other articulated vehicle body part jack-knifing in relation to the driver cabin.	
54	Vehicle Contributing Factors	Power train	An obvious defect or malfunction in the subject vehicle's power train (engine and differential) may have contributed to the occurrence of the Precipitating Event.	Includes universal joint, drive shaft, transmission, stuck throttle.
54	Vehicle Contributing Factors	Exhaust system	An obvious defect or malfunction in the subject vehicle's exhaust system may have contributed to the occurrence of the Precipitating Event.	Includes exhaust manifold, header, muffler, catalytic converter, tailpipe.
54	Vehicle Contributing Factors	Headlights	An obvious defect or malfunction in the subject vehicle's headlights may have contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Signal lights	An obvious defect or malfunction in the subject vehicle's signal lights may have contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Other lights	An obvious defect or malfunction in the subject vehicle's lights not listed in previous categories may have contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Wipers	An obvious defect or malfunction in the subject vehicle's windshield wipers may have contributed to the occurrence of the Precipitating Event.	Includes worn wipers, lack of washer fluid.
54	Vehicle Contributing Factors	Mirrors	An obvious defect or malfunction in the subject vehicle's mirrors may have contributed to the occurrence of the Precipitating Event.	Includes rear view and side view mirrors.
54	Vehicle Contributing Factors	Seating and controls	An obvious defect or malfunction in the subject vehicle's driver or passenger seating (including seating controls) may have contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Body, doors, hood	An obvious defect or malfunction in the subject vehicle's body or doors may have contributed to the occurrence of the Precipitating Event.	Includes trunk, hood, tailgate, rear doors of cargo vans.
54	Vehicle Contributing Factors	Trailer hitch	An obvious defect or malfunction in the subject vehicle's trailer hitch may have contributed to the occurrence of the Precipitating Event.	Includes defective or improper trailer hitch.
54	Vehicle Contributing Factors	Multiple failures	More than one feature or function of the vehicle failed, each contributed to the occurrence of the Precipitating Event.	
54	Vehicle Contributing Factors	Other	An obvious defect or malfunction of a subject vehicle factor not listed in previous categories may have contributed to the occurrence of the Precipitating Event (the factor is known).	
54	Vehicle Contributing Factors	Unknown	Cannot determine whether any vehicle contributing factors are present due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
55	Infrastructure Contributing Factors	None	No infrastructure-related issues present that affected the outcome of the event.	
55	Infrastructure Contributing Factors	Roadway alignment	Physical maneuver is difficult for the subject vehicle driver due to the geometry of the roadway or intersection.	Ex. narrow roadway, sharp turn, extremely short merge lane.
55	Infrastructure Contributing Factors	Roadway sight distance	The subject vehicle driver is unable to see an adequate distance ahead.	Ex. Due to hills or curves, signs, fences, buildings, etc. that obstruct critical viewing angles.
55	Infrastructure Contributing Factors	Traffic control device	Lack of, poor positioning of, poor visibility of, or improper functioning of traffic control devices contributed to event outcome.	Ex. Stop sign is obstructed by a tree or a confusing intersection is not clearly signaled or signed.
55	Infrastructure Contributing Factors	Roadway delineation	Poor visibility or positioning of roadway or lane borders contributes to the event outcome.	Ex. faded paint on lane lines, or missing lane lines.
55	Infrastructure Contributing Factors	Roadway maintenance	Poor roadway conditions contributed to the event outcome.	Ex., potholes, deteriorated road edges, etc.
55	Infrastructure Contributing Factors	Weather, visibility	Roadway is not designed to accommodate certain weather condition(s), and thus weather conditions influence driver capabilities	Ex. lane markings are difficult to distinguish on wet pavement.
55	Infrastructure Contributing Factors	Multiple factors	More than one infrastructure-related issues were present that affected the outcome of the event.	
55	Infrastructure Contributing Factors	Other	An obvious roadway design feature not listed in previous categories may have contributed to the occurrence of the Precipitating Event (the factor is known).	
55	Infrastructure Contributing Factors	Unknown	Cannot determine whether the Infrastructure contributed to the event outcome due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
56	Visual Obstructions	No obstruction	No visual obstructions for the subject vehicle driver were obvious.	
56	Visual Obstructions	Rain, snow, fog, smoke, sand, dust	Surrounding atmosphere included rain, snow, fog, smoke, and/or dust, which decreased visibility.	If it is not actively raining or snowing, but rain or snow is on the windshield obstructing the view, use the category "Broken or improperly cleaned windshield." If window is foggy (no fog in the air), use category "Inadequate defrost or defog system" or "Broken or improperly cleaned windshield" as appropriate.
56	Visual Obstructions	Reflected glare	Glare reflected off of the vehicle or other exterior objects decreased visibility.	Reflections from the sun create more visual problems than the direct sunlight.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
56	Visual Obstructions	Sunlight	Direct bright sunlight decreased visibility.	Direct sunlight (i.e., the sun shining into the driver's eyes) creates more visual problems than reflections from the sun.
56	Visual Obstructions	Headlights	Headlights of other vehicle(s) decreased visibility.	
56	Visual Obstructions	Curve or hill	The presence of a curve or hill in the field of view decreased visibility.	
56	Visual Obstructions	Building, billboard, or other roadway infrastructure design features	The presence of a man-made structure in the field of view decreased visibility.	Includes sign, embankment, building.
56	Visual Obstructions	Trees, crops, vegetation	The presence of trees, crops, or vegetation in the field of view decreased visibility.	
56	Visual Obstructions	Moving vehicle (with or without load)	The presence of a vehicle in motion on the trafficway (with or without a load) in the field of view decreased visibility.	
56	Visual Obstructions	Stopped vehicle	The presence of a parked vehicle or a vehicle stopped in the traffic lane in the field of view decreased visibility.	
56	Visual Obstructions	Splash or spray of passing vehicle	A splash or spray of water, snow, sand, etc. from a passing vehicle in the field of view decreased visibility.	
56	Visual Obstructions	Inadequate defrost or defog system	The presence of frost or fog on the subject vehicle's windshield due to an inadequate defrost/defog system decreased visibility. (Defrost/defog system must be in use for this category to apply).	If the defrost/defog system was not being used, use category "Broken or improperly cleaned windshield".
56	Visual Obstructions	Inadequate roadway lighting system	Inadequate lighting of the roadway (other than lighting provided by vehicles) decreased visibility.	
56	Visual Obstructions	Inadequate vehicle headlamps	An inadequate exterior lighting system of the subject vehicle (malfunctioning or turned off) decreased visibility.	Includes headlights, fog lights, but not lighting systems of other vehicles.
56	Visual Obstructions	Obstruction interior to vehicle	An interior feature (other than head restraints) of the subject vehicle decreased visibility.	Includes interior mirrors, objects hanging from rear view mirror, objects piled on the rear or passenger seat blocking windows.
56	Visual Obstructions	Mirrors	Exterior mirrors on the subject vehicle in the field of view decreased visibility.	
56	Visual Obstructions	Other vehicle or object in blind spot	Vision of critical vehicle is obstructed by presence of blind spot (over left/right shoulder)	
56	Visual Obstructions	Other obstruction	A known visual obstruction not listed in previous categories decreased visibility.	Can be external or internal to the vehicle (e.g., driver drinking from a water bottle that obscures the vision).
56	Visual Obstructions	Vision obscured - no details	The vision of the subject vehicle driver was obviously obscured, but the source of the impediment cannot be determined.	
56	Visual Obstructions	Unknown whether vision was obstructed	Cannot determine whether any Visual Obstructions are present due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
57*	Lighting	Dawn	The time of day during the Precipitating Event is sunrise.	It is just starting to get light, but is still mostly dark. Most vehicles will drive with headlights.

Researcher Dictionary for Safety Critical Event Video Reduction Data, October 5 2015, Version 4.1  
 Category Definitions and Hints

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
57*	Lighting	Daylight	The Precipitating Event occurs in daylight, such as occurs in after dawn but before dusk.	
57*	Lighting	Dusk	The time of day during the Precipitating Event is sunset.	It is just before full darkness. Most vehicles will drive with headlights.
57*	Lighting	Darkness, lighted	It is dark during the Precipitating Event, but the roadway is sufficiently lighted. (Vehicle may be outside or inside a parking structure or tunnel.)	Lighted roadway includes street lamps as well as lighting coming from businesses provided that they illuminate the roadway also.
57*	Lighting	Darkness, not lighted	It is dark during the Precipitating Event, and the roadway is not lighted. (Vehicle may be outside or inside a parking structure or tunnel.)	
57*	Lighting	Unknown	Cannot determine the lighting conditions due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
58*	Weather	Clear/Partly Cloudy	There are no adverse atmospheric conditions at the time of the Precipitating Event (no conditions described in other categories), and some clear sky can be seen. (In nighttime conditions, this includes Overcast.)	
58*	Weather	Overcast	There are no adverse atmospheric conditions at the time of the Precipitating Event (no conditions described in other categories), but the sky is overcast and no clear sky can be seen. (In nighttime conditions, this should be coded as Clear/Partly Cloudy.)	
58*	Weather	Wind Gusts	Wind is gusting so as to affect vehicle dynamics and/or cause objects or debris/sand to blow outside.	
58*	Weather	Fog	There is fog visible at the time of the Precipitating Event.	
58*	Weather	Mist/Light Rain	There is mist in the air or light rain at the time of the Precipitating Event.	
58*	Weather	Raining	It is raining steadily at the time of the Precipitating Event. (Code wet road in Surface Condition.)	Check for wiper use.
58*	Weather	Snowing	It is snowing at the time of the Precipitating Event.	
58*	Weather	Sleeting	It is sleeting at the time of the Precipitating Event. (Code ice on road in Surface Condition.)	
58*	Weather	Rain & Fog	It is both raining and foggy at the time of the Precipitating Event. (Code wet road in Surface Condition.)	
58*	Weather	Snow/Sleet & Fog	It is both snowing and foggy at the time of the Precipitating Event.	
58*	Weather	Other	There is some type of adverse atmospheric condition present, not described in other categories, at the time of the Precipitating Event.	Ex. smog, blowing sand, blowing snow (not falling from sky), crosswind, hail, sand/dust, smoke
58*	Weather	Unknown	Cannot determine the weather at the time of the Precipitating Event due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
59*	Surface Type	Paved, smooth	Driving surface is made from paved material, with little or few potholes, seams, or other features that would decrease the smoothness of the surface at the location of the event.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
59*	Surface Type	Paved, rough	Driving surface is made from paved material, but with potholes, seams, or other features that decrease the smoothness of the surface at the location of the event.	
59*	Surface Type	Gravel/Dirt road	Driving surface is made of gravel, dirt, or sand at the location of the Precipitating Event.	
59*	Surface Type	Gravel/Dirt over pavement	Driving surface is made from paved material, but with gravel, dirt, or sand over top of the pavement at the location of the Precipitating Event.	
59*	Surface Type	Grass	Driving surface is grassy at the location of the Precipitating Event.	
59*	Surface Type	Other	Driving surface is made of a material not included in other categories at the location of the Precipitating Event.	Ex., brick
59*	Surface Type	Unknown	Cannot determine the type of road surface at the time of the Precipitating Event due to limitations in video views, lighting, visual obstructions, or limited perspective.	
60*	Surface Condition	Dry	There is no foreign material (rain, snow, oil, etc.) on the roadway in the area of the event (nothing on the road to affect the driving task).	
60*	Surface Condition	Wet	Roadway is completely or partially wet in the area of the event (not snowy, icy, muddy, or oily).	
60*	Surface Condition	Snowy	There is some amount of unmelted snow or slush on the roadway in the area of the event (no ice on the road in the area of interest).	If other conditions are also present in the area affecting the event, choose the first category from this list that is applicable: icy, snowy, oily, or muddy, and add other conditions to narrative.
60*	Surface Condition	Icy	There is some amount of ice on the roadway in the area of the event.	If there is ice on the surface that affects the event, code as icy, regardless of any other coexisting conditions. Add other conditions to narrative.
60*	Surface Condition	Muddy	There is some amount of mud on the roadway in the area of the event, enough to affect the driving task.	If other conditions (other than simply a wet road) are also present in the area affecting the event, choose the first category from this list that is applicable: icy, snowy, or oily. Add other conditions to narrative.
60*	Surface Condition	Oily	There is some amount of oil, grease, or other slippery fluid on the roadway in the area of the event, enough to affect the driving task.	If the road is also icy (or icy and snowy) in the area affecting the event, categorize as icy. If the road is also snowy, categorize as snowy. Add other conditions to narrative.
60*	Surface Condition	Other	There is some type of foreign substance on the road, not listed in previous categories, enough to affect the driving task.	If the substance on the road can be driven over, but would affect the vehicle's coefficient of friction, code as "other" road condition. Material large or harmful enough to necessitate maneuvering around it would be categorized as an object or obstacle in the road and is not considered a Surface Condition.
60*	Surface Condition	Unknown	Cannot determine whether any Surface Conditions affected the event due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
61*	Roadway Alignment	Straight	Roadway alignment is straight in the vicinity of the event.	
61*	Roadway Alignment	Curve left	Roadway alignment is curved to the left in the vicinity of the event.	
61*	Roadway Alignment	Curve right	Roadway alignment is curved to the right in the vicinity of the event.	
61*	Roadway Alignment	Other	Roadway alignment in the vicinity of the event is known, but is not described in previous categories.	
61*	Roadway Alignment	Unknown	Cannot determine roadway alignment due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
62*	Roadway Grade	Level	Roadway profile is flat (no hills or grade) in the vicinity of the event.	
62*	Roadway Grade	Grade Up	Roadway profile is uphill relative to the subject vehicle in the vicinity of the event.	
62*	Roadway Grade	Grade Down	Roadway profile is downhill relative to the subject vehicle in the vicinity of the event.	
62*	Roadway Grade	Hillcrest	Roadway profile creates a hillcrest (top or near top of hill) in the vicinity of the event.	
62*	Roadway Grade	Dip	Roadway profile creates a dip (e.g., between two hills, at the bottom or near the bottom) in the vicinity of the event.	
62*	Roadway Grade	Other	Roadway grade in the vicinity of the event is known, but is not described in previous categories.	
62*	Roadway Grade	Unknown	Cannot determine the roadway profile due to limitations in video views, lighting, visual obstructions, or limited perspective.	
63*	Traffic Flow	Not divided - simple 2-way trafficway	The trafficway being traveled by the subject vehicle is not divided (no median or barrier) and traffic in at least one travel lane travels in direct opposition to another travel lane. (e.g., The two directions of travel are separated by a double yellow line or no line.)	
63*	Traffic Flow	Not divided - center 2-way left turn lane	The trafficway being traveled by the subject vehicle is not divided (no median or barrier) but the two directions of travel are separated by a two-way center turn lane (aka, a reversible lane or "suicide lane").	
63*	Traffic Flow	Divided (median strip or barrier)	The trafficway being traveled by the subject vehicle is divided (by a median strip or barrier, for example) and traffic travels in only one direction on the subject driver's side of the division. Both directions of travel must have at least one lane of travel.	
63*	Traffic Flow	One-way traffic	The trafficway being traveled by the subject vehicle may be divided or not divided, but traffic in all lanes flows in the same direction.	Ex. one-way streets, entrance/exit ramps. Also include tunnels when all lanes in the tunnel travel in the same direction.
63*	Traffic Flow	No lanes	There are no marked or implied lanes of travel on the surface upon which the subject vehicle is traveling.	Ex. parking lots with no marked lanes, driveways.
63*	Traffic Flow	Unknown	Cannot determine the Traffic Flow due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
64*	Contiguous Travel Lanes	0	subject vehicle is not in an area intended for traffic or is within the boundaries of a parking lot or driveway.	
64*	Contiguous Travel Lanes	1	Only one lane is potentially available for travel at the time of the event. It is the only lane present, or it is separated from all other lanes by a median or barrier. This option should also be used if the subject vehicle driver is on a one-way roadway with no lane markings.	
64*	Contiguous Travel Lanes	2	Two lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier. Includes two-way roadways with no lane markings.	
64*	Contiguous Travel Lanes	3	Three lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier.	
64*	Contiguous Travel Lanes	4	Four lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier.	
64*	Contiguous Travel Lanes	5	Five lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier.	
64*	Contiguous Travel Lanes	6	Six lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier.	
64*	Contiguous Travel Lanes	7	Seven lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier.	
64*	Contiguous Travel Lanes	8+	Eight or more lanes are potentially available for travel at the time of the event and there are no medians or other raised barriers dividing them in any way. They are the only lanes present, or they are separated from all other lanes by a median or barrier.	
64*	Contiguous Travel Lanes	Unknown	Cannot determine the number of contiguous travel lanes due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
65*	Through Travel Lanes	0	subject vehicle is not in an area intended for traffic OR all lanes in the subject's direction of travel are dedicated turn lanes or acceleration/deceleration lanes OR subject is within the boundaries of a parking lot or driveway.	
65*	Through Travel Lanes	1	Only one through lane (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) is available for travel in the subject 's current travel direction at the time of the event. It is the only through lane present, or it is separated from all other through lanes by a median or barrier This option should also be used if the subject vehicle driver is on a one-way roadway with no lane markings.	
65*	Through Travel Lanes	2	Two through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject 's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	
65*	Through Travel Lanes	3	Three through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	
65*	Through Travel Lanes	4	Four through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	
65*	Through Travel Lanes	5	Five through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	
65*	Through Travel Lanes	6	Six through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	
65*	Through Travel Lanes	7	Seven through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
65*	Through Travel Lanes	8+	Eight or more through lanes (not counting turn lanes, restricted lanes, acceleration/deceleration lanes) are available for travel in the subject's current travel direction at the time of the event. They are the only through lanes present, or they are separated from all other through lanes by a median or barrier.	
65*	Through Travel Lanes	Unknown	Cannot determine the number of through travel lanes due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
66*	V1 Lane Occupied	Numbers 1 through 8+	Enter the lane number assignment in which the subject vehicle is traveling at the time of the Precipitating Event, starting with the through lane closest to the median or center line as lane #1. If the vehicle is in the process of changing lanes, enter the destination lane. Do not count turn lanes, restricted lanes, or acceleration/deceleration lanes in this count (use the options below for this condition). Lane #1 would be the left most through lane in the direction of travel. If the subject is not in a through lane, enter "dedicated right turn lane", "dedicated left turn lane", "acceleration lane", "deceleration lane", or "No Lane" as appropriate. Enter "No Lane" if the area is not intended for traffic or the subject is within the boundaries of a parking lot or driveway. If the subject is in the process of changing lanes and has already crossed the lane line, enter the destination lane.	
66*	V1 Lane Occupied	1-LS left through 8+LS left (MC Only)	Motorcycle is lane splitting to the left. Lane splitting is riding between occupied lanes of vehicles traveling in the same direction). Motorcycle is in the leftmost portion of the indicated lane. Lane splitting will be coded in this manner if the motorcycle is positioned to allow moving between cars in adjacent lanes, and has just completed the maneuver (within the last 2 seconds), is in the process of maneuver, or is preparing to ride between these cars (within the next 2 seconds). If motorcycle is close to the lane line but is not splitting, preparing to split, or having just split (e.g., is lane sharing with another motorcycle alongside), do not code as splitting. Note that Lane Splitting is legal in some locations.	For example, if the rider is splitting between cars in lanes 1 and 2, but is in the left portion of Lane 2 while splitting (lane line is closer to the left side of the forward view than the right), code as 2-LS Left. If it appears that the motorcycle is directly on the lane line, code according to the direction from which it last came (e.g., if rider is riding the line between lanes 1 and 2 but came from the right (lane 2), code as 2-LS Left.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
66*	V1 Lane Occupied	1-LS right through 8+-LS right (MC Only)	Motorcycle is lane splitting to the right. Lane splitting is riding between occupied lanes of vehicles traveling in the same direction. Motorcycle is in the rightmost portion of the indicated lane. Lane splitting will be coded in this manner if the motorcycle is positioned to allow moving between cars in adjacent lanes, and has just completed the maneuver (within the last 2 seconds), is in the process of maneuver, or is preparing to ride between these cars (within the next 2 seconds). If motorcycle is close to the lane line but is not splitting, preparing to split, or having just split (e.g., is lane sharing with another motorcycle alongside), do not code as splitting. Note that Lane Splitting is legal in some locations.	For example, if the rider is splitting between cars in lanes 1 and 2, but is in the 1st lane (thus on the right side of the lane), code Lane Occupied as 1-LS Right. If it appears that the motorcycle is directly on the lane line, code according to the direction from which it last came (e.g., if rider is riding the line between lanes 1 and 2 but came from the left (lane 1), code as 1-LS Right.
66*	V1 Lane Occupied	Dedicated left turn lane	Subject is in a dedicated left turn lane at the time of the Precipitating Event.	
66*	V1 Lane Occupied	Dedicated right turn lane	Subject is in a dedicated right turn lane at the time of the Precipitating Event.	
66*	V1 Lane Occupied	Center 2-way turn lane	Subject is in a center 2-way turn lane at the time of the Precipitating Event.	
66*	V1 Lane Occupied	Acceleration lane	Subject is in a dedicated acceleration lane at the time of the Precipitating Event and will need to merge onto the current roadway.	
66*	V1 Lane Occupied	Deceleration lane	Subject is in a dedicated deceleration lane at the time of the Precipitating Event with the intention of exiting the current roadway.	
66*	V1 Lane Occupied	Oncoming traffic lane	Subject is in a lane intended specifically for oncoming traffic at the time of the Precipitating Event.	
66*	V1 Lane Occupied	Loading/unloading lane	Subject is in a lane intended specifically for loading and unloading passengers, luggage, and/or cargo at the time of the Precipitating Event. This does not include events where the subject is within the boundaries of a parking lot (coded as no lanes) or instances where the subject is loading or unloading passengers/luggage in a shoulder or travel through lane.	
66*	V1 Lane Occupied	No lane	subject vehicle is not in an area intended for traffic. (Contiguous Travel Lanes = 0.)	
66*	V1 Lane Occupied	Unknown w/ Lane splitting (MC Only)	Cannot determine the number of through travel lanes due to limitations in video views, lighting, visual obstructions, or limited perspective. But it is known that the motorcycle is lane splitting.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
66*	V1 Lane Occupied	Unknown	Cannot determine the number of through travel lanes due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
67*	V1 Lane Position (MC only)	Left	The motorcycle is in the rider's left portion of the lane indicated in the variable "V1 Lane Occupied"	If the left lane line is obviously further from the left edge of the forward video view than the right lane line is from the right edge of this view, code as Left for Lane Position. If lanes are not marked, this assignment should be assigned by referring to "implied" lane lines.
67*	V1 Lane Position (MC only)	Center	The motorcycle is in the center portion of the lane indicated in the variable "V1 Lane Occupied"	If the left lane line is approximately the same distance from the left edge of the forward video view as the right lane line is from the right edge of this view, code as Center for Lane Position. If lanes are not marked, this assignment should be assigned by referring to "implied" lane lines.
67*	V1 Lane Position (MC only)	Right	The motorcycle is in the center portion of the lane indicated in the variable "V1 Lane Occupied"	If the right lane line is obviously further from the right edge of the forward video view than the left lane line is from the left edge of this view, code as Right for Lane Position. If lanes are not marked, this assignment should be assigned by referring to "implied" lane lines.
67*	V1 Lane Position (MC only)	No lane	Subject vehicle is not in an area intended for traffic. (Contiguous Travel Lanes = 0.)	
67*	V1 Lane Position (MC only)	Unknown	Cannot determine the lane position due to limitations in video views, lighting, visual obstructions, or limited perspective.	
68*	Traffic Density	Level-of-service A1: Free flow, no lead traffic	LOS A1 represents a free flow traffic situation when the subject vehicle has no leading traffic in any lane (following traffic may or may not be present). Individual users are unaffected by the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is at the highest level possible.	Driving-related decisions are made with virtually no need to consider the presence of other vehicles (due to the lowest traffic density).
68*	Traffic Density	Level-of-service A2: Free flow, leading traffic present	LOS A2 represents a free flow traffic with a leading vehicle present in at least one lane. However, individual drivers are still virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.	Ex. 1: If more than 1 lane is present in the direction of travel, then LOS A2 may apply if there is a lead vehicle in the subject's lane but no vehicles in the adjacent lane preventing the driver from passing the lead vehicle. If there is a lead vehicle, there should be no or very few other vehicles on the road in order to qualify for LOS A, and speed selection should be unconstrained. Ex. 2: If the subject is preparing to exit, merge, change lanes, etc., then no other vehicles should be in position to potentially interfere with this maneuver to be considered LOS A.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
68*	Traffic Density	Level-of-service B: Flow with some restrictions	LOS B is still in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.	<p>Driving-related decisions are made with a small need to consider the presence of other vehicles (due to a fairly low traffic density).</p> <p>Ex. 1: If only 1 through lane is present, LOS B may apply if a lead vehicle is present at a fairly constant range and the subject is moderating vehicle speed to match that of the lead vehicle, but speeds are still at or near the speed limit.</p> <p>Ex. 2: If &gt;1 through lane is present, then LOS B may apply if there is a lead vehicle as well as an adjacent vehicle preventing the driver from easily passing OR if there are adjacent vehicles on both sides. However, this situation should be transient. The subject driver should not be "boxed" in for a more than a few seconds. LOS B would also apply if several vehicles are present in the mid-range vicinity, even if they are not directly in front of or adjacent to the subject. Driving speeds are still at or near the speed limit and are not persistently affected by surrounding traffic.</p> <p>Ex. 3: If the subject is preparing to exit, merge, change lanes, etc. in an LOS B environment, there will be at least one vehicle that could pose a potential hazard and requires monitoring by the subject, but the maneuver can still be completed fairly easily.</p>

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
68*	Traffic Density	Level-of-service C: Stable flow, maneuverability and speed are more restricted	LOS C is still in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the driver. The general level of comfort and convenience declines noticeably at this level.	<p>Driving-related decisions are made with a definite need to consider the presence of other vehicles, with a good chance of mishap if such considerations are not made (due to a medium traffic density).</p> <p>Ex. 1: If only 1 through lane is present, LOS C may apply if subject has a lead vehicle AND another car is following the subject. OR, if subject is following multiple vehicles. In either case, the speed is significantly controlled by leading traffic, but the prevailing speed is not more than 10 mph below the speed limit.</p> <p>Ex. 2: If &gt;1 through lane is present, LOS C may apply if the subject is "boxed in" by lead and adjacent vehicles and this condition is not transient (e.g., it persists as the vehicles travel for some time). LOS C would also apply if multiple vehicles are present in the near-range vicinity, and travel speeds are moderately affected (but are not more than 10 mph below the posted speed limit).</p> <p>Ex. 3: If the subject is preparing to exit, merge, change lanes, etc. in an LOS C environment, there will be multiple vehicles posing potential hazards and requiring careful monitoring by the subject. The maneuver will be more difficult, but will generally be completed without incident.</p>



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
68*	Traffic Density	Level-of-service D: Unstable flow - temporary restrictions substantially slow driver	LOS D represents a high-density, but stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.	<p>Driving-related decisions are made with urgent need to consider the presence of other vehicles, with a great likelihood of mishap if such considerations are not made (due to a fairly high traffic density).</p> <p>Ex. 1: If only 1 through lane is present, LOS D may apply if subject is following another car AND another car is following the subject. OR, if subject is following multiple vehicles. In either case, the speed is significantly controlled by leading traffic, and prevailing speed is more than 10 mph below the speed limit.</p> <p>Ex. 2: If &gt;1 through lane is present, LOS D may apply if the subject is persistently "boxed in" by lead vehicles and adjacent vehicles, AND the prevailing travel speed is determined by surrounding traffic and is more than 10 mph below the posted speed limit.</p> <p>Ex. 3: If the subject is preparing to exit, merge, change lanes, etc. in an LOS D environment, there will be multiple vehicles posing potential hazards and requiring careful monitoring. The maneuver will not be easy and will likely involve braking, accelerating, or excessive steering on the part of the subject or other vehicles.</p>

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
68*	Traffic Density	Level-of-service E: Flow is unstable, vehicles are unable to pass, temporary stoppages, etc.	LOS E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.	Driving-related decisions are made with an urgent need to consider the presence of other vehicles, with a great likelihood of mishap if such considerations are not made/freedom to execute maneuvers is severely restricted such that drivers must be aggressive in maneuvering (due to a very high traffic density). Ex. 1: If only 1 through lane is present, LOS E may apply if subject is following multiple cars AND multiple cars are following the subject. The speed is significantly controlled by leading traffic, and the prevailing speed is reduced to less than half the posted speed limit. Ex. 2: If >1 through lane is present, then LOS E may apply if the subject is persistently "boxed in" by lead vehicles and adjacent vehicles, AND the prevailing travel speed is determined by surrounding traffic and is less than half the posted speed limit. Ex. 3: If the subject is preparing to exit, merge, change lanes, etc. in an LOS E environment, there will be multiple vehicles posing potential hazards and requiring careful monitoring by the subject. The maneuver will be "forced" and will likely involve braking, accelerating, or excessive steering on the part of both the subject and other vehicles.
68*	Traffic Density	Level-of-service F: Forced traffic flow condition with low speeds and traffic volumes that are below capacity	LOS F represents forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. LOS F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow, which causes the queue to form, and level-of-service F is an appropriate designation for such points.	Traffic flow and related driving decisions are based entirely on the presence and actions of other vehicles (due to the highest traffic density). Ex. 1: Regardless of the number of travel lanes, LOS F represents "traffic jam" or "stop and go" conditions. Ex. 2: If the subject is preparing to exit, merge, change lanes, etc. queues will be forming or present either in the subject's desired lane and/or in the subject's destination lane. The maneuver will be "forced" and will involve braking, accelerating, or excessive steering on the part of both the subject and other vehicles.
68*	Traffic Density	Not Applicable	Event occurs within the boundaries of a parking lot or other environment where it is not appropriate to measure the throughput of traffic.	
68*	Traffic Density	Unknown	Cannot determine the traffic density due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

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<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
69*	Parking Lot Demand	Empty lot, no activity	Parking lot is empty of other motorists and non-motorists with no activity other than that of the subject.	
69*	Parking Lot Demand	0-25% Occupied	Parking lot spaces (in the vicinity of the subject vehicle) are less than 25% occupied based on visual estimation, but the parking lot is not otherwise empty.	
69*	Parking Lot Demand	26-75% Occupied	Parking lot spaces (in the vicinity of the subject vehicle) are between 26% and 75% occupied based on visual estimation.	
69*	Parking Lot Demand	76-100% Occupied	Parking lot spaces (in the vicinity of the subject vehicle) are more than 75% occupied based on visual estimation.	
69*	Parking Lot Demand	Not Applicable	Event does not occur within the boundaries of a parking lot (or similar). Traffic Density variable is coded instead.	
69*	Parking Lot Demand	Unknown	Cannot determine the Parking Lot Demand due to limitations in video views, lighting, visual obstructions, or limited perspective.	
70*	Traffic Control	No traffic control	There is no traffic control applicable to the subject vehicle at the time of the Precipitating Event.	
70*	Traffic Control	Officer or watchman	An officer or other person is assigned to controlling some aspect of the traffic flow applicable to the subject vehicle at the time of the Precipitating Event.	Include crossing guard, flagman.
70*	Traffic Control	Traffic signal	A traffic signal (by colors or flashing) is controlling some aspect of the traffic flow applicable to the subject vehicle at the time of the Precipitating Event.	
70*	Traffic Control	Stop sign	A stop sign is controlling some aspect of the traffic flow applicable to the subject vehicle at the time of the Precipitating Event.	
70*	Traffic Control	School zone related sign	A sign indicating some type of special condition related to the proximity of a school is present in the vicinity of the event.	Ex. slow speed school zone
70*	Traffic Control	Construction signs/warnings	A sign indicating some type of special condition related to construction is present in the vicinity of the event.	
70*	Traffic Control	Slow or warning sign, other	A slow or warning sign (if not described more specifically in another category) is controlling some aspect of traffic flow applicable to the subject vehicle at the Precipitating Event.	Includes any black on orange/yellow diamond shaped sign not included in other categories. Some black on yellow horizontal rectangular or vertical rectangular signs are also included.
70*	Traffic Control	Traffic lanes marked	There are markings on the road that contain information or warnings applicable to the driving task for the subject vehicle at the Precipitating Event. (Use if no other types of devices are used to convey the same information.)	Ex. pavement markings such as crosswalks, turn arrows, stop bars--use if no other controls conveying this information are present. Note that GES does not include this category.
70*	Traffic Control	No passing signs	A sign indicating that the subject vehicle is in a no passing zone is applicable at the Precipitating Event.	
70*	Traffic Control	Yield sign	A yield sign is controlling some aspect of the traffic flow applicable to the subject vehicle at the Precipitating Event.	
70*	Traffic Control	One-way road or street	A sign indicating the presence of a one-way road or street is controlling traffic flow applicable to the subject vehicle at the Precipitating Event.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
70*	Traffic Control	Railroad crossing with markings or signs	A railroad crossing with associated signage only (including markings on the road, signs, cross bucks) is controlling some aspect of traffic flow applicable to the subject vehicle at the Precipitating Event.	
70*	Traffic Control	Railroad crossing with signals, no gate	A railroad crossing with associated signals (including flashing lights, traffic lights) but no gate is controlling some aspect of traffic flow applicable to the subject vehicle at the Precipitating Event.	
70*	Traffic Control	Railroad crossing with gate, no signal	A railroad crossing with a gate, but no signals (including flashing lights, traffic lights) controlling some aspect of traffic flow applicable to the subject vehicle at the Precipitating Event.	
70*	Traffic Control	Railroad crossing with gate and signals	A railroad crossing with associated gate(s) with or without signals (including flashing lights, traffic lights) is controlling some aspect of traffic flow applicable to the subject vehicle at the Precipitating Event.	
70*	Traffic Control	Other	There is some known type of traffic control device, not described in previous categories, controlling some aspect of traffic flow applicable to the subject vehicle at the Precipitating Event.	Ex. toll booths, parking gates, drive through, traffic circles, roundabouts, speed bumps
70*	Traffic Control	Unknown	Cannot determine if a traffic control is applicable due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
71*	Relation to Junction	Non-junction	Subject vehicle is not close to a junction (the area formed by the connection of two roadways).	Ex. normal roadway
71*	Relation to Junction	Intersection	Subject vehicle is at or very close (within a standard car length or about 5 meters) to an intersection where the roads cross at the same grade.	See Figure 3 in Researcher Dictionary for Video Reduction Data. Ex. subject or other vehicle is first at intersection. Includes traffic circles (roundabouts).
71*	Relation to Junction	Intersection-related	Subject vehicle is close (within 4 standard car lengths or about 20 meters) to an intersection (where roads cross at the same grade), either approaching or exiting the intersection.	See Figure 3 in Researcher Dictionary for Video Reduction Data. Ex. subject vehicle is 3-4 cars back from the intersection, in a line of traffic waiting to pass through the intersection, being directly influenced by the intersection.
71*	Relation to Junction	Entrance/exit ramp	Subject vehicle is on or entering/exiting an exit or entrance ramp (a transition roadway connecting two roadways or used for entering or exiting through-traffic lanes).	A ramp can form an intersection with a roadway as well as diverge from or merge into one, can form a channeled intersection, or can split into two ramps.
71*	Relation to Junction	Rail grade crossing	Subject vehicle is close to the at-grade connection of a railroad bed and roadway.	
71*	Relation to Junction	Interchange area	Subject vehicle is within the boundaries of an interchange area, defined as a road junction that typically utilizes grade separation and one or more ramps to permit traffic on at least one road to pass through the junction without crossing any other traffic stream. Interchange areas must feature either an acceleration or deceleration lane. Subject vehicle is not on the entrance or exit ramp(s), but on one of the through roads.	See Figure 4 in Researcher Dictionary for Video Reduction Data.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
71*	Relation to Junction	Parking lot entrance/exit	Subject vehicle is entering/exiting a parking lot or is at the intersection of a parking lot entrance and another trafficway that is not controlled by a traffic signal (but may be controlled partially by a stop sign). If this entrance is controlled by a traffic signal, code as "Intersection" or "Intersection related".	Include cases when the vehicle is in a center 2-way turn lane and can turn left and oncoming traffic can use that same lane and turn left into parking lots, etc.
71*	Relation to Junction	Parking lot, within boundary	Subject vehicle is within the boundaries of a parking lot. Includes driving lanes around the outside of parking lot if they are not separated from the parking lot by a median.	
71*	Relation to Junction	Driveway, alley access, etc.	Subject vehicle is on or entering/exiting a driveway, alley, or some other roadway providing access to property adjacent to the trafficway that is not controlled by a traffic signal (but may be partially controlled by a stop sign) or is at the intersection of such a trafficway and another trafficway. If this entrance is controlled by a traffic signal, code as "Intersection" or "Intersection related".	
71*	Relation to Junction	Crossover related	Subject vehicle is in, entering, or exiting a crossover. A crossover is a break in a median to allow for U-turns and/or emergency service vehicles to pass through.	
71*	Relation to Junction	Other	Subject vehicle is related to a junction in a manner not described in other categories.	Includes cross-walks, "jug handles", etc..
71*	Relation to Junction	Unknown	Cannot determine if subject vehicle is at or near a junction due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
72*	Intersection Influence	Yes, Traffic Signal	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is influenced by a traffic signal at the time of the event. This can include accelerating or decelerating in a queue of traffic or in response to signal color changes or in preparation for a turn at such an intersection, moving between through lanes and turn lanes, yielding to oncoming or cross traffic, etc. Does not include green lights that have no impact on the subject's travel during the event (to be coded as "No"). Includes parking lot and driveway entrance/exits that are control by a traffic signal.	
72*	Intersection Influence	Yes, Stop Sign	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is influenced by a stop sign at the time of the event. This can include accelerating or decelerating in a queue of traffic or in preparation for a turn, moving between through lanes and turn lanes, yielding to oncoming or cross traffic, etc. Includes parking lot and driveway exits when the Subject is the exiting vehicle and is Subject to a stop sign.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
72*	Intersection Influence	Yes, Uncontrolled	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is influenced by an intersection or intersecting trafficway, other than a driveway or parking lot entrance/exit, that is not controlled (in the subject's direction of travel) by any type of traffic control device. This can include accelerating or decelerating in a queue of traffic or in preparation for a turn, moving between through lanes and turn lanes, yielding to oncoming or cross traffic, etc. Generally will only be coded if cross traffic or oncoming traffic is moving across the subject's intended travel path and requiring some speed or steering response from the subject.	
72*	Intersection Influence	Yes, Parking lot, Driveway Entrance/Exit	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is influenced by a parking lot or driveway entrance/exit that is not controlled (in the subject's direction of travel) by any type of traffic control device (although other involved vehicles may or may not have a stop sign). This can include the Subject or other involved vehicle(s) decelerating in traffic in preparation to turn into a parking lot or driveway, turning into or out of a parking lot or driveway, yielding to oncoming or cross traffic prior to turning in or exiting a parking lot or driveway, etc.	
72*	Intersection Influence	Yes, Interchange	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is influenced by an interchange area at the time of the event. This can include accelerating or decelerating in a queue of traffic or prior to merging, moving between through lanes and acceleration/deceleration lanes, yielding to traffic in adjacent lanes related to merging by the Subject or another vehicle, etc.	
72*	Intersection Influence	Yes, Other	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is influenced by some other type of intersection or intersecting trafficway not listed in other categories at the time of the event.	This can include influences related to crosswalks, railroad crossings, traffic circles/roundabouts, etc.
72*	Intersection Influence	No	Subject vehicle's safe movement along the roadway (e.g., speed, travel path, lane changes) is not influenced by any type of intersection or intersecting trafficway at the time of the event. This may be coded even if the Subject is in or near an intersection or intersecting trafficway provided that the subject's speed, travel path, etc. are not being actively affected during the event.	
72*	Intersection Influence	Unknown	Cannot determine whether the Subject is being influenced by an intersection due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

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<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
73*	Roadway Feature	On a bridge or overpass	Subject is entering, inside of, or exiting a bridge or overpass at the time of the Precipitating Event, regardless of the length of the bridge or overpass. Does not include parking garages or multi-level road situations.	
73*	Roadway Feature	Under a bridge or overpass	Subject is under, or in the process of moving under or out of under a bridge or overpass at the time of the Precipitating Event. Does not include parking garages or multi-level road situations.	
73*	Roadway Feature	Tunnel	Subject is entering, inside of, or exiting a tunnel at the time of the Precipitating Event.	
73*	Roadway Feature	Toll booth	Subject is approaching, in, or leaving a toll booth at the time of the Precipitating Event. "Toll booth" is defined as the entire area starting at the point where the travel lanes begin to split out prior to the toll booth until they fully converge back into a normal roadway after the toll booth.	
73*	Roadway Feature	Traffic circle	Subject is entering, in, or exiting a traffic circle or round-about at the time of the Precipitating Event.	
73*	Roadway Feature	Jug handle	Subject is entering, in, or exiting a jug handle at the time of the Precipitating Event.	
73*	Roadway Feature	Other	Subject is entering, in, or exiting some roadway feature not included in other categories at the time of the Precipitating Event.	
73*	Roadway Feature	None	Subject is not in or near any of the above roadway features at the time of the Precipitating Event.	
73*	Roadway Feature	Unknown	Cannot determine whether the subject in or near any special roadway feature due to limitations in video views, lighting, visual obstructions, or limited perspective.	
74*	Locality	Open country	Other than the roadway, there is nothing but vegetation visible during the time surrounding the Precipitating Event that is described in any of the other categories. Road is not an Interstate or a bypass/divided highway with traffic signals. (Often appears as rural roads, 2 lanes undivided.)	Includes roadways not defined as Interstate or divided highway, when no landmarks mentioned in other categories are visible.
74*	Locality	Open Residential	Rural to semi-rural areas where there may be only one or a few houses around (i.e., farmland).	
74*	Locality	Moderate Residential	An area where multiple houses or apartment buildings are present, but is not as dense as an Urban Locality.	e.g., residential subdivisions
74*	Locality	Business/industrial	Any type of business or industrial structure is present, but is not as dense as an Urban Locality. (If there are also houses visible, this category takes precedence over Open residential and Moderate residential).	
74*	Locality	Church	One or more involved vehicle passes a church building at the time of the Precipitating Event.	
74*	Locality	Playground	One or more involved vehicle passes any type of playground or children's playing field at the time of the Precipitating Event.	If playground/field is on school grounds, code as School.

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<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
74*	Locality	School	One or more involved vehicles passes any type of school building or is in a school zone at the time of the Precipitating Event, including adult learning institutions.	Include any training centers, universities, etc. as well as elementary and secondary schools.
74*	Locality	Urban	Higher density area where blocks are shorter, streets are a mix of one and two way, and traffic can include buses and trams. (This category takes precedence over others when either businesses and/or residences are present.)	
74*	Locality	Airport	Vehicle(s) are traveling within or between or are entering or exiting an airport terminal situation where arrivals and departures create complicated parking and cross-lane navigation traffic and pedestrian traffic is likely to be high.	
74*	Locality	Interstate/bypass/ divided highway, controlled access	Vehicle is travelling on an interstate, bypass, or divided highway with no at-grade intersections (regardless of what buildings can be seen), at the time of the Precipitating Event. All traffic to and from the roadway must utilize an interchange.	
74*	Locality	Bypass/divided highway, access not controlled	Vehicle is travelling on a bypass or divided highway with at grade intersections present (either uncontrolled, stop signs, or traffic signals) and no other category description fits at the time of the Precipitating Event. Traffic to and from the roadway are not required to use an Interchange. (Often appears as "Open Country", but with more lanes and/or as a divided road.)	
74*	Locality	Other	Locality at the time of the Precipitating Event is one not described in other categories.	Ex. In campground.
74*	Locality	Unknown	Cannot determine the Locality due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
75*	Construction Zone	Not construction zone-related	Vehicle is not in, approaching, or otherwise affected by a construction zone (construction equipment, barrel, etc. are visible) at the time of the Precipitating Event.	
75*	Construction Zone	Construction Zone (occurred in zone)	Vehicle is in a construction zone (construction equipment, barrel, etc. are visible) at the time of the Precipitating Event.	
75*	Construction Zone	Construction zone-related (occurred in approach or otherwise related to zone)	Vehicle is approaching or is otherwise affected by a construction zone (construction equipment, barrel, etc. are visible) at the time of the Precipitating Event.	
75*	Construction Zone	Unknown	Cannot determine if the event happened in or in relation to a construction zone due to limitations in video views, lighting, visual obstructions, or limited perspective.	
76	Number of Other Motorists/ Non-Motorists	0	No other motorists/non-motorists were involved in the crash or near-crash (only the subject vehicle). A single vehicle event.	If Motorist/Non-Motorist 2,3 only interacts with objects or animals: code as 0.



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
76	Number of Other Motorists/ Non-Motorists	1	One other motorist/non-motorist (in addition to the subject vehicle) was involved in the crash or near-crash.	
76	Number of Other Motorists/ Non-Motorists	2	Two other motorists/non-motorists (in addition to the subject vehicle) were involved in the crash or near-crash.	
76	Number of Other Motorists/ Non-Motorists	3	Three other motorists/non-motorists (in addition to the subject vehicle) were involved in the crash or near-crash.	
76	Number of Other Motorists/ Non-Motorists	4	Four other motorists/non-motorists (in addition to the subject vehicle) were involved in the crash or near-crash.	
76	Number of Other Motorists/ Non-Motorists	5 or more	Five or more other motorists/non-motorists (in addition to the subject vehicle) were involved in the crash or near-crash.	
76	Number of Other Motorists/ Non-Motorists	Unknown	Cannot determine the number of other motorists/non-motorists involved in the crash due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
77	Number of Objects/ Animals	0	No animals/objects were involved in the crash or near-crash.	If only interaction is with motorists and non-motorists, code as 0.
77	Number of Objects/ Animals	1	One animal/object was involved in the crash or near-crash.	
77	Number of Objects/ Animals	2	Two animals/objects were involved in the crash or near-crash.	
77	Number of Objects/ Animals	3	Three animals/objects were involved in the crash or near-crash.	
77	Number of Objects/ Animals	4	Four animals/objects were involved in the crash or near-crash.	
77	Number of Objects/ Animals	5 or more	Five or more animals/objects were involved in the crash or near-crash.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
77	Number of Objects/ Animals	Unknown	Cannot determine the number of other motorists/non-motorists involved in the crash due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
78	Fault	Subject driver	The driver of the subject vehicle obviously committed the error that led to the event.	
78	Fault	Driver 2	The driver of vehicle 2 (or non-motorist) obviously committed the error that led to the event.	
78	Fault	Driver 3	The driver of vehicle 3 (or non-motorist) obviously committed the error that led to the event.	
78	Fault	Shared Fault	More than one motorist or non-motorist committed errors that contributed to the event.	
78	Fault	No Fault	No motorists or non-motorists committed any errors that led to the event. This is often (but not always) true for animal-related conflicts and objects in the roadway.	
78	Fault	Unable to determine	Can't determine or make a judgment as to whether one driver or non-motorist was completely at fault. Likely more than one driver or non-motorist share the fault.	
78	Fault	Unknown	Cannot determine the fault due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
78	Fault	Not applicable	Code as not applicable if the other party(ies) involved is an object or animal that the driver cannot be expected to anticipate and/or avoid.	Medians, curbs, barriers are generally coded as Motorist/Non-Motorist 2,3 Driver at fault.
79, 87	Motorist/ Non-Motorist 2, 3 Type	Automobile	Light vehicle designed primarily to transport passengers in an enclosed (or convertible) space (includes automobile derivatives such as auto-based pickups).	Ex. convertible; 2-door sedan, hardtop, coupe; 2 to 5-door hatchback; 3-door coupe; 4-door sedan; station wagon (excluding van- and truck-based); cargo station wagon, El Camino, auto-based ambulance/hearse; large limousine; 3-wheeled automobile
79, 87	Motorist/ Non-Motorist 2, 3 Type	Sport Utility Vehicle	Utility vehicle designed to have off-road capabilities, less than or equal to 4,536 gross vehicle weight rating.	Ex. multi-purpose vehicle; compact utility vehicle; large utility vehicle; utility station wagon
79, 87	Motorist/ Non-Motorist 2, 3 Type	Van (minivan or standard van)	Vehicle designed to maximize cargo/passenger area versus overall length, has an enclosed cargo/passenger area and relatively short (or non-existent) hood, less than or equal to 4,536 gross vehicle weight rating.	Ex. minivan; large van; step van or walk-in van; van based motorhome; van based school bus; other van derivatives
79, 87	Motorist/ Non-Motorist 2, 3 Type	Pickup truck	Light conventional truck, pickup style small cab, large hood covering conventional engine placement, separate open box area for cargo, less than or equal to 4,536 gross vehicle weight rating.	
79, 87	Motorist/ Non-Motorist 2, 3 Type	Light Vehicle pulling trailer	Automobile, Sport Utility Vehicle, Van, or Pickup Truck pulling a trailer	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	School bus	Medium/heavy vehicle (not including van-based) designed to carry groups of passengers to and from educational facilities and/or related functions, characteristically painted yellow and clearly identified as school buses, gross vehicle weight rating more than 4,536 kg.	Includes private company school bus, school bus converted for other uses (e.g., church bus).
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Bus (transit, motor coach)	Medium/heavy motor vehicle (not including van-based) designed to transport large groups of passengers, not a school bus, gross vehicle weight rating more than 4,536 kg.	Includes transit, intercity, bus-based motorhome, charter bus.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Single-unit straight truck	A non-articulated truck designed to carry cargo, gross vehicle weight rating more than 4,536 kg.	Ex. Box trucks, delivery trucks, dump trucks, Garbage trucks, concrete mixers, flatbed truck, tow truck, large work pickup trucks (e.g., F450, 500), etc., as long as the truck is a single unit that doesn't not articulate when turning.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Single-unit straight truck + trailer	A non-articulated truck designed to carry cargo, gross vehicle weight rating more than 4,536 kg, with a trailing unit.	Ex., Tow truck pulling a trailer or towing a vehicle.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Tractor only	A fifth wheel equipped tractor-trailer power unit, gross vehicle weight rating more than 4,536 kg, without a trailer.	
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Tractor-trailer	A fifth wheel equipped tractor-trailer power unit, gross vehicle weight rating more than 4,536 kg, with trailer.	Ex., enclosed box trailer, open top/grain trailer, flatbed trailer, tank trailer, car carrier, livestock carrier, lowboy trailer, dump trailer, multiple trailer.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Other large construction equipment	Construction equipment other than trucks propelled by an internal combustion engine.	Includes bulldozer, steamroller, forklift, road grader.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Motorcycle or moped	Motorcycle is a two- or three-wheeled open vehicle (no enclosed body) propelled by an internal combustion engine (includes motorcycles equipped with side car), moped is a motorized bicycle capable of moving either by pedaling or by an internal combustion engine. Also includes other motored cycles (such as a mini-bike or motor scooter).	Does not include all-terrain vehicles (e.g., 3 or 4-wheelers).
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Emergency Vehicle	Any in-service vehicle readily identified through lights or markings that is used solely to provide emergency services. Vehicle must be identifiable as in-service by lights, markings, sirens, or observable actions. Vehicles not in service should be coded as the appropriate vehicle type.	Ex., ambulance, fire truck/car, police, rescue
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Other vehicle type	Vehicles not included in the categories listed above.	Includes all-terrain vehicles (3 and 4-wheelers), snowmobile, farm equipment (other than truck), construction equipment (other than truck).

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Pedestrian	Any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. Includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.	A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skateboard, skis, sled, wheel chair, rickshaw, and persons riding on or behind pulled by an animal).
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Pedalcyclist	A person on any type of self-propelled pedaled cycle, either driver or passenger, including bicycles, tricycles, and unicycles. Includes pedal cyclists who hold onto a motor vehicle in motion.	
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Other non-motorist	Any non-motorist person not listed in above categories.	A non-motorist conveyance is a human-powered device by which a non-motorist may move or may move another non-motorist (includes baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skateboard, skis, sled, wheel chair, rickshaw, and persons riding on or behind pulled by an animal. Does NOT include pedal cyclists or pedestrians.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Unknown type	Cannot determine the motorist/non-motorist type due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
79, 87	<b>Motorist/ Non-Motorist 2, 3 Type</b>	Not applicable	There is no motorist or non-motorist, thus no type to categorize.	
80, 88	<b>Object/Animal 2,3 Type</b>	Deer, elk, moose, bear (or similar)	Any type of live, large animal.	
80, 88	<b>Object/Animal 2,3 Type</b>	Other animal	Any type of small animal.	Ex., Dog, cat, squirrel, rabbit, bird, opossum
80, 88	<b>Object/Animal 2,3 Type</b>	Parked motor vehicle	Any type of vehicle that is in a parked position, with no immediate intention or expectation of movement.	
80, 88	<b>Object/Animal 2,3 Type</b>	Fixed object - Building	Object is a building.	
80, 88	<b>Object/Animal 2,3 Type</b>	Fixed object - Impact attenuator/crash cushion	Object is a device intended to attenuate an impact.	
80, 88	<b>Object/Animal 2,3 Type</b>	Fixed object - Bridge structure	Object is a bridge (not overhead), or part of a bridge support system.	(e.g., abutment)
80, 88	<b>Object/Animal 2,3 Type</b>	Fixed object - Guardrail	Object is a guardrail.	
80, 88	<b>Object/Animal 2,3 Type</b>	Fixed object - Concrete traffic barrier or other longitudinal barrier	Object is a concrete or other longitudinal barrier or median.	(e.g., "Jersey Barrier")

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
80, 88	Object/Animal 2,3 Type	Fixed object - Post, pole, or support	Object is a post or pole designed to support a sign, light, etc.	
80, 88	Object/Animal 2,3 Type	Fixed object - Culvert or ditch	Object is a culvert or ditch.	
80, 88	Object/Animal 2,3 Type	Fixed object - Curb	Object is a curb.	
80, 88	Object/Animal 2,3 Type	Fixed object - Embankment	Object is an embankment.	
80, 88	Object/Animal 2,3 Type	Fixed object - Fence	Object is a fence.	
80, 88	Object/Animal 2,3 Type	Fixed object - Wall	Object is a well (not part of a building).	
80, 88	Object/Animal 2,3 Type	Fixed object - Fire hydrant	Object is a fire hydrant.	
80, 88	Object/Animal 2,3 Type	Fixed object - Shrubbery or bush	Object is shrubbery or a bush.	
80, 88	Object/Animal 2,3 Type	Fixed object - Tree (not overhead)	Object is a tree (not overhead).	
80, 88	Object/Animal 2,3 Type	Fixed object - Boulder	Object is a boulder.	
80, 88	Object/Animal 2,3 Type	Fixed object - Loading dock	Object is a loading dock.	
80, 88	Object/Animal 2,3 Type	Fixed object - Loading equipment	Object is stationery loading equipment (e.g., forklift, pallets).	
80, 88	Object/Animal 2,3 Type	Fixed object - Cargo	Object is cargo.	
80, 88	Object/Animal 2,3 Type	Overhanging object - Tree branch	Object is an overhanging tree branch.	
80, 88	Object/Animal 2,3 Type	Overhanging object - Overhanging part of sign or post	Object is an overhanging part of sign or a post.	
80, 88	Object/Animal 2,3 Type	Overhanging object - Bridge/overpass	Object is an overhead bridge/overpass.	
80, 88	Object/Animal 2,3 Type	Overhanging object - Building	Object is an overhanging component of a building.	
80, 88	Object/Animal 2,3 Type	Overhanging object - Telephone wires	Object is overhead telephone wires.	
80, 88	Object/Animal 2,3 Type	Non-fixed object - Vehicle parts, including tire parts	Object is vehicle parts, including tire parts.	
80, 88	Object/Animal 2,3 Type	Non-fixed object - Spilled cargo	Object is spilled cargo.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
80, 88	Object/Animal 2,3 Type	Non-fixed object - Dead animal in roadway	Object is a dead animal in a roadway.	
80, 88	Object/Animal 2,3 Type	Non-fixed object - Broken tree limbs or other tree/shrub parts	Object is broken tree limbs or other tree/shrub parts.	
80, 88	Object/Animal 2,3 Type	Non-fixed object - Trash/debris	Object is trash or debris.	
80, 88	Object/Animal 2,3 Type	Non-fixed object - Construction barrel	Object is a construction barrel.	
80, 88	Object/Animal 2,3 Type	Non-fixed object - Construction cone	Object is a construction cone.	
80, 88	Object/Animal 2,3 Type	Other	Object is of a type not listed in other categories	
80, 88	Object/Animal 2,3 Type	Unknown	Cannot determine the object type due to limitations in video views, lighting, visual obstructions, or limited perspective.	
80, 88	Object/Animal 2,3 Type	Not Applicable	There is no object, thus no type to categorize.	
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	A = In front of the subject vehicle	Other vehicle, non-motorist, animal, or object is in front of the subject vehicle, in the path of travel, at the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data.
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	B = In front and to the immediate right of the subject vehicle	Other vehicle, non-motorist, animal, or object is in front of the subject vehicle, but to the right of the path of travel (closer to the passenger side of the vehicle) at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is ahead in right adjacent lane).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	BS = lane sharing, in front and to the immediate right of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but in front and to the right of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	C = On the right side of the subject vehicle, closer to the front seat of the vehicle.	Other vehicle, non-motorist, animal, or object is on the right (passenger) side of the subject vehicle, closer to the front than the back of the car at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is in the right adjacent lane next to hood and/or front passenger door).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	CS = lane sharing, beside front tire and to the immediate right of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but to the right and closer to the front tire of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	D = On the right side of the subject vehicle, closer to the rear seat of the vehicle.	Other vehicle, non-motorist, animal, or object is on the right (passenger) side of the subject vehicle, closer to the back than the front of the car at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is in the right adjacent lane next to the rear passenger door and/or trunk area).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	DS =lane sharing, beside rear tire and to the immediate right of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but to the right and closer to the rear tire of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	E = Behind and to the immediate right of the subject vehicle.	Other vehicle, non-motorist, animal, or object is behind the subject vehicle, but to the right of the path of travel (closer to the passenger side of the vehicle) at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is behind in right adjacent lane).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	ES =lane sharing, behind and to the immediate right of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but behind and to the right of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	F = Behind the subject vehicle	Other vehicle, non-motorist, animal, or object is behind the subject vehicle, in the path of travel at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data.
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	G = Behind and to the immediate left of the subject vehicle.	Other vehicle, non-motorist, animal, or object is behind the subject vehicle, but to the left of the path of travel at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is behind in left adjacent lane).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	GS =lane sharing, behind and to the immediate left of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but behind and to the left of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	H = On the left side of the subject vehicle, closer to the rear seat of the vehicle.	Other vehicle, non-motorist, animal, or object is on the left (driver) side of the subject vehicle, closer to the back than the front of the car at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is in the left adjacent lane next to the rear passenger door and/or trunk area).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	HS =lane sharing, beside rear tire and to the immediate left of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but to the left and closer to the rear tire of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	I = On the left side of the subject vehicle, closer to the front seat of the vehicle.	Other vehicle, non-motorist, animal, or object is on the left (driver) side of the subject vehicle, closer to the front than the back of the car at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is in the left adjacent lane next to hood and/or driver door).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	IS = lane sharing, beside front tire and to the immediate left of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but to the left and closer to the front tire of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	J = In front and to the immediate left of the subject vehicle	Other vehicle, non-motorist, animal, or object is in the front of the subject vehicle, but to the left of the path of travel (closer to the driver side of the vehicle) at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data (e.g., other vehicle is ahead in left adjacent lane).
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	JS = lane sharing, in front and to the immediate left of the subject vehicle (MC Only)	The majority of the other vehicle, non-motorist, animal, or object is in the same lane as, but in front of and to the left of the subject MC at the time of the Precipitating Event.	See Figure 5 in Researcher Dictionary for Video Reduction Data; motorcycles riding side by side, lane sharing
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	K = On top of vehicle	Other vehicle, non-motorist, animal, or object is located above the subject vehicle at the time of the Precipitating Event.	Ex., overhanging tree branches, low bridge
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	Curb, guardrail, or similar longitudinal barrier	Object is a curb, guardrail, or similar longitudinal barrier that does not have a discrete location.	
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	Unknown - Lane Sharing (MC Only)	Cannot determine the motorist/non-motorist position due to limitations in video views, lighting, visual obstructions, or limited perspective, but it is known that the motorcycle is lane sharing with another vehicle.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	Unknown	Cannot determine the motorist/non-motorist position due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
81, 89	Motorist/Non-Motorist/Object/Animal 2, 3 Location	Not applicable	There is no motorist, non-motorist, animal, or object involved, thus no location to categorize.	Ex., single-vehicle road departure
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Going straight, constant speed	Vehicle (V2 or V3) is traveling straight at what appears to be constant speed, and no other category listed below applies. (Straight travel path need not be very long.)	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Going straight, accelerating	Vehicle (V2 or V3) is traveling straight and appears to be accelerating, and no other category listed below applies. (Straight travel path need not be very long.)	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Going straight, but with unintentional "drifting" within lane or across lanes	Vehicle (V2 or V3) is traveling generally straight, but with occasional variance within travel lane or into adjacent lane.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Decelerating in traffic lane	Vehicle (V2 or V3) is traveling in lane and decelerating, and no other category listed below applies. Include slowing prior to a turn or curve or slowing/stopping for traffic.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Starting in traffic lane	Vehicle (V2 or V3) is in the process of accelerating from a stopped position in the travel lane. (Car was idling.)	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Stopped in traffic lane	Vehicle (V2 or V3) is stopped in travel lane, and the speed indicator reads 0 mph. Vehicle is not parked or disabled, but car is idling.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Passing or overtaking another vehicle	Vehicle (V2 or V3) is traveling straight ahead and is in the process of deliberately moving ahead of another vehicle on the left or right with intent to pass.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Disabled or parked in travel lane	Vehicle (V2 or V3) is stopped in travel lane, and the speed indicator reads 0 mph due to being parked or disabled. Driver is not required to be in the vehicle to use this category.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Leaving a parking position, moving forward	Vehicle (V2 or V3) is in the process of moving into the travel lane from a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) by moving forward.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Leaving a parking position, moving backward	Vehicle (V2 or V3) is in the process of moving into the travel lane from a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) by moving in reverse.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Entering a parking position, moving forward	Vehicle (V2 or V3) is in the process of moving from a travel lane into a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) from the travel lane by moving forward.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Entering a parking position, moving backward	Vehicle (V2 or V3) is in the process of moving from a travel lane into a parking space (parallel, diagonal, or perpendicular) adjacent to the traffic lane(s) from the travel lane by moving in reverse.	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Turning right	Vehicle (V2 or V3) is making a right turn after traveling forward, intending to travel in that new direction on a different roadway. (Does not include steering maneuvers to avoid an animal, pedestrian, pedal cyclist, or other vehicle.)	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Turning left	Vehicle (V2 or V3) is making a left turn after traveling forward, intending to travel in that new direction on a different roadway (Does not include steering maneuvers to avoid an animal, pedestrian, pedal cyclist, or other vehicle.)	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Making U-turn	Vehicle (V2 or V3) is making a 180-degree directional turn in the roadway, intending to travel in the opposite direction.	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Backing up (other than for parking purposes)	Vehicle (V2 or V3) is traveling backwards within the trafficway for a purpose other than entering or exiting a parked position.	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Negotiating a curve	Vehicle (V2 or V3) is in the process of traveling on a roadway that has (at that point) significant curvature to the right or left such that special attention is needed to maintain lane position and vehicle control.	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Changing lanes	Vehicle (V2 or V3) is traveling straight ahead and is in the process of changing from one travel lane to the adjacent one (left or right) while on the same roadway. Driver may or may not intend to pass a lead vehicle. (If lane change was unplanned and performed to avoid an animal, pedestrian, pedal cyclist, or other vehicle, code as the appropriate avoidance maneuver, listed below.)	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Merging	Vehicle (V2 or V3) is moving forward and in the process of merging from the left or right into a traffic lane.	
82, 90	<b>Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver</b>	Maneuvering to avoid an animal	Vehicle (V2 or V3) engages in a steering action with the sole purpose to avoid contact with a live animal, whether that animal is in motion or stationary.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Maneuvering to avoid a pedestrian/pedal cyclist	Vehicle (V2 or V3) engages in a steering action with the sole purpose to avoid contact with a pedestrian or pedal cyclist.	A pedestrian is any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorized or motorized conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle. A pedal cyclist is a person on any type of self-propelled pedaled cycle, as either the driver or a passenger, including bicycles, tricycles, and unicycles. This includes pedal cyclists who hold onto a motor vehicle in motion.
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Maneuvering to avoid an object	Vehicle (V2 or V3) engages in a steering action with the sole purpose to avoid contact with any type of inanimate obstacle or object (other than another vehicle) including dead animals.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Maneuvering to avoid a vehicle	Vehicle (V2 or V3) engages in a steering action with the sole purpose to avoid contact with another vehicle.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Pedestrian static, in roadway	Pedestrian is not in motion, and is somewhere within the boundaries of the trafficway.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Pedestrian dynamic, in roadway	Pedestrian is in motion, and is somewhere within the boundaries of the trafficway.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Pedestrian static, not in roadway	Pedestrian is not in motion, and is outside of the boundaries of the trafficway.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Pedestrian dynamic, not in roadway	Pedestrian is in motion, and is outside of the boundaries of the trafficway.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Other	Other known action by V2 or V3 not included in previous categories.	
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Unknown	Cannot determine the V2 or V3 Maneuver due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
82, 90	Motorist/Non-Motorist 2, 3 Pre-Incident Maneuver	Not applicable	There is no motorist or non-motorist (V2 or V3) involved, thus no maneuver to categorize.	Code as "not applicable" if animal, object, or roadside-barrier.
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	No driver present (rider for motorcycle)	No driver or rider was present in the vehicle (V2 or V3) at the time of the event.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	No reaction	No change in the driving behavior of the vehicle (V2 or V3) driver due to the Precipitating Event was evident.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Braked Only	Driver (V2 or V3) activated brake pedal. Did not include evasive steering.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Released brakes	Driver (V2 or V3) released brake pedal.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Steered to left	Driver (V2 or V3) steered to left of initial travel direction.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Steered to right	Driver (V2 or V3) steered to right of initial travel direction.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Braked and steered to left	Driver (V2 or V3) activated brake pedal and steered to left of initial travel direction.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Braked and steered to right	Driver (V2 or V3) activated brake pedal and steered to right of initial of travel direction.	
83, 91	Motorist/Non-Motorist 2, 3 Evasive Maneuver	Accelerated	Driver (V2 or V3) activated or increased pressure on gas pedal to accelerate. (May or may not have released brake first.)	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Accelerated and steered to left	Driver (V2 or V3) activated or increased pressure on gas pedal to accelerate and steered to left of initial travel direction. (May or may not have released brake first.)	
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Accelerated and steered to right	Driver (V2 or V3) activated or increased pressure on gas pedal to accelerate and steered to right initial travel direction. (May or may not have released brake first.)	
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Released throttle (no brake)	Driver (V2 or V3) released the throttle (but did not brake or steer).	
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Released throttle (no brake) and steered left	Driver (V2 or V3) released the throttle (but did not brake) and steered to left of initial travel direction.	
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Released throttle (no brake) and steered right	Driver (V2 or V3) released the throttle (but did not brake) and steered to right of initial travel direction.	
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Pedestrian performed some type of evasive maneuver	Pedestrian reacted to the event and performed or attempted to perform some type of action to lessen its impact.	Ex. pedestrian jumped out of the way of the vehicle or stopped walking into the street in front of the vehicle.
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Pedestrian did not perform any type of evasive maneuver	Pedestrian did not attempt any type of action to lessen the impact of the event.	Ex. pedestrian continued to walk in front of the vehicle.
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Other actions	Driver (V2 or V3) performed other corrective action not included in previous categories.	Includes decelerating without braking (e.g., releasing accelerator).
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Unknown if action was attempted	Cannot determine if the driver or non-motorist (V2 or V3) attempted an evasive maneuver or the nature of the evasive maneuver cannot be determined due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
83, 91	<b>Motorist/ Non-Motorist 2, 3 Evasive Maneuver</b>	Not applicable	There is no motorist or non-motorist involved, thus no reaction to categorize.	Code as "not applicable" if animal, or object, or roadside barrier.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	None (or No Additional Behaviors)	Motorist/Non-Motorist 2/3 engages in no apparent behavior(s) related to causing or contributing to the crash or near-crash.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Lane Drifting	Motorist/Non-Motorist 2,3 fails to maintain appropriate and safe lane position and unintentionally drifts towards and/or over one or more lane lines.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Exceeded speed limit	Motorist/Non-Motorist 2,3 traveling at a speed greater than the posted speed limit (not in a work zone). In Variable Speed Zones, this is relative to the speed limit in effect at the time of the event.	>= 10 mph above posted speed limit.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Exceeded safe speed but not speed limit	Motorist/Non-Motorist 2,3 traveling at a speed close to or under the posted speed limit, but still too fast to maintain a safe driving environment given current environmental conditions (e.g., weather, traffic, lighting). (Not in a work zone.)	Ex. during conditions that may require slower speeds such as weather, traffic situation, etc.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Driving slowly: below speed limit	Motorist/Non-Motorist 2,3 traveling at a speed much lower than the posted speed limit when higher speeds are appropriate.	>= 10 mph under posted speed limit.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Driving slowly in relation to other traffic: not below speed limit	Motorist/Non-Motorist 2,3 traveling much slower than other vehicles in traffic stream (but not substantially below the posted speed limit).	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Passing on right	Motorist/Non-Motorist 2,3 deliberately passes another vehicle in the lane (or shoulder, etc.) immediately to the right of the other vehicle.	This variable is not applicable in heavy traffic. In addition to standard "passing on right", this includes moving into exit lane to pass a vehicle on the right and then re-entering roadway ahead of that vehicle, or passing a vehicle in an area not intended for traffic.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Lane Splitting	Motorist/Non-Motorist 2,3 is a motorcycle and is starting to, in the process of, or coming out of lane splitting to pass one or more other vehicles.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Illegal passing	Motorist/Non-Motorist 2,3 passes another vehicle in an unsafe or illegal manner (other than on the right).	Ex. passing across double line, going straight through turn lane, using shoulder. Passing in a High Occupancy Vehicle (HOV) lane, would NOT be considered illegal passing, even if the driver is the only passenger in the vehicle.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Other improper or unsafe passing	Motorist/Non-Motorist 2,3 passes another vehicle in an improper manner not included in previous categories. For motorcycles, this does not include passing by lane splitting. Code as other relevant category.	Ex. passing on two-lane road with limited sight distance or other vehicle present.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Cutting in, too close in front of other vehicle	Motorist/Non-Motorist 2,3 enters lane of another vehicle too closely to the front of that vehicle.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Cutting in at safe distance but then decelerated, causing conflict	Motorist/Non-Motorist 2,3 enters lane in front of another vehicle at a seemingly safe distance, but then decelerated inappropriately, causing a conflict.	Ex. Motorist/Non-Motorist 2,3 moves into right lane at last minute to turn into parking lot and following vehicle not expecting the deceleration.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Cutting in, too close behind other vehicle	Motorist/Non-Motorist 2,3 enters lane of another vehicle too closely to the back of that vehicle.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Did not see other vehicle during lane change or merge	Motorist/Non-Motorist 2,3 enters a lane or merges into a lane and appears to have not been aware of another vehicle close by that is already traveling in that lane.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Other improper or unsafe merge/exit/weave	Subject vehicle executes an improper transition between a through road and exit/entrance ramp or acceleration/deceleration lanes (or vice versa) or when a lane is dropped and two lanes are forced into one, and the error is not described in other options.	Example: inappropriately stopping at the end of an entrance ramp (with no yield sign), driving on shoulder to pass merging/weaving traffic, merging out of turn (before lead vehicle), merging without sufficient gap, moving into exit lane and then back out with insufficient warning.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Other improper or unsafe lane change	Subject vehicle executes an improper transition between two adjacent lanes when not in an interchange or lane drop situation, and the error is not described in other options.	Example: inappropriately moving into a third lane while changing between two (e.g. a "wide" lane change), changing lanes at an inappropriate time, or moving across multiple lanes in one maneuver.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Driving in other vehicle's blind zone	Motorist/Non-Motorist 2,3 is traveling close to another vehicle in such a way that the driver of the other vehicle is not expected to be able to see it. Motorist/Non-Motorist 2,3 vehicle must maintain this relative position for at least 5 seconds.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Aggressive driving, specific, directed menacing actions	Motorist/Non-Motorist 2,3 driver is driving in a purposefully aggressive manner, with actions intended for a specific recipient.	Ex. exhibiting road rage.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Aggressive driving, other	Motorist/Non-Motorist 2,3 is driving in an aggressive manner not described in previous categories. Includes reckless and "sporty" driving.	Ex. reckless driving without directed menacing actions, such as excessive speed, weaving in and out of traffic, tailgating.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Wrong side of road, not overtaking	Motorist/Non-Motorist 2,3 is traveling on the wrong side of the road with no intent of passing or overtaking another vehicle.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Following too closely	Motorist/Non-Motorist 2,3 is traveling at an unsafe distance (too close) behind the lead vehicle.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Failed to signal	Motorist/Non-Motorist 2,3 failed to properly signal its intent by not signaling at all. Applies to planned maneuvers, not sudden evasive maneuvers.	Ex. changed lanes or made a turn without signaling.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper signal	Motorist/Non-Motorist 2,3 failed to properly signal its intent by signaling incorrectly or signaling late. Use with planned maneuvers, not sudden evasive maneuvers.	Ex. used right turn signal when making a left turn, or activated turn signal at same time began maneuver.

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Making turn from wrong lane	Motorist/Non-Motorist 2,3 turns left or right from a lane not intended for making that turn.	Ex. making turn across lanes.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper turn, wide right turn	Motorist/Non-Motorist 2,3 turned right from the initial travel path, unnecessarily encroaching into the left adjacent lane or median.	Ex. turning into oncoming traffic, turning into wrong lane on left.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper turn, cut corner on right turn	Motorist/Non-Motorist 2,3 turned right from the initial travel path, unnecessarily encroaching into the right adjacent lane or shoulder/curb.	Ex. turning into wrong lane on right, or going over curb.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper turn, wide left turn	Motorist/Non-Motorist 2,3 turned left from the initial travel path, unnecessarily encroaching into the right adjacent lane or shoulder/curb.	Ex. turning into wrong lane on right or going over curb.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper turn, cut corner on left	Motorist/Non-Motorist 2,3 turned left from the initial travel path, unnecessarily encroaching into the left adjacent lane or median.	Ex. cuts into adjacent lane or oncoming traffic, turning into wrong lane on left or going over median.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper U-turn	Motorist/Non-Motorist 2,3 executes an improper U-turn, which may cause conflict with any direction of traffic and/or unintended road departures.	Ex. Making a U-turn where U-turns are prohibited, Making a U-turn without yielding, making a U-turn with insufficient warning, making a U-turn with adequate space for vehicle's turning radius
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper turn, other	Motorist/Non-Motorist 2,3 turned left or right from the initial travel path in an unsafe manner not described in previous categories.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper backing, did not see	Motorist/Non-Motorist 2,3 traveled in reverse without obtaining a proper view of the surroundings behind the vehicle.	Ex. did not check mirrors when backing.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper backing, other	Motorist/Non-Motorist 2,3 traveled in reverse in an unsafe manner not described in previous categories.	Ex. backing into traffic, backing up on interstate.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Improper start from parked position	Motorist/Non-Motorist 2,3 moved from a parked position in an unsafe manner.	Ex. did not check mirrors.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Disregarded officer or watchman	Motorist/Non-Motorist 2,3 driver did not notice or obey an officer of the law or traffic guard serving to provide guidance in traffic flow and the driving task.	Ex. unaware or late to react.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Signal violation	Motorist/Non-Motorist 2,3 disobeyed (or nearly disobeyed) a traffic signal. It may or may not be known if this was intentional.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Stop sign violation, at speed	Motorist/Non-Motorist 2,3 disobeyed or nearly disobeyed a stop sign. It may or may not be known if this was intentional.	



<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Stop sign violation, "rolling stop"	Motorist/Non-Motorist 2,3 did not come to a complete stop at a stop sign (minimum speed was below 15 mph, but above 0 mph).	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Other sign (e.g., Yield) violation	Motorist/Non-Motorist 2,3 disobeyed a traffic sign (other than a stop sign). It may or may not be known if this was intentional.	e.g., Yield, Do Not Enter, One Way
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Non-signed crossing violation	Motorist/Non-Motorist 2,3 proceeded through a non-signed intersection in an unsafe manner.	Ex. did not check traffic when entering roadway from driveway or parking lot.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Right-of-way error in relation to other vehicle or person	Motorist/Non-Motorist 2,3 made the incorrect decision regarding who had the right-of-way (his/her own vehicle or another vehicle or pedestrian). It may or may not be known if this was intentional.	Ex. did not see other vehicle, misjudged gap or speed.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Delayed or insufficient braking	Motorist/Non-Motorist 2,3 failed to brake, braked or decelerated later than was reasonably expected, or failed to brake or decelerate at a reasonably sufficient level given the circumstances of the event. Braking may or may not have led to a complete stop.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Sudden or improper braking	Motorist/Non-Motorist 2,3 braked suddenly or in an unsafe manner in the roadway, but did not come to a complete stop (i.e., speed did not drop to zero).	If the sudden braking leads directly to stopping (speed indicator goes to zero), code as "sudden or improper stopping on roadway"
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Sudden or improper stopping on roadway	Motorist/Non-Motorist 2,3 stopped (speed dropped to zero) without ample warning or in an unsafe manner in the roadway.	Ex. hard or late braking/code only when driver speed indicator goes to zero--code "sudden or improper braking" otherwise. The only time to code braking and stopping for one event would be when the braking doesn't lead directly to the stopping (Motorist/Non-Motorist 2,3 brakes, then a bit later has to suddenly stop).
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Parking in improper or dangerous location	Motorist/Non-Motorist 2,3 parked (stopped with the intent of remaining stopped) in a location not intended for parking.	Ex. shoulder of Interstate
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Speeding or other unsafe actions in work zone	Motorist/Non-Motorist 2,3 traveling at a speed greater than the posted speed limit, specifically while driving in a work zone.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Failure to dim headlights	Motorist/Non-Motorist 2,3 traveling with high beams activated on headlights, without dimming the lights when appropriate.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Driving without lights or with insufficient lights	Motorist/Non-Motorist 2,3 traveling with no headlights on (or insufficient headlights) when the situation requires such lighting for safety.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Avoiding pedestrian	Motorist/Non-Motorist 2,3 behaved in a manner intended to avoid conflict with a pedestrian.	

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Category Definition (replace "driver" with "rider" when referenced vehicle is a motorcycle)</b>	<b>Examples and Hints</b>
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Avoiding other vehicle	Motorist/Non-Motorist 2,3 behaved in a manner intended to avoid conflict with another vehicle.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Avoiding animal	Motorist/Non-Motorist 2,3 behaved in a manner intended to avoid conflict with an animal.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Avoiding object	Motorist/Non-Motorist 2,3 behaved in a manner intended to avoid conflict with an object.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Apparent unfamiliarity with roadway	Motorist/Non-Motorist 2,3 behaved in an unsafe manner, apparently due to an unfamiliarity with the surrounding traffic situation or locality.	Ex. repeated U-turns, reading maps, papers, etc.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Other	Motorist/Non-Motorist 2,3 engages in other behavior not described in previous categories.	
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Unknown	Cannot determine the behavior(s) engaged in by Motorist/Non-Motorist 2,3 due to limitations in video views, lighting, visual obstructions, or limited perspective.	Ex. Part of the video is missing or there is insufficient information in the video to make a determination.
84, 85, 86, 92, 93, 94	Motorist/Non-Motorist 2, 3 Behavior 1,2,3	Not applicable	There is no motorist or non-motorist involved, thus no behavior to categorize.	Code as "not applicable" if animal, or object, or roadside barrier.
95*	Final Narrative/Additional Notes	N/A - Open-Ended Text	Final Narrative is a open-ended text.	

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	No Secondary Tasks (or No Additional Secondary Tasks)	N/A	N/A
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Talking/singing, audience unknown	Driver first starts to open mouth, forming first word.	Driver stops moving mouth for last time.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Dancing	Body first starts moving in a rhythmic motion.	Body stops moving in a rhythmic motion for the last time.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Reading	Eyes first glance at what the driver is reading.	Eyes have fixated on the reading material for the last time and then fixate somewhere else. Note that the driver may look up during this time and look back at the reading. If so, include the entire time.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Writing	Eyes first fixate on the writing surface.	Eyes have fixated on the writing task for the last time and have fixated somewhere else. Note that the driver may look up during this time and look back at the writing surface. If so, include the entire time.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Passenger in adjacent seat - interaction	The first frame number when driver interacts with a passenger in the adjacent front seat. This could be talking, reacting to (e.g., laughing), moving toward or away from the passenger (e.g., reaching for the passenger, or avoiding a pat from the person) or looking/glancing at the passenger or something the passenger is showing him/her.	The last frame number when driver interacts with a passenger in the adjacent seat in any of the ways listed under Start Point, or Event End, whichever is first.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Passenger in rear seat - interaction	When the passenger gets in the vehicle or the first frame number when driver interacts with a passenger in the rear seat(s). This could be talking, reacting to (e.g., laughing), moving toward or away from the passenger (e.g., reaching for the passenger, or avoiding a pat from the person) or glancing at the passenger or something the passenger is showing him/her.	The last frame number when driver interacts with a passenger in the rear seat(s) in any of the ways listed under Start Point, or Event End, whichever is first.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Child in adjacent seat - interaction	The first frame number when driver interacts with a child in the adjacent front seat. This could be talking, reacting to (e.g., laughing), moving toward or away from the child (e.g., reaching for the child, or avoiding a pat from the person) or looking/glancing at the child or something the child is showing him/her.	The last frame number when driver interacts with a child in the adjacent front seat in any of the ways listed under Start Point, or Event End, whichever is first.

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Child in rear seat - interaction	The first frame number when driver interacts with a child in the rear seat(s). This could be talking, reacting to (e.g., laughing), moving toward or away from the child (e.g., reaching for the child, or avoiding a pat from the person) or looking/glancing at the child or something the child is showing him/her.	The last frame number when driver interacts with a child in the rear seat(s) in any of the ways listed under Start Point, or Event End, whichever is first.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Look back in Sleeperberth (Truck Only)	The first frame number when driver starts to look at, reach towards, or move towards the sleeperberth area, whichever comes first.	Driver has last interaction with the sleeperberth and returns hands and attention back to the driving task. May be when eyes return forward, hands return to wheel, etc., whichever is last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Moving object in vehicle (or on motorcycle)	Object is first set in motion (e.g., by hard braking, or throwing).	Object comes to a rest.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Insect in vehicle (or around motorcycle)	Driver first responds to insect (i.e., looks away from driving scene, or moves body away from or towards it).	Driver goes back to normal driving behavior (e.g., looking at driving scene) and stops looking at and interacting with the insect (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Pet in vehicle (or on motorcycle)	Driver first interacts with pet. This could be first glance away from driving scene when looking for or at pet or the first body movement towards or away from pet. If driver first speaks and then looks at pet, then the beginning frame number would be when first word is formed.	Driver stops interacting with pet. This would be when driver has last glance at pet OR takes hand off of pet (if not looking at pet), OR stops talking to pet (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Object dropped by driver	Driver last touches the object before it drops.	Driver touches the object and it is first lifted up and glance returns to the driving task.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Reaching for object, other	Driver first starts to move hand to reach for object OR glances toward the object and immediately reaches for it (whichever occurs first).	Driver first touches the object.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Object in vehicle, other	Driver first looks at OR handles the object (whichever occurs first).	Driver places object and it no longer is in his/her hands, OR is no longer looking at the object (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell phone, Holding	Cell phone is first being held without manipulation. Could occur after a previous manipulation	Cell phone is put down (no longer held) or some other cell phone manipulation begins.

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell phone, Talking/listening, hand-held	Phone is first at the driver's ear.	Phone is away from the ear and the driver has let go of the phone, OR (if driver does not release phone) once the phone is no longer moving (i.e., driver puts the phone down in their lap or continues to hold it but not manipulate it), OR when another cell phone tasks begins. Once they put the phone in their lap or holds it without manipulating it, this should be recorded as "Cell phone, other."
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell phone, Talking/listening, hands-free	If using an earpiece, it begins when the driver has pushed the last button on his/her phone to make or answer a call or starts talking repeatedly as if in conversation (not with passenger) (i.e., call is automatically answered). If using a system integrated into the vehicle, it begins when the last button is pressed or voice command is given and the driver is waiting for someone to answer or begins talking immediately.	If using an earpiece or integrated system it is when a button is pushed on phone, earpiece, or integrated device to end the call or stops talking with no button press (i.e., phone ends the call automatically).  <i><b>NOTE:</b> This category is not used in most naturalistic studies unless additional information/resources are available. See the Cell phone, Talking/Listening, hands-free" entry in the Variable Definitions section of this dictionary.</i>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell Phone, Texting	First button is depressed to create a text message or first glance to phone just before pressing a button, whichever is first.	Last button is depressed and hand stops moving or last glance to the phone for the texting task is made, or when the driver begins to holds the phone without manipulation, whichever is last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell Phone, Browsing	First button is depressed to begin browsing or first glance to phone just before pressing a button, whichever is first.	Last button is depressed and hand stops moving or last glance to the phone for the browsing task is made, or when the driver begins to holds the phone without manipulation, whichever is last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell Phone, Dialing hand-held	For flip phones it begins when phone is fully opened. For non-flip phones it begins when first button on keypad or touchscreen is depressed OR first glance at cell phone begins just prior to pushing a button, whichever occurs first. If driver reads phone number from a piece of paper, the first frame number would be when they have the paper in their hand and the first glance at it for the purpose of dialing.	Last button is depressed and hand stops moving when the phone is up to the driver's ear. Or if not completing a call, it would be when he/she closes the phone and/or lets it go or puts it in his/her lap, or holds it without manipulation, OR last glances at it (whichever occurs last).

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell Phone, Dialing hand-held using quick keys	For flip phones it begins when phone is fully opened. For non-flip phones it begins when first button on keypad or touchscreen is depressed or glance at cell phone begins just prior to pushing a button, whichever occurs first. If driver reads phone number from a piece of paper, the first frame number would be when they pick up the piece of paper and glance at it.	Last button is depressed and hand stops moving when the phone is up to the driver's ear. Or if not completing a call, it would be when he/she closes the phone and/or lets it go or puts it in his/her lap, or holds it without manipulation, OR last glances at it (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell Phone, Dialing hands-free using voice- activated software	Driver begins to speak toward open cell phone or into receiver or with an integrated system. If using a headset or integrated device, the driver may press a button prior to giving the voice command. Start would be when that button is first pressed or a glance associated with that button press is made, whichever is first.	Driver continually speaks (as if in conversation) OR presses button on cell phone, headset, or integrated device (e.g., aborts call).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell Phone, Locating/reaching/ answering	Driver first starts to move hand to reach for cell phone OR glances in that direction to locate the phone (whichever occurs first).	Driver does one of the following (or whichever occurs last): (1) For locating and reaching, ends when one of the other categories begins (e.g., dialing, talking/listening, reading text message). If the driver intends to dial, it ends when the phone is first flipped open or, for non-flip phones, when the driver glances at the phone quickly followed by the first button press. If driver simply picks up the phone (e.g., but then rests the phone in lap or just holds phone in hand), it is when hand becomes stationary again. (2) For locating cell phone and not picking it up, it ends just before the first timestamp when the subject shifts his/her gaze to something else (e.g., forward roadway), having glanced at the cell phone for the last time. (3) For answering the cell phone, the last frame is when the driver finishes moving the phone to his/her ear.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Cell phone, other	Driver first shows evidence of the interaction.	Driver behavior fits into another category (ex., dialing cell phone) or there is no longer any evidence of interaction.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Tablet device, Locating/reaching	Driver first starts to move hand to reach for electronic tablet device OR glances in that direction followed by hand moving for tablet device (whichever occurs first).	Driver first touches the tablet device. If driver doesn't touch tablet device, then it is when driver begins actually viewing the tablet device (rather than just glancing to locate).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Tablet device, Operating	Driver first presses a button on the electronic tablet device.	Driver last presses button on the tablet device.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Tablet device, Viewing	Driver first looks in the direction of the electronic tablet device location (not for locating).	Driver looks away from the electronic tablet device and fixates on another location.

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Tablet device, other	Driver first interacts with tablet device in some manner not listed above.	Driver last interacts with tablet device in some manner not listed above.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	CB Radio, Interact	Driver first interacts with CB Radio in some way, either looking, reaching, speaking, or appearing to listen, whichever is first.	Driver last interacts with CB Radio.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Electronic dispatching device, Interact with (Truck Only)	Driver first interacts with dispatching device in some way, either looking, reaching, etc., whichever is first.	Driver last interacts with dispatching device.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	DAS, Interact	Driver first interacts with the DAS in some way, either looking, reaching, etc., whichever is first.	Driver last interacts with DAS.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Other electronic device, Interact with	Driver first interacts with another type of electronic device in some way, either looking, reaching, speaking, or appearing to listen, whichever is first.	Driver last interacts with electronic device.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Adjusting/monitoring climate control	Driver's hand first moves towards the control OR driver first glances at climate control, with or without subsequent reaching (whichever occurs first).	Driver's hand has last interaction adjusting knobs or any controls for that device OR driver glances at device for the last time (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Adjusting/monitoring radio	Driver's hand first touches the control OR driver first glances at the radio, with or without subsequent reaching (whichever occurs first).	Driver's hand has last interaction adjusting knobs or any controls for that device OR driver glances at device for the last time (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Inserting/retrieving CD (or similar)	Driver's hand moves in the direction of the CD, cassette, or other music storage device (other than MP3 player) to insert it into player OR driver's hand first touches the player to extract a CD OR driver first glances at case or direction of the CD player to insert or retrieve a CD (whichever comes first).	Driver's hand has last interaction with player (e.g., pushing play) OR driver puts CD that has been retrieved either in a case or puts it down OR driver last glances at device or CD.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Adjusting/monitoring other/unknown Instrument Panel device	Driver's hand first touches the device OR driver first glances at that device, with or without subsequent reaching (whichever occurs first).	Driver's hand has last interaction touching that device OR driver glances at that device for the last time.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Adjusting/monitoring other devices integral to vehicle	Driver's hand first touches the device OR driver first glances at that device, with or without subsequent reaching (whichever occurs first).	Driver's hand has last interaction touching that device OR driver glances at that device for the last time.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Looking at previous crash or incident	Driver's glance is first directly on the accident or something related to the accident (e.g., police officer standing on the side of the road).	Driver has taken his/her last glance at the accident.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Looking at pedestrian	Driver first glances at pedestrian.	Driver has taken his/her last glance at the pedestrian.

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Looking at animal	Driver first glances at the animal.	Driver has taken his/her last glance at the animal.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Looking at an object external to the vehicle	Driver first glances at the object.	Driver has taken his/her last glance at the object.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Distracted by construction	Driver first glances at an object or person in the construction zone.	Driver has taken his/her last glance at an object or person in the construction zone.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Other external distraction	Driver first glances outside of the vehicle for purposes not described in previous categories (and not driving-related).	Driver's eyes first fixate on a location fitting into another category or the driving task.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Reaching for food-related or drink-related item	Driver's hand moves in the direction of the item OR driver first glances at the item (whichever occurs first).	Driver's hand has last interaction touching the item OR driver begins eating or drinking which fits into another category (such as "Eating with utensils") (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Eating with utensils	Driver first picks up the food to be eaten or the utensil to eat it with (whichever occurs first).	Driver does the last of one of the following: (1) finishes chewing, (2) puts food or utensil down and lets go of it, (3) hand that is holding food/utensil is still (e.g., in lap or on steering wheel).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Eating without utensils	Driver first picks up the food to be eaten.	Driver does the last of one of the following: (1) finishes chewing, (2) puts food down and lets go of it, (3) hand that is holding food is still (e.g., in lap or on steering wheel).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Drinking with lid and straw	Driver first picks up the drink to be drunk.	Driver puts drink down and lets go of it OR hand that is holding the drink is still (e.g., in lap or on steering wheel), whichever occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Drinking with lid, no straw	Driver first picks up the drink to be drunk.	Driver puts drink down and lets go of it OR hand that is holding the drink is still (e.g., in lap or on steering wheel), whichever occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Drinking with straw, no lid	Driver first picks up the drink to be drunk.	Driver puts drink down and lets go of it OR hand that is holding the drink is still (e.g., in lap or on steering wheel), whichever occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Drinking from open container	Driver first picks up the drink to be drunk.	Driver puts drink down and lets go of it OR hand that is holding the drink is still (e.g., in lap or on steering wheel), whichever occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Reaching for cigar/cigarette	Driver first starts to move hand to reach for cigar/cigarette or related items OR glances in that direction followed by hand moving for cigar/cigarette (whichever occurs first).	Driver puts the cigar/cigarette in mouth and last touches cigar/cigarette before the process of lighting it has begun OR stops reaching for cigar/cigarette OR the hand holding the cigar/cigarette is still and the driver is not moving to light it.



Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Lighting cigar/cigarette	Driver first starts to move hand to reach for lighter OR glances in that direction followed by hand moving for lighter (whichever occurs first).	Driver starts to let go of lighter, OR (in the case of an in-dash lighter), when lighter is placed back in dashboard and driver lets go of it OR last glance to either of these devices (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Smoking cigar/cigarette	Driver lets go of lighter and driver has a lit cigar/cigarette in mouth or hand.	This would be the last frame number before driver starts to move cigar/cigarette towards ashtray or device for extinguishing cigar/cigarette OR if driver puts lit cigar/cigarette down (e.g., to rest in ashtray) OR driver passes the lit cigar/cigarette to the passenger.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Extinguishing cigar/cigarette	Driver's hand starts to move cigarette towards extinguishing device (e.g., ashtray, window).	Driver last touches cigar/cigarette.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Tobacco, other	Driver first starts to interact with tobacco (e.g., to obtain packet or to put tobacco in mouth, or to reach for/spit in receptacle).	Driver last interacts with tobacco. (Tobacco may be in mouth with interaction ends.)
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Reaching for personal body-related item	Driver's hand moves in the direction of the item OR driver first glances at the item to reach for it (whichever occurs first).	Driver's hand has last interaction touching the item OR driver begins using the item and action fits into another category (such as "Combing/brushing/fixing hair") (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Combing/brushing/ fixing hair	Driver's hand first holds hairbrush/comb or first reaches for hair if not using a brush/comb.	Driver's hand/brush/comb last touches hair OR brush/comb is released (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Applying make-up	Driver's hand first holds the make-up and hand is moving in the direction of opening up make-up container (e.g., flipping a compact lid open, or taking top off of lip gloss).	Driver puts makeup down, last touches body to apply make-up, and/or last checks self in mirror, whichever step occurs last. This would include smoothing out make-up that was just applied.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Shaving	Driver has the razor in hand and hand moves towards body to begin hair removal.	Razor is put down and/or driver last checks self in mirror, whichever step occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Brushing/flossing teeth	Driver has toothbrush, floss or oral hygiene product in hand. For floss this would start when the package is in hand, before they actually get the piece of floss out.	Toothbrush, floss, or oral hygiene product is put down, driver spits out toothpaste, and/or driver checks teeth in mirror, whichever step occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Biting nails/cuticles	Driver's hand first moves towards mouth before biting nails.	Driver's hand last touches mouth or bitten off cuticle OR finger nail is removed from driver's mouth (whichever occurs last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Removing/adjusting clothing	Driver's hand first moves towards or driver first glances at article of clothing.	Driver's hand last touches clothing or last glances at clothing, whichever step occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Removing/adjusting helmet (MC only)	Rider's hand first moves towards or rider first glances at helmet or related item	Rider's hand last touches helmet/item or last glances at helmet/item, whichever step occurs last.

Secondary Task Start and Stop Times

<b>Variable # (*Baseline)</b>	<b>Variable Name</b>	<b>Category</b>	<b>Secondary Task Start Time (replace "driver" with "rider" when subject vehicle is a motorcycle)</b>	<b>Secondary Task End Time</b>
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Removing/adjusting jewelry	Driver's hand first touches or glances at jewelry.	Driver's hand last touches jewelry (if adjusting or putting on jewelry), OR the driver lets go of jewelry (if removing jewelry), OR driver last glances at jewelry, whichever step occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Removing/inserting/adjusting contact lenses or glasses	Driver's hand first touches or glances at eye to remove contact or interact with contact (if removing contact) OR driver first opens or glances at contact lens case to expose contact (if inserting contact) OR driver first touches or glances at glasses/sunglasses.	Driver's hand last touches eyeball (if inserting contact) OR driver last touches contact (if removing it or adjusting it in the eye), OR driver last touches glasses/sunglasses, OR driver last glances at eye, contact lens, or sunglasses, whichever steps occurs last.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Other personal hygiene	Driver has first interaction.	Driver has last interaction.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Other non-specific internal eye glance	Driver's eyes first fixate on something in the vehicle (not listed in another category).	Driver's eyes first fixate on the next glance location or direction of travel.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Other Secondary Task	Driver's eyes first fixate on an item related to the other Secondary Task or first starts to move towards it or engage in it (whichever is first).	Driver's eyes return to the driving task or move to a new task or driver stops engaging in other secondary task (whichever is last).
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Unknown type (secondary task present)	Driver is first clearly distracted from the driving task (specific distraction is unknown or not listed).	Driver behavior fits into another category or there is no longer any evidence of distraction.
<b>33*, 37*, 41*, 45*</b>	<b>Secondary Task 1,2,3,4</b>	Not applicable	N/A, No Timestamp can be provided.	N/A, No Timestamp can be provided.