HIGHWAY SAFETY INFORMATION SYSTEM GUIDEBOOK FOR THE

MINNESOTA STATE DATA FILES

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Washington, DC 20590

Revised, November 2022

Introduction to the Minnesota HSIS Guidebook

The Highway Safety Information System (HSIS), established in 1987, is a foundational highway research data system. The State of Minnesota has participated in the HSIS program since the beginning, providing quality data to HSIS for use by researchers through a request system. In 2021, HSIS began a modernization effort with the goal of expanding the technological and analytic capabilities of the data system. This modernization provides an increased emphasis on spatial analysis and cloud-based data management.

What Has Changed

This guidebook is intended to support the use of Minnesota HSIS data for the years 2016 and beyond. Data and documentation prior to 2016 (1985-2015) are available upon request to the HSIS Virtual Laboratory. Prior to 2016, the Minnesota datasets included variables for the following files:

1. Roadway inventory.
2. Accident characteristics.
3. Vehicles involved in crashes.
4. Vehicle occupants involved in crashes.
5. Intersection inventory.

The revised Minnesota database incorporated into HSIS contains 14 different files:

1. Roadway inventory (including traffic information).
2. Intersection inventory.
3. Horizontal curve inventory.
4. Intersection approach inventory.
5. Traffic signal inventory.
6. Freeway interchange inventory.
7. Lighting unit inventory.
8. Lighting system inventory.
9. Roadside barrier inventory.
10. Roadside barrier terminals.
11. Sign support inventory.
12. Crash characteristics.
13. Units involved in crashes.
14. Persons involved in crashes.

Appendix A summarizes revisions the HSIS Laboratory made to the variables. In addition to the expanded list of files, there are several key differences between the Minnesota HSIS data prior to 2016:

Changes in File Names

Previously, HSIS data included accident, vehicle, and occupant files to describe crashes, the vehicles involved in those crashes, and the occupants of those vehicles. Due to changes in reported data, HSIS now uses the nomenclature, of Crash, Unit, and Person files to represent these characteristics. Figure 1 illustrates the connection between the previous file naming convention (1985-2015) and the current file naming convention (2016-2020).

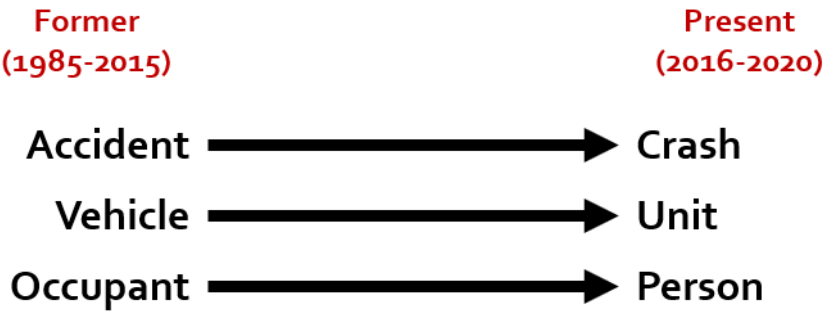

Figure 1. Changes to Minnesota HSIS Data File Naming Convention.

Changes in Variable Names

Previous versions of HSIS guidebooks referred to *SAS Name* as the shorthand for the more descriptive names in the HSIS documentation. With the modernization effort and increased emphasis on flexibility, this is now referred to as the *Variable Name*. Furthermore, the descriptive names of variables may have changed in this guidebook compared to previous versions. This may reflect changes in the data or definition of the variable to match updates to Minnesota's data documentation. Please consult the HSIS Virtual Laboratory for information on changes to the data over time.

Changes in Available Variables

This guidebook reflects the latest high-quality data available to HSIS and the research community. Variables that were available in previous years and documented in past guidebooks may no longer be available or otherwise discontinued. This guidebook represents data that are available to requestors for the years 2016 to 2020. Please consult past guidebooks or the HSIS Virtual Laboratory for information regarding previously available data.

The first available year for all non-crash datasets after the HSIS modernization (e.g., Roadway, Intersections, Lighting Units) is 2020. This reflects a change in the transfer of Minnesota data to the HSIS Virtual Laboratory and the absence of archived data prior to 2020.

Changes in Variable Linkages

HSIS data are stored in a geographic information systems (GIS) compatible format. Researchers can request data from HSIS in various additional formats such as SAS, Microsoft Excel® and Access®, dBase, ASCII, etc. to meet their analytical and resource capabilities. Figure 2 provides an overview of the structure and relationships linking the 14 files. The following sections provide a brief summary of each file.

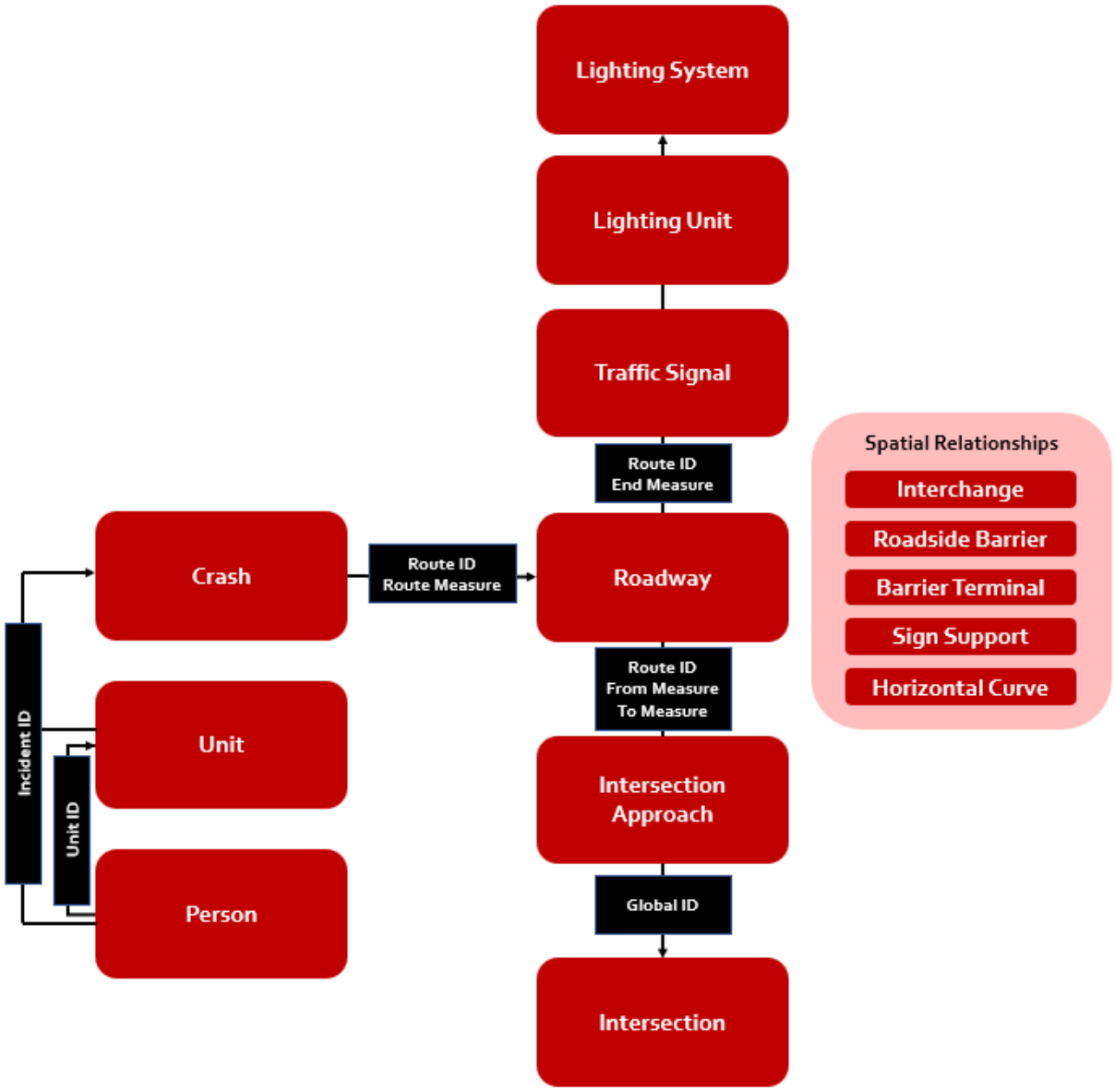

Figure 2. Minnesota HSIS Data Files and Linking Variables.

Roadway File (2020)

This file contains information about the physical layout of Minnesota's roads and the traffic characteristics (where available) associated with all public roads in the State. The file includes variables that describe the surface width, lane width and type, shoulder width and type, median information, and other variables. This file also contains information on traffic volumes represented as annual average daily traffic (AADT).

Minnesota also digitally represents data in a directional format, although many data elements are combined to bidirectional values. Table 1 provides an overview of road and traffic variables by format.

Table 1. Variable Format in Minnesota's Road File.

VARIABLE NAME	VARIABLE DESCRIPTION	FORMAT
ACCESS_CONTROL	ACCESS CONTROL	Bidirectional
ADDITIONAL_LANE_LEFT	ADDITIONAL LANE LEFT	Single Direction
ADDITIONAL_LANE_RIGHT	ADDITIONAL LANE RIGHT	Single Direction
CURB_SIDE	CURB SIDE	Single Direction
FACILITY_TYPE	DIVIDED AND ONE-WAY CODE	Single Direction
FUNCTIONAL_CLASS	FUNCTIONAL CLASS	Bidirectional
MEDIAN_STRUCTURE_TYPE	MEDIAN STRUCTURE TYPE	Single Direction*
MEDIAN_WIDTH	MEDIAN WIDTH	Single Direction*
MEDIAN_TYPE	MEDIAN TYPE	Single Direction*
PARKING_LEFT	PARKING ON LEFT OF ROAD	Single Direction
PARKING_RIGHT	PARKING ON RIGHT OF ROAD	Single Direction
PAVED_SHOULDER_LEFT	LEFT SHOULDER TYPE – PAVED	Single Direction
PAVED_SHOULDER_LEFT_WIDTH	LEFT SHOULDER WIDTH – PAVED	Single Direction
PAVED_SHOULDER_RIGHT	RIGHT SHOULDER TYPE – PAVED	Single Direction
PAVED_SHOULDER_RIGHT_WIDTH	RIGHT SHOULDER WIDTH – PAVED	Single Direction
BASIC_PAVEMENT_TYPE	SURFACE TYPE	Single Direction
TRAVEL_WIDTH	TRAVEL WIDTH	Single Direction
UNPAVED_SHOULDER_LEFT	LEFT SHOULDER TYPE – UNPAVED	Single Direction
UNPAVED_SHOULDER_LEFT_WIDTH	LEFT SHOULDER WIDTH – UNPAVED	Single Direction
UNPAVED_SHOULDER_RIGHT	RIGHT SHOULDER TYPE – UNPAVED	Single Direction
UNPAVED_SHOULDER_RIGHT_WIDTH	RIGHT SHOULDER WIDTH – UNPAVED	Single Direction
AADT	AADT	Bidirectional
AADT_DAILY_FACTOR_GROUP	AADT DAILY FACTOR GROUP	Bidirectional
AADT_DATA_TYPE	AADT DATA TYPE	Bidirectional
COMMERCIAL_AADT	COMMERCIAL AADT	Bidirectional

CITY_NAME	CITY NAME	Bidirectional
CTU_CLASS	CITY/TOWNSHIP CLASS	Bidirectional
COUNTY_NAME	COUNTY	Bidirectional
MAINTENANCE_DISTRICT_NAME	MAINTENANCE DISTRICT NAME	Bidirectional
RODWYCLS	ROADWAY CLASS	Bidirectional
TOTAL_LANES	NUMBER OF LANES	Bidirectional

* Only available in the inventory direction.

Route ID is the key linking variable between the base roadway inventory and the associated datasets (e.g., Crash, Traffic Signal, Intersection Approach, etc.). This variable is an 18-digit numerical code that documents the road ownership jurisdiction, the Geographic Names Information System (GNIS) ID for the jurisdiction (this value will be all 0's for Trunk Highways), the designated route number, route suffix (or a dash if no suffix present), and direction of travel relative to increasing mileposts (e.g., if traveling in the direction of decreasing mileposts, this will be "D"). Figure 3 illustrates the *Route ID* format for Wabasha Street in St. Paul.

	Ownership		Jurisdiction										Route Number				Suffix/Dash	Direction
Route ID	0	5	0	0	0	2	3	9	6	5	1	1	0	2	3	5	-	I
Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Figure 3. Example of Minnesota's Route ID Naming Convention.

Intersection File (2020)

Minnesota represents intersections of two or more roads at grade as polygons in GIS. This does not include locations where crossing centerlines represent grade-separated intersections or ramp merge locations on to freeways. These polygons spatially represent the line segments that comprise the approaches to the intersection.

Horizontal Curve File (2020)

Horizontal curvature is available for locations along Minnesota's State highway network. This includes characteristics such as radius and length. Curvature is linkable to the Roadway file and other datasets through spatial context.

Intersection Approach File (2020)

Intersection approaches (or intersection legs) provide the route and milepost location of each leg that approaches the intersection. Approaches can be linked to intersections through the *Global ID* field.

Traffic Signal File (2020)

This file provides a spatial inventory of Minnesota Department of Transportation (MnDOT)-owned traffic signals and flashing beacons on Minnesota roads; this inventory does not include locally owned and operated signals. Signal locations have a primary route and milepost.

Interchange File (2020)

This file is a statewide polygon GIS data layer where each polygon represents information on a freeway interchange. For this dataset, interchanges were defined as a grade-separated junction of two or more roads where at least one road is fully access-controlled and movements between roads are accomplished through straight and loop ramps. The polygon for each interchange encompasses the broad area of roadway where traffic interactions are reasonably related to the interchange, including all ramps, ramp intersections with cross streets, merging and diverging areas, acceleration and deceleration lanes, and portions of the mainline freeway that are within the general boundaries of the interchange. Each interchange is classified into a general design category, such as diamond or cloverleaf. The interchange inventory includes all interchanges in Minnesota, regardless of road ownership.

Lighting Unit File (2020)

This file represents individual light poles on State-owned routes. This file is linkable to the Roadway File through a route and milepost, as well as linkable to a larger lighting system via the *Light System Name*.

Lighting System File (2020)

This file represents coordinated groups of individual light poles. This file is linkable to the Roadway File through a route and milepost, as well as linkable to individual light poles via the *Light System Name*.

Roadside Barrier File (2020)

This file is a linear representation of roadside and median traffic barriers. Information in this file includes barrier type, material, height, post type, and length. These features are linkable to other data files by spatial location.

Roadside Barrier Terminal File (2020)

This file represents the location of terminal features for roadside and median barriers. These features are linkable to their applicable barrier location by spatial location.

Sign Support File (2020)

This file provides the spatial location of sign supports along State-maintained roads. Although sign content information is generalized, the Sign Support file indicates sign post material, number of posts, direction of travel, and other relevant support data. These data are spatially linkable to other files.

Crash File (2016-2020)

Crash data are contained in three separate files. The Crash file contains basic information on the crash. Related information on the vehicles and people involved in each crash are contained in the corresponding Unit File and Person File. Specifically, the Crash File contains information relating to crash-level characteristics and conditions at the time of the crash. All crashes are spatially locatable, and most crashes have an applicable route and milepost for tabular linkages.

Crash data are collected statewide by all police departments in Minnesota on a standard form as prescribed by State law. The prescribed crash-reporting threshold is currently personal injury, death, or $1,000 property damage.

Unit File (2016-2020)

This file provides information on the vehicles or units involved in crashes on Minnesota roads. This includes motor vehicles, bicyclists, pedestrians, and other users that represent an involved party in a crash. The Unit file can be linked to the Person file through the combination of the *Incident ID* and *Unit ID* variables.

Person File (2016-2020)

This file includes information on all persons involved in a crash, whether injured or not. This file includes standard variables related to seating positions in a vehicle, sex, race, and injury. The injury variable in Minnesota uses the KABCO system, which provides police estimates of injury level.

Using the Files Together

Figure 1 highlighted the linkages between each of the 14 Minnesota files. Researchers can use these files together to understand the circumstances, location, and vehicles and individuals involved in a crash. HSIS data can be linked and aggregated using either spatial or tabular relationships. HSIS data follow four different formats; each variable in this guidebook notes the specific format of that variable.

Numeric: Numeric values absent of alphabetical or special characters. These can include decimals or whole numbers.

Coded: Alphanumerical values that represent fixed value entries; this guidebook is a data dictionary for coded values.

Text: Free-form, plain text values that are not represented by coded abbreviations or other shorthand values (e.g., '5/16 or 3/8 steel bolts').

Date: Values representing date and time; specific formatting is noted in the relevant variable description.

When using the files together, users should note that there are variables of the same name in two different files in some cases. For some of these variables, this is by design so that the files can be linked together. Examples of this include *Incident ID* and *Unit Number*. *Incident ID* is used to link the Crash file, Unit file, and Person file. *Unit Number* is used to link the Unit file and Person file. For other variables, duplicated variable names across files are because the same information has been collected twice. For example, *County* is recorded by the reporting officer in the Crash file. It is also a variable in the Roadway file. In these cases, the HSIS Laboratory has compared across these variables and harmonized them to provide consistent information.

Requesting HSIS Data

Researchers can reference this guidebook to determine variables of interest for their particular research question. This section provides a fictious example research question to demonstrate how the variables can be requested and how the variables can be linked across the files.

A graduate student is interested in exploring signalized intersection crashes involving women in Minnesota. Specifically, they are interested in injury severity at different types of intersections and under different conditions. This is part one of their study. The graduate student anticipates that they will undertake a part two for the study where they may spatially combine the HSIS data with county-level socioeconomic data to explore highway safety for women across the State.

The HSIS Laboratory will work with the student to structure a data request that includes variables that will provide insight into the student's request questions, variables to link the relevant files together, and flexibility to add external data in part two of the study. The following is the structure of their request:

Roadway Variables

- Route ID (*linkable to the Route ID variable in the Crash file*).
- From Measure.
- End Measure.
- Roadway Class.
- Functional Class.
- AADT.
- Median Type.
- Median Width.
- Number of Lanes – Total.
- County.

Traffic Signal Variables

- Signal Status.

Intersection Variables

- Global ID.
- Intersection Name.
- Intersection Type.
- Traffic Control.

Crash Variables

- Route ID (*linkable to the Route ID variable in the Roadway file*).
- Route Measure (*linkable to the Roadway file in GIS*).
- Incident ID (*linkable to the Incident ID variable in the Unit file*).
- Crash Date.
- Crash Severity.
- First Harmful Event.
- Light Condition.

- Intersection Related Indicator.
- Number of Vehicles Involved.

Unit Variables

- Incident ID (*linkable to the Incident ID variable in the Crash file*).
- Unit ID (*linkable to the Unit ID variable in the Person file*).
- Posted Speed Limit.
- Unit Type.

Person Variables

- Incident ID (*linkable to the Incident ID variable in the Crash file*).
- Unit ID (*linkable to the Unit ID variable in the Unit file*).
- Person ID.
- Person Age.
- Person Injury.
- Person Gender.

The analyst does not request any information from the remaining files. A few things to note about their request:

- There are variables in the student's request that record similar information. For example, the Unit file includes a variable, *Traffic Control Condition* and *Traffic Control Device* that may seem redundant with the Traffic Signal file variable that defined the request as only crashes at signalized intersections. However, these data represent different sources, such as the officer reporting the crash at the scene in the case of the Unit and Crash files, and internal MnDOT records in the case of the Traffic Signal file. The student could request all variables to confirm that the signal was operating as a signal at the time of the crash. For example, the signal may have been under human control or in flashing operation during a power outage or similar; the Unit file contains this information in the *Traffic Control Condition* variable.
- When merging the files, the student should note that the Crash, Unit, Person, and Roadway files contain different numbers of observations or rows. The Crash file contains one observation per crash (e.g., a unique case number on each row), while the Unit file contains an observation for each vehicle involved in the crash. If more than one vehicle is involved in a crash, there will be more than one row associated with the same *Incident ID*. Additionally, the Roadway file contains an observation or row for each road segment. Some segments may have multiple crashes associated with it while others may not have any.

Available Data

Table 2 provides a summary of all variables currently available in HSIS for the 14 files. Attributes and fields have evolved since the introduction of Minnesota into the HSIS data system, and users should carefully consider these changes during the data collection research process.

Table 2. Summary of Minnesota HSIS Variables by Data File.

VARIABLE NAME	VARIABLE DESCRIPTION	DATA FILE
AADT	AADT	Roadway
AADT_DAILY_FACTOR_GROUP	AADT DAILY FACTOR GROUP	Roadway
AADT_DATA_TYPE	AADT DATA TYPE	Roadway
ACCESS_CONTROL	ACCESS CONTROL	Roadway
ADDITIONAL_LANE_LEFT	ADDITIONAL LANE LEFT	Roadway
ADDITIONAL_LANE_RIGHT	ADDITIONAL LANE RIGHT	Roadway
TO_MEASURE	CALCULATED ENDING MEASURE	Roadway
FROM_MEASURE	CALCULATED FROM MEASURE	Roadway
CITY_NAME	CITY NAME	Roadway
CTU_CLASS	CITY/TOWNSHIP CLASS	Roadway
COMMERCIAL_AADT	COMMERCIAL AADT	Roadway
COUNTY_NAME	COUNTY	Roadway
CURB_SIDE	CURB SIDE	Roadway
FACILITY_TYPE	DIVIDED AND ONE-WAY CODE	Roadway
FUNCTIONAL_CLASS	FUNCTIONAL CLASS	Roadway
PAVED_SHOULDER_LEFT	LEFT SHOULDER TYPE – PAVED	Roadway
UNPAVED_SHOULDER_LEFT	LEFT SHOULDER TYPE – UNPAVED	Roadway
PAVED_SHOULDER_LEFT_WIDTH	LEFT SHOULDER WIDTH – PAVED	Roadway
UNPAVED_SHOULDER_LEFT_WIDTH	LEFT SHOULDER WIDTH – UNPAVED	Roadway
MAINTENANCE_DISTRICT_NAME	MAINTENANCE DISTRICT NAME	Roadway
MEDIAN_STRUCTURE_TYPE	MEDIAN STRUCTURE TYPE	Roadway
MEDIAN_TYPE	MEDIAN TYPE	Roadway
MEDIAN_WIDTH	MEDIAN WIDTH	Roadway
TOTAL_LANES	NUMBER OF LANES	Roadway
PARKING_LEFT	PARKING ON LEFT OF ROAD	Roadway
PARKING_RIGHT	PARKING ON RIGHT OF ROAD	Roadway
PAVED_SHOULDER_RIGHT	RIGHT SHOULDER TYPE – PAVED	Roadway
UNPAVED_SHOULDER_RIGHT	RIGHT SHOULDER TYPE – UNPAVED	Roadway
PAVED_SHOULDER_RIGHT_WIDTH	RIGHT SHOULDER WIDTH – PAVED	Roadway
UNPAVED_SHOULDER_RIGHT_WIDTH	RIGHT SHOULDER WIDTH – UNPAVED	Roadway
ROADWYCLS	ROADWAY CLASS	Roadway
ROUTE_ID	ROUTE ID	Roadway
BASIC_PAVEMENT_TYPE	SURFACE TYPE	Roadway
TRAVEL_WIDTH	TRAVEL WIDTH	Roadway
ADT_ENTERING_VOLUME	ADT ENTERING VOLUME	Intersection
CTU_NAME	CITY/TOWNSHIP NAME	Intersection

COUNTY_NAME	COUNTY NAME	Intersection
GENERAL_INTERSECTION_TYPE	GENERAL INTERSECTION TYPE	Intersection
INTERSECTION_NAME	INTERSECTION NAME	Intersection
LIGHTING_EXISTS	LIGHTING EXISTS	Intersection
LIGHTING_TYPE	LIGHTING TYPE	Intersection
PRIMARY_ROUTE_ID	PRIMARY ROUTE ID	Intersection
TRAFFIC_CONTROL_EXISTS	TRAFFIC CONTROL EXISTS	Intersection
TRAFFIC_CONTROL_TYPE	TRAFFIC CONTROL TYPE	Intersection
INTERSECTION_DESIGN_SPECIFIC	SPECIFIC INTERSECTION DESIGN	Intersection
ADT_ENTERING_VOLUME_YR	YEAR OF ADT ENTERING VOLUME	Intersection
DIRECTION	AVERAGE BEARING	Horizontal Curve
ARCLENGTH	CURVE ARC LENGTH	Horizontal Curve
DELTA	CURVE DELTA	Horizontal Curve
CURVE_ID	CURVE ID	Horizontal Curve
DISTANCE	CURVE LENGTH	Horizontal Curve
CURVE_NUMBER	CURVE NUMBER	Horizontal Curve
RADIUS	CURVE RADIUS	Horizontal Curve
TANGENT	CURVE TANGENT	Horizontal Curve
DISTRICT_NUMBER	DISTRICT NUMBER	Horizontal Curve
TIS_ID	ROAD NUMBER	Horizontal Curve
FROM_MEASURE	FROM MEASURE	Intersection Approach
INTERSECTION_GLOBALID	GLOBAL ID	Intersection Approach
ROUTE_ID	ROUTE ID	Intersection Approach
TO_MEASURE	TO MEASURE	Intersection Approach
DATE_INSERVICE	DATE IN SERVICE	Traffic Signal
END_MEASURE	END MEASURE	Traffic Signal
ROUTE_ID	ROUTE ID	Traffic Signal
SGL_THRU_LOCATION	SIGNAL LOCATION	Traffic Signal

SIGNAL_SYSTEM_CLASS_CODE_NAME	SIGNAL SYSTEM CLASS	Traffic Signal
SIGNAL_SYSTEM_ID	SIGNAL SYSTEM ID	Traffic Signal
SIGNAL_SYSTEM_NAME	SIGNAL SYSTEM NAME	Traffic Signal
SIGNAL_SYSTEM_STATUS_NAME	SIGNAL SYSTEM STATUS	Traffic Signal
CTU_NAME	CITY/TOWNSHIP NAME	Interchange
COUNTY_NAME	COUNTY NAME	Interchange
INTERCHANGE_DESIGN_GENERAL	INTERCHANGE DESIGN GENERAL	Interchange
INTERCHANGE_DESIGN_SPECIFIC	INTERCHANGE DESIGN SPECIFIC	Interchange
INTERCHANGE_NAME	INTERCHANGE NAME	Interchange
LIGHTING_TYPE	LIGHTING TYPE	Interchange
PRIMARY_ROUTE_ID	PRIMARY ROUTE ID	Interchange
LIGHTING_EXISTS	ROADWAY LIGHTING	Interchange
TRAFFIC_CONTROL_EXISTS	TRAFFIC CONTROL EXISTS	Interchange
TRAFFIC_CONTROL_TYPE	TRAFFIC CONTROL TYPE	Interchange
DATE_INSTALLED	DATE INSTALLED	Lighting Unit
END_MEASURE	END MEASURE	Lighting Unit
SGL_ELEC_ASM_FOUNDATION_NAME	FOUNDATION TYPE	Lighting Unit
LIGHT_SYSTEM_ID	LIGHT SYSTEM ID	Lighting Unit
LIGHT_SYSTEM_NAME	LIGHT SYSTEM NAME	Lighting Unit
LIGHT_UNIT_ID	LIGHT UNIT ID	Lighting Unit
LIGHT_UNIT_NAME	LIGHT UNIT NAME	Lighting Unit
LIGHT_UNIT_STATUS_NAME	LIGHT UNIT STATUS	Lighting Unit
LIGHT_UNIT_CLASS_CODE_NAME	LIGHT UNIT TYPE	Lighting Unit
SGL_ELECT_ASM_LUMHEIGHT_NAME	MOUNTING HEIGHT	Lighting Unit
OWNER_NAME	OWNER NAME	Lighting Unit
SGL_POLE_NUMBER	POLE NUMBER	Lighting Unit
ROUTE_ID	ROUTE ID	Lighting Unit
OWNER_NAME	ADMINISTRATIVE UNIT	Lighting System
END_MEASURE	END MEASURE	Lighting System
INSTALL_DATE	INSTALL DATE	Lighting System
LIGHT_SYSTEM_ID	LIGHT SYSTEM ID	Lighting System
LIGHT_SYSTEM_NAME	LIGHT SYSTEM NAME	Lighting System
LIGHT_SYSTEM_STATUS_NAME	LIGHT SYSTEM STATUS	Lighting System
LIGHT_SYSTEM_CLASS_CODE_NAME	LIGHT SYSTEM TYPE	Lighting System

ROUTE_ID	ROUTE ID	Lighting System
TB_BARRIER_HEIGHT	BARRIER HEIGHT	Roadside Barrier
LENGTH	BARRIER LENGTH	Roadside Barrier
TB_POST_TYPE_NAME	BARRIER POST TYPE	Roadside Barrier
TB_CURB_HEIGHT_NAME	CURB HEIGHT	Roadside Barrier
INSTALL_DATE	INSTALLATION DATE	Roadside Barrier
TRAF_BARRIER_CLASS_CODE_NAME	LINEAR BARRIER CLASS	Roadside Barrier
TRAF_BARRIER_ID	LINEAR BARRIER ID	Roadside Barrier
TRAF_BARRIER_NAME	LINEAR BARRIER NAME	Roadside Barrier
TRAF_BARRIER_STATUS_NAME	LINEAR BARRIER STATUS	Roadside Barrier
TB_LBSUBCAT_TYPE_NAME	LINEAR BARRIER SUBTYPE	Roadside Barrier
TB_LBCAT_TYPE_NAME	LINEAR BARRER TYPE	Roadside Barrier
TB_CABLE_NUM	NUMBER OF CABLES	Roadside Barrier
OWNER_NAME	OWNER NAME	Roadside Barrier
ASSET_STATUS_NAME	ASSET STATUS	Roadside Barrier Terminal
TB_TERMINI_CLASS_CODE_NAME	BARRIER TERMINAL CLASS	Roadside Barrier Terminal
TB_BARRIER_HEIGHT	BARRIER TERMINAL HEIGHT	Roadside Barrier Terminal
TB_TERMINI_ID	BARRIER TERMINAL ID	Roadside Barrier Terminal
LENGTH	BARRIER TERMINAL LENGTH	Roadside Barrier

		Terminal
TB_TERIMINI_NAME	BARRIER TERMINAL NAME	Roadside Barrier Terminal
TB_CURB_HEIGHT_NAME	CURB HEIGHT	Roadside Barrier Terminal
INSTALLATIONDATE	INSTALLATION DATE	Roadside Barrier Terminal
BRACE_NUMBER_NAME	BRACE NUMBER	Sign Support
GROUND_MOUNT_TYPE_NAME	GROUND MOUNT TYPE	Sign Support
GROUND_SUPPORT_TYPE_NAME	GROUP SUPPORT TYPE	Sign Support
DATE_INSTALLED	INSTALL DATE	Sign Support
POST_NUMBER_NAME	POST NUMBER	Sign Support
ROUTE_TYPE_NAME	ROUTE TYPE	Sign Support
STRUCTURE_OWNER_NAME	STRUCTURE OWNER	Sign Support
SUPPORT_CLASS_CODE_NAME	SUPPORT CLASS	Sign Support
SUPPORT_ID	SUPPORT ID	Sign Support
SUPPORT_NAME	SUPPORT NAME	Sign Support
SUPPORTS_POSITION_NAME	SUPPORT POSITION	Sign Support
SUPPORTS_STATUS_NAME	SUPPORT STATUS	Sign Support
TRAVEL_DIRECTION_NAME	TRAVEL DIRECTION	Sign Support
CITY_NAME	CITY	Crash
COUNTY_NAME	COUNTY	Crash
BRIDGE_IND	CRASH OCCURRED ON BRIDGE	Crash
CRASH_SEVERITY_CODE	CRASH SEVERITY	Crash
CRASH_TYPE_CODED	CRASH TYPE	Crash
DATE_TIME_OF_INCIDENT	DATE AND TIME CRASH OCCURRED	Crash
INCIDENT_ID	INCIDENT ID	Crash
LIGHT_CONDITION_CODE	LIGHT CONDITIONS	Crash
ROUTE_MEASURE	MEASURE	Crash
MINIMUM_DAMAGE_IND	MINIMUM DAMANGE THRESHOLD	Crash
NUMBER_OF_VEHICLES_INVOLVED	NUMBER OF VEHICLES	Crash
INTERSECTION_RELATED_IND	RELATIONSHIP TO INTERSECTION	Crash
ROUTE_ID	ROUTE ID	Crash
BUS_INVOLVED_CODE	SCHOOL BUS INVOLVED CRASH	Crash
NUMBER_OF_FATALITIES	TOTAL NUMBER OF FATALITIES	Crash
TOWNSHIP_GNIS_FEATURE_ID	TOWNSHIP NUMBER	Crash

WEATHER_CODE	WEATHER CONDITIONS 1	Crash
WEATHER_SECONDARY_CODE	WEATHER CONDITIONS 2	Crash
WORKERS_PRESENT_CODE	WORKER PRESENT	Crash
WORK_ZONE_LOCATION_CODE	WORK ZONE LOCATION	Crash
WORKZONE_IND	WORK ZONE MARKED	Crash
YEAR	YEAR	Crash
VEHICLE_COLOR	COLOR OF VEHICLE	Unit
FIRE_CODE	FIRE IN VEHICLE	Unit
INCIDENT_IND	INCIDENT ID	Unit
MOST_HARMFUL_EVENT_CODE	MOST HARMFUL EVENT	Unit
CARGO_BODY_TYPE_CODE	MOTOR CARRIER BODY TYPE	Unit
PRIMARY_CONTRIBUTOR_CODE	CONTRIBUTING FACTOR 1	Unit
SECONDARY_CONTRIBUTOR_CODE	CONTRIBUTING FACTOR 2	Unit
POSTED_SPEED	POSTED SPEED LIMIT	Unit
ROADWAY_GRADE_CODE	ROADWAY GRADE CODE	Unit
LICENSE_PLATE_STATE_CODE	STATE OF VEHICLE REGISTRATION	Unit
TRAFFIC_CONTROL_CONDITION_CODE	TRAFFIC CONTROL CONDITION	Unit
TRAFFICWAY_DESIGN_CODE	TRAFFICWAY DESIGN	Unit
VEHILCE_MODEL	TYPE OF VEHICLE	Unit
UNIT_ID	UNIT ID	Unit
UNIT_TYPE_CODE	UNIT TYPE	Unit
HAZMAT_CLASS_CODE	VEHICLE CARRYING HAZARDOUS MATERIAL	Unit
DIRECTION_OF_MOVEMNT_CODE	VEHICLE DIRECTION	Unit
VEHICLE_MAKE	VEHICLE MAKE	Unit
TOWED_IND	VEHICLE TOWED	Unit
YEAR	YEAR	Unit
AGE	AGE	Person
AIRBAG_CODE	AIRBAG DEPLOYED	Person
BLOOD_ALCOHOL_TEST_RESULT_CODE	BLOOD ALCOHOL TEST RESULT	Person
ALCOHOL_TEST_TYPE_CODE	BLOOD ALCOHOL TEST TYPE	Person
DL_CLASS	DRIVER LICENSE CLASS	Person
DL_RESTRICTION1_CODE	DRIVER – LICENSE RESTRICTION 1	Person
DL_RESTRICTION2_CODE	DRIVER – LICENSE RESTRICTION 1	Person
DL_RESTRICTION3_CODE	DRIVER – LICENSE RESTRICTION 1	Person
DL_STATE_CODE	DRIVER LICENSE STATE	Person
DRUG_TEST_STATUS_CODE	DRUG TEST PERFORMED	Person
EJECTION_CODE	EJECTION FROM VEHICLE	Person
INCIDENT_ID	INCIDENT ID	Person

INJURY_SEVERITY_CODE	INJURY SEVERITY	Person
PERSON_ID	PERSON ID	Person
PHYSICAL_CONDITION_CODE	PHYSICAL CONDITION 1	Person
PHYSICAL_CONDITION2_CODE	PHYSICAL CONDITION 2	Person
POSITION_CODE	POSITION IN VEHICLE	Person
SAFETY_EQUIPMENT_USE_COD	SAFETY EQUIPMENT USED	Person
GENDER_CODE	SEX	Person
TRANSPORT_TYPE_CODE	TRANSPORTED TO HOSPITAL METHOD	Person
UNIT_ID	UNIT ID	Person
YEAR	YEAR	Person

Roadway File

AADT

Variable Name: AADT

Definition: Counted or estimated AADT for the segment.

Field Type: Numeric.

AADT Daily Factor Group

Variable Name: AADT_DAILY_FACTOR_GROUP

Definition: Broad category or factor group that applies to the traffic counts and AADT on the segment (e.g., 'Sim WkDay/WkEnd').

Field Type: Text.

AADT Data Type

Variable Name: AADT_DATA_TYPE

Definition: The type of sample or method used to collect data.

Field Type: Coded.

'A' 'Actual'
'M' 'Created'

Access Control

Variable Name: ACCESS_CONTROL

Definition: Indicates some degree of control of through movements to a road. (e.g., 'Full Access Control').

Field Type: Text.

Additional Lane Left

Variable Name: ADDITIONAL_LANE_LEFT

Definition: Type of additional lane on the left side of the road based on direction of travel (e.g., 'Acceleration').

Field Type: Text.

Additional Lane Right

Variable Name: ADDITIONAL_LANE_RIGHT

Definition: Type of additional lane on the right side of the road based on direction of travel (e.g., Escape).

Field Type: Text.

Calculated Ending Measure*

Variable Name: TO_MEASURE

Definition: The ending measure or milepost. This value is the primary means to link other files to the Roadway file.

Field Type: Numeric.

Calculated From Measure*

Variable Name: FROM_MEASURE

Definition: The beginning measure or milepost. This value is the primary means to link other files to the Roadway file.

Field Type: Numeric.

City Name

Variable Name: CITY_NAME

Definition: City where the segment is located (e.g., 'Saint Paul').

Field Type: Text.

City/Township Class

Variable Name: CTU_CLASS

Definition: The type of city or township in which the segment is located (e.g., 'TOWNSHIP').

Field Type: Text.

* Variable created or edited by HSIS Lab

Commercial AADT

Variable Name: COMMERCIAL_AADT

Definition: Counted or estimated AADT for commercial traffic on the segment.

Field Type: Numeric.

County

Variable Name: COUNTY_NAME

Definition: County where the segment is located (e.g., 'Hennepin').

Field Type: Text.

Curb Side

Variable Name: CURB_SIDE

Definition: Indicate for the side of the road segment where curb is present.

Field Type: Coded.

'B' 'Both'
'L' 'Left'
'R' 'Right'

Divided and One-Way Code

Variable Name: FACILITY_TYPE

Definition: The type of traffic operation of the road segment (e.g., 'Two-Way Roadway').

Field Type: Text.

Functional Class

Variable Name: FUNCTIONAL_CLASS

Definition: Federal functional classification of the roadway segment (e.g., 'Major Collector').

Field Type: Text.

Left Shoulder Type – Paved
Variable Name: PAVED_SHOULDER_LEFT

Left Shoulder Type – Unpaved
Variable Name: UNPAVED_SHOULDER_LEFT

Definition: Each field indicates there is a paved or unpaved shoulder on the left side of the segment, as well as the surface type of the shoulder (e.g., 'Surfaced shoulder exists – bituminous concrete (AC)' for paved, or 'Stabilized shoulder exists' for unpaved).

Field Type: Text.

Left Shoulder Width – Paved
Variable Name: PAVED_SHOULDER_LEFT_WIDTH

Left Sh. Width – Unpaved
Variable Name: UNPAVED_SHOULDER_LEFT_WIDTH

Definition: The width of the applicable left shoulder in feet (if present).

Field Type: Numeric.

Maintenance District Name
Variable Name: MAINTENANCE_DISTRICT_NAME

Definition: District responsible for maintenance of the road segment (e.g., 'D1-DULUTH').

Field Type: Text.

Median Structure Type
Variable Name: MEDIAN_STRUCTURE_TYPE

Definition: The detailed type of median structure on the road segment, if it has one (e.g., 'Cable High Tension').

Field Type: Text.

Median Type
Variable Name: MEDIAN_TYPE

Definition: The generic type of median on the roadway segment, if it has one (e.g., 'Positive Barrier – semi-rigid').

Field Type: Text.

Median Width

Variable Name: MEDIAN_WIDTH

Definition: The width of the median in feet.

Field Type: Numeric.

Number of Lanes

Variable Name: TOTAL_LANES

Definition: Total number of through travel lanes on the segment. See Table 1 for variable interpretation.

Field Type: Numeric.

Parking on Left of Road

Variable Name: PARKING_LEFT

Parking on Right of Road

Variable Name: PARKING_RIGHT

Definition: Type of parking present on a segment (e.g., 'Parallel').

Field Type: Text.

Right Shoulder Type – Paved

Variable Name: PAVED_SHOULDER_RIGHT

Right Shoulder Type – Unpaved

Variable Name: UNPAVED_SHOULDER_RIGHT

Definition: Each field indicates there is a paved or unpaved shoulder on the right side of the segment, as well as the surface type of the shoulder (e.g., 'Surfaced shoulder exists – bituminous concrete (AC)' for paved, or 'Stabilized shoulder exists' for unpaved).

Field Type: Text.

R. Sh. Width – Paved

Variable Name: PAVED_SHOULDER_RIGHT_WIDTH

R. Sh. Width – Unpaved

Variable Name: UNPAVED_SHOULDER_RIGHT_WIDTH

Definition: The width of the applicable right shoulder in feet (if present).

Field Type: Numeric.

Roadway Class*

Variable Name: RODWYCLS

Definition: This variable is developed by the HSIS Laboratory for the purposes of readily classifying roadway data. This variable is a combination of the *Number of Lanes*, *Rural Urban Identification*, *Median Type*, and *Functional Class* variables.

Field Type: Text.

Values:

Urban Freeways
Urban 2 Lane Roads
Urban Multilane Divided Non-Freeway
Urban Multilane Undivided Non-Freeway
Rural Freeways
Rural 2 Lane Roads
Rural Multilane Divided Non-Freeway
Rural Multilane Undivided Non-Freeway
Other

Route ID

Variable Name: ROUTE_ID

Definition: Route ID of the roadway segment. This variable is used to link the other files to the Roadway file.

Field Type: Text.

Surface Type

Variable Name: BASIC_PAVEMENT_TYPE

Definition: Pavement type of the drivable portion of the road segment (e.g., 'Bituminous').

Field Type: Text.

* Variable created by HSIS Lab

Travel Width

Variable Name: TRAVEL_WIDTH

Definition: Width of the area of travel on the segment in feet. See Table 1 for variable interpretation.

Field Type: Numeric.

Intersection File

ADT Entering Volume

Variable Name: ADT_ENTERING_VOLUME

Definition: Combined daily traffic volume entering the intersection.

Field Type: Numeric.

City/Township Name

Variable Name: CTU_NAME

Definition: Name of the city or township in which the intersection is located (e.g., 'Saint Paul').

Field Type: Text.

County Name

Variable Name: COUNTY_NAME

Definition: County in which the intersection is located (e.g., 'Hennepin').

Field Type: Text.

General Intersection Type

Variable Name: GENERAL_INTERSECTION_TYPE

Definition: Type of intersection geometry (e.g., 'Four-way').

Field Type: Text.

Intersection Name

Variable Name: INTERSECTION_NAME

Definition: Name of intersection that is a combination of the coded name of the roads and the generic name of the roads involved (e.g., 'M 88 (114th St N) and M 100 (Ironwood Ave N)').

Field Type: Text.

Lighting Exists

Variable Name: LIGHTING_EXISTS

Definition: Indicator that lighting is present at the intersection (e.g., 'Yes').

Field Type: Text.

Lighting Type

Variable Name: LIGHTING_TYPE

Definition: The type of lighting that is present at the intersection, if it exists (e.g., 'Continuous').

Field Type: Text.

Primary Route ID

Variable Name: PRIMARY_ROUTE_ID

Definition: Route ID of primary route entering the intersection polygon (e.g., '1000023949630088-I').

Field Type: Text.

Traffic Control Exists

Variable Name: TRAFFIC_CONTROL_EXISTS

Definition: Indicator that traffic control is present at the intersection (e.g., 'No').

Field Type: Text.

Traffic Control Type

Variable Name: TRAFFIC_CONTROL_TYPE

Definition: Type of traffic control at the intersection, if traffic control exists (e.g., 'Signal').

Field Type: Text.

Specific Intersection Design

Variable Name: INTERSECTION_DESIGN_SPECIFIC

Definition: Intersection design subtype of the general intersection design (e.g., 'Four-way Right Angle').

Field Type: Text.

Year of ADT Entering Volume

Variable Name: ADT_ENTERING_VOLUME_YR

Definition: The year that the daily traffic entering the intersection was counted or estimated.

Field Type: Numeric.

Horizontal Curve File

Average Bearing

Variable Name: DIRECTION

Definition: The average bearing of the curve segment in degrees (e.g., '50.0348').

Field Type: Numeric.

Curve Arc Length

Variable Name: ARCLENGTH

Definition: The length of the curve from one point of curvature to the other in meters (e.g., '343.324').

Field Type: Numeric.

Curve Delta

Variable Name: DELTA

Definition: The angular change along a curve in degrees (e.g., '69.3407').

Field Type: Numeric.

Curve ID

Variable Name: CURVE_ID

Definition: Unique ID for the curve that is made up of the district, road number, and curve number (e.g., '1.023.010').

Field Type: Text.

Curve Length

Variable Name: DISTANCE

Definition: The straight-line length of the curve (i.e., as the crow flies) in meters (e.g., '322.753').

Field Type: Numeric.

Curve Number

Variable Name: CURVE_NUMBER

Definition: The number of the curve in sequential order that restarts with each road number (e.g., '1').

Field Type: Numeric.

Curve Radius

Variable Name: RADIUS

Definition: The distance from the center point of a curve to the arc of a curve in meters (e.g., '283. 687').

Field Type: Numeric.

Curve Tangent

Variable Name: TANGENT

Definition: Tangent length of the curve in meters (e.g., '196.217').

Field Type: Numeric.

District Number

Variable Name: DISTRICT_NUMBER

Definition: District number in which the curve is located (e.g., '1').

Field Type: Numeric.

Road Number

Variable Name: TIS_ID

Definition: Unique identifier of the road that the curve is on (e.g., '0300000023').

Field Type: Numeric.

Intersection Approach File

From Measure

Variable Name: FROM_MEASURE

Definition: The beginning milepost of the intersection approach. This variable, used in conjunction with the *Route ID*, can help link the intersection leg to the Roadway and Crash files.

Field Type: Numeric.

Global ID

Variable Name: INTERSECTION_GLOBALID

Definition: Unique identifier associated with the intersection as a whole (e.g., '000EDADC-7640-4927-962B-297CA7DEE8FC').

Field Type: Text.

Route ID

Variable Name: ROUTE_ID

Definition: Route ID of the intersection approach. This variable, used in conjunction with the measure fields, can help link the intersection leg to the Roadway and Crash files. There are two approaches assigned to a route (representing both directions of travel; e.g., '0800006594500245-I').

Field Type: Text.

To Measure

Variable Name: TO_MEASURE

Definition: The ending milepost of the intersection approach. This variable, used in conjunction with the *Route ID*, can help link the intersection leg to the Roadway and Crash files.

Field Type: Numeric.

Traffic Signal File

Date In Service

Variable Name: DATE_INSERVICE

Definition: Date device was installed and started service (MM/DD/YYYY).

Field Type: Date.

End Measure

Variable Name: END_MEASURE

Definition: Measure or milepost where the traffic signal is located. This variable can be used in combination with the ROUTE_ID variable to link to the Roadway file.

Field Type: Numeric.

Route ID

Variable Name: ROUTE_ID

Definition: The route ID of the road where the traffic signal is located. This variable can be used in combination with the END_MEASURE variable to link to the Roadway file. (e.g., '0200000000000061-I').

Field Type: Text.

Signal Location

Variable Name: SGL_THRU_LOCATION

Definition: Location of the signal shown by the names of the applicable crossroads (e.g., '8TH AV SE/SW').

Field Type: Text.

Signal System Class

Variable Name: SIGNAL_SYSTEM_CLASS_CODE_NAME

Definition: The type of traffic signal system (e.g., 'Intersection with Battery Backup').

Field Type: Text.

Signal System ID

Variable Name: SIGNAL_SYSTEM_ID

Definition: Unique ID for the signal system (e.g., '1734921').

Field Type: Numeric.

Signal System Name

Variable Name: SIGNAL_SYSTEM_NAME

Definition: A unique name of the signal consisting of the road(s) involved with the signal and the unique signal ID (e.g., 'SigSys-MN1-32 N JCT 8TH & MAIN-1734921').

Field Type: Text.

Signal System Status

Variable Name: SIGNAL_SYSTEM_STATUS_NAME

Definition: Status of signal system (e.g., 'Active').

Field Type: Text.

Interchange File

City/Township Name

Variable Name: CTU_NAME

Definition: Name of the city or township in which the interchange is located (e.g., 'Minneapolis').

Field Type: Text.

County Name

Variable Name: COUNTY_NAME

Definition: County in which the interchange is located (e.g., 'Hennepin').

Field Type: Text.

Interchange Design General

Variable Name: INTERCHANGE_DESIGN_GENERAL

Definition: General design and configuration of the interchange (e.g., 'Diamond').

Field Type: Text.

Interchange Design Specific

Variable Name: INTERCHANGE_DESIGN_SPECIFIC

Definition: The specific subtype design and detail of the interchange (e.g., 'Diamond with Frontage Roads').

Field Type: Text.

Interchange Name

Variable Name: INTERCHANGE_NAME

Definition: Name assigned to the interchange that is a combination of the two or more roads that intersect (e.g., 'ISTH 35W / 31ST ST').

Field Type: Text.

Lighting Type

Variable Name: LIGHTING_TYPE

Definition: Type of lighting present at the interchange (e.g., 'Roadway, Underpass)'.

Field Type: Text.

Primary Route ID

Variable Name: PRIMARY_ROUTE_ID

Definition: Route ID of the primary road at the interchange (e.g., '0300000000000371-I').

Field Type: Text.

Roadway Lighting

Variable Name: LIGHTING_EXISTS

Definition: Indicator that lighting is present at the interchange (e.g., 'Yes').

Field Type: Text.

Traffic Control Exists

Variable Name: TRAFFIC_CONTROL_EXISTS

Definition: Indicator that traffic control is present at the interchange (e.g., 'Yes').

Field Type: Text.

Traffic Control Type

Variable Name: TRAFFIC_CONTROL_TYPE

Definition: Text field detailing the type of traffic control that is present at the interchange (e.g., 'BEGIN SL 30 1/3 MI 36X66, CHEVRON RIGHT 18X24, EXIT ADVISORY 50 48X60, Intersection, RAMP 30 M.P.H.*').

Field Type: Text.

Lighting Unit File

Date Installed

Variable Name: DATE_INSTALLED

Definition: Date light unit was installed (MM/DD/YYYY).

Field Type: Date.

End Measure

Variable Name: END_MEASURE

Definition: Milepost of the road that the light unit occurs on.

Field Type: Numeric.

Foundation Type

Variable Name: SGL_ELEC_ASM_FOUNDATION_NAME

Definition: The foundation type that supports the light unit (e.g., 'Cast in place').

Field Type: Text.

Light System ID

Variable Name: LIGHT_SYSTEM_ID

Definition: Unique ID for the applicable light system (e.g., '1756537').

Field Type: Numeric.

Light System Name

Variable Name: LIGHT_SYSTEM_NAME

Definition: Unique name of the applicable light system. The name includes the unique ID and the road name the name on which the system is located (e.g., 'LightSys-I494-7-S03L-1756537').

Field Type: Text.

Light Unit ID

Variable Name: LIGHT_UNIT_ID

Definition: Unique ID for light unit (e.g., '2409595').

Field Type: Numeric.

Lighting Unit File

Light Unit Name

Variable Name: LIGHT_UNIT_NAME

Definition: Unique name for the light unit that includes the unique ID and the road name on which the unit is located (e.g., 'LightUnit-I35-3RD AVE E-B94P-7-1763913').

Field Type: Text.

Light Unit Status

Variable Name: LIGHT_UNIT_STATUS_NAME

Definition: Status of light unit (e.g., 'Active').

Field Type: Text.

Light Unit Type

Variable Name: LIGHT_UNIT_CLASS_CODE_NAME

Definition: The type of area that the light unit is lighting (e.g., 'Roadway').

Field Type: Text.

Mounting Height

Variable Name: SGL_ELECT_ASM_LUMHEIGHT_NAME

Definition: Luminaire height off of the ground in feet.

Field Type: Numeric.

Owner Name

Variable Name: OWNER_NAME

Definition: The district that is responsible for the light unit (e.g., '9100 - District 1').

Field Type: Text.

Pole Number

Variable Name: SGL_POLE_NUMBER

Definition: The unique number of the pole unit among the light system.

Field Type: Numeric.

Route ID

Variable Name: ROUTE_ID

Definition: Route ID of the road that the unit is on. This variable can be used to link the unit to the Roadway file (e.g., '0300000000000007-I').

Lighting Unit File

Field Type: Text.

Lighting System File

Administrative Unit

Variable Name: OWNER_NAME

Definition: The district that is responsible for the light system (e.g., District 6).

Field Type: Text.

End Measure

Variable Name: END_MEASURE

Definition: Measure or milepost of the route on which the light system is located.

Field Type: Numeric.

Install Date

Variable Name: INSTALL_DATE

Definition: Date of light system installation (MM/DD/YYYY).

Field Type: Date.

Light System ID

Variable Name: LIGHT_SYSTEM_ID

Definition: Unique ID for light system (e.g., '1756537').

Field Type: Numeric.

Light System Name

Variable Name: LIGHT_SYSTEM_NAME

Definition: Unique name of light system that includes the unique ID and the applicable road name (e.g., 'LightSys-I494-7-S03L-1756537').

Field Type: Text.

Light System Status

Variable Name: LIGHT_SYSTEM_STATUS_NAME

Definition: Status of light system (e.g., 'Active').

Field Type: Text.

Lighting System File

Light System Type

Variable Name: LIGHT_SYSTEM_CLASS_CODE_NAME

Definition: The type of area that the system is lighting (e.g., 'Intersection').

Field Type: Text.

Route ID

Variable Name: ROUTE_ID

Definition: Route ID of the road on which system is located. This variable can be used to link the system to the Roadway file (e.g., '0300000000000007-I').

Field Type: Text.

Roadside Barrier File

Barrier Height

Variable Name: TB_BARRIER_HEIGHT

Definition: Barrier height in inches.

Field Type: Numeric.

Barrier Length

Variable Name: LENGTH

Definition: Length of the barrier in feet.

Field Type: Numeric.

Barrier Post Type

Variable Name: TB_POST_TYPE_NAME

Definition: The type of material of the post that supports the barrier (e.g., 'Steel').

Field Type: Text.

Curb Height

Variable Name: TB_CURB_HEIGHT_NAME

Definition: Indicator that a curb is present, and if so, that the curb is greater than 3 inches (e.g., 'Greater than 3'').

Field Type: Text.

Installation Date

Variable Name: INSTALL_DATE

Definition: Date the barrier was installed (YYYY:MM:DD).

Field Type: Date.

Linear Barrier Class

Variable Name: TRAF_BARRIER_CLASS_CODE_NAME

Definition: The class of the linear barrier (e.g., 'Plate Beam').

Field Type: Text.

Linear Barrier ID

Variable Name: TRAF_BARRIER_ID

Definition: Unique ID for the linear barrier (e.g., '2432515').

Field Type: Numeric.

Linear Barrier Name

Variable Name: TRAF_BARRIER_NAME

Definition: Unique name for the linear barrier than includes the applicable road (e.g., 'TBL-I35W-029-55B').

Field Type: Text.

Linear Barrier Status

Variable Name: TRAF_BARRIER_STATUS_NAME

Definition: Status of the linear barrier (e.g., 'Inplace').

Field Type: Text.

Linear Barrier Subtype

Variable Name: TB_LBSUBCAT_TYPE_NAME

Definition: The subtype of the linear barrier (e.g., 'Type 31 Long Span').

Field Type: Text.

Linear Barrier Type

Variable Name: TB_LBCAT_TYPE_NAME

Definition: The type of linear barrier (e.g., 'W-beam').

Field Type: Text.

Number of Cables

Variable Name: TB_CABLE_NUM

Definition: Number of cables that the barrier has if it is a cable barrier, otherwise null.

Field Type: Numeric.

Owner Name

Variable Name: OWNER_NAME

Definition: The administrative unit that is responsible for owning the barrier (e.g., '9452 - D-4 Fergus Falls Sub Area').

Field Type: Text.

Roadside Barrier Terminal File

Asset Status

Variable Name: ASSET_STATUS_NAME

Definition: Status of the barrier terminal (e.g., 'Removed').

Field Type: Text.

Barrier Terminal Class

Variable Name: TB_TERMINI_CLASS_CODE_NAME

Definition: The class of the barrier terminal (e.g., 'Cable Anchor').

Field Type: Text.

Barrier Terminal Height

Variable Name: TB_BARRIER_HEIGHT

Definition: Barrier terminal height in inches.

Field Type: Numeric.

Barrier Terminal ID

Variable Name: TB_TERMINI_ID

Definition: Unique ID for the barrier terminal (e.g., '2454733').

Field Type: Numeric.

Barrier Terminal Length

Variable Name: LENGTH

Definition: Length of the barrier terminal in feet.

Field Type: Numeric.

Barrier Terminal Name

Variable Name: TB_TERMINI_NAME

Definition: Unique name for the barrier terminal than includes the applicable road (e.g., 'TBT-I694-037-34').

Field Type: Text.

Curb Height

Variable Name: TB_CURB_HEIGHT_NAME

Definition: Indicator that a curb is present, and if so, that the curb is greater than 3 inches (e.g., 'Greater than 3'').

Field Type: Text.

Installation Date

Variable Name: INSTALLATIONDATE

Definition: Date the barrier terminal was installed (YYYY:MM:DD).

Field Type: Date.

Sign Support File

Brace Number

Variable Name: BRACE_NUMBER_NAME

Definition: Number of braces on the sign support.

Field Type: Numeric.

Ground Mount Type

Variable Name: GROUND_MOUNT_TYPE_NAME

Definition: The type of ground mount for the sign support (e.g., '5/16 or 3/8 steel bolts').

Field Type: Text.

Ground Support Type

Variable Name: GROUND_SUPPORT_TYPE_NAME

Definition: The type of support pole associated with the sign support (e.g., 'U Channel').

Field Type: Text.

Install Date

Variable Name: DATE_INSTALLED

Definition: The install date of the sign support (MM/DD/YYYY).

Field Type: Date.

Post Number

Variable Name: POST_NUMBER_NAME

Definition: Number of posts incorporated in the sign support.

Field Type: Numeric.

Route Type

Variable Name: ROUTE_TYPE_NAME

Definition: The type of route that the sign support is associated with (e.g., 'Ramp').

Field Type: Text.

Structure Owner

Variable Name: STRUCTURE_OWNER_NAME

Definition: The agency responsible for the sign support (e.g., 'MNDOT').

Field Type: Text.

Support Class

Variable Name: SUPPORT_CLASS_CODE_NAME

Definition: The general location of the support (e.g., 'Overhead').

Field Type: Text.

Support ID

Variable Name: SUPPORT_ID

Definition: Unique ID for the sign support (e.g., '2667953').

Field Type: Numeric.

Support Name

Variable Name: SUPPORT_NAME

Definition: Generic name of the support that is made up of the Support ID and the type of sign or content (e.g., '2667953 CYLINDER DELINEATOR YELLOW').

Field Type: Text.

Support Position

Variable Name: SUPPORTS_POSITION_NAME

Definition: Where, relative to the road, the sign support is placed (e.g., 'Right').

Field Type: Text.

Support Status

Variable Name: SUPPORTS_STATUS_NAME

Definition: The status of the sign support, whether it is in place or not at the time of the data creation (e.g., 'Inplace').

Field Type: Text.

Travel Direction

Variable Name: TRAVEL_DIRECTION_NAME

Definition: The applicable travel direction the sign faces (e.g., 'North').

Sign Support File

Field Type: Text.

Crash File

City

Variable Name: CITY_NAME

Definition: City where the crash occurred (e.g., 'Saint Paul').

Field Type: Text.

County

Variable Name: COUNTY_NAME

Definition: County where the crash occurred (e.g., 'Ramsey').

Field Type: Text.

Crash Occurred on Bridge

Variable Name: BRIDGE_IND

Definition: Indicator that crash occurred on a bridge.

Field Type: Coded.

'1'	'Yes'
'2'	'No'
'99'	'Unknown'

Crash Severity

Variable Name: CRASH_SEVERITY_CODE

Definition: The most severe injury as a result of the crash.

Field Type: Coded.

'1'	'Killed'
'2'	'Suspected Serious Injury (A)'
'3'	'Suspected Minor Injury (B)'
'4'	'Possible Injury (C)'
'5'	'No Apparent Injury'

Crash Type

Variable Name: CRASH_TYPE_CODE

Definition: The first harmful event of the crash.

Field Type: Coded.

'8'	'Pedestrian'

'9'	'Pedalcyclist (Bicyclist)'
'10'	'Motor Vehicle In Transport'
'11'	'Parked Motor Vehicle'
'12'	'Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle'
'13'	'Train – LRT'
'14'	'Train – Passenger'
'15'	'Train – Cargo'
'16'	'Deer'
'17'	'Other Animal - Alive at Time of Crash'
'18'	'Other Animal - Dead Before Crash'
'20'	'Separation of Units'
'21'	'Ran Off Roadway Right'
'22'	'Ran Off Roadway Left'
'23'	'Cross Median'
'24'	'Cross Centerline'
'25'	'Other - Non Fixed Object'
'28'	'Utility Pole/Light Support'
'30'	'Traffic Signal or Signal Structure'
'31'	'RR / LRT Crossing Device'
'32'	'Roadway Sign or Sign Structure'
'33'	'Downhill Runaway'
'34'	'Fell/Jumped From Motor Vehicle'
'35'	'Other Post, Pole or Support'
'36'	'Construction or Maintenance Equipment'
'37'	'Reentering Roadway'
'38'	'Thrown or Falling Object'
'39'	'Cargo/Equipment Loss or Shift'
'41'	'Bridge Pier or Support'
'42'	'Bridge Overhead Structure'
'43'	'Bridge Rail'
'46'	'Culvert'
'47'	'Curb'
'48'	'Ditch'
'49'	'Embankment'
'50'	'Snowbank'
'51'	'Other - Non-Motorist'
'55'	'Cable Median Barrier'
'56'	'Concrete Traffic Barrier'
'57'	'Other Traffic Barrier'
'60'	'Impact attenuator/ Crash Cushion'
'61'	'Guardrail (Face)'

'62'	'Guardrail (End)'
'67'	'Mailboxes/Posts'
'68'	'Hydrant'
'69'	'Standing Tree/Shrubbery'
'70'	'Fence (Non-Median Barrier)'
'71'	'Parking Meter'
'75'	'Other - Fixed Object'
'83'	'Overturn/Rollover'
'84'	'Immersion (Full or Partial)'
'85'	'Fire/Explosion'
'86'	'Jackknife'
'89'	'Other Non-Collision'
'99'	'Unknown'

Date and Time Crash Occurred

Variable Name: DATE_TIME_OF_INCIDENT

Definition: Date and time when the crash occurred (e.g., '5/20/2020 4:10:00 PM').

Field Type: Date.

Incident ID

Variable Name: INCIDENT_ID

Definition: Unique identifier for the crash. This is linkable to Unit and Person files.

Field Type: Numeric.

Light Conditions

Variable Name: LIGHT_CONDITION_CODE

Definition: The type/level of light present at the time of the crash.

Field Type: Coded.

'1'	'Daylight'
'2'	'Dawn'
'3'	'Dusk'
'4'	'Dark Street Lights On'
'5'	'Dark Street Lights Off'
'6'	'Dark No Street Lights'
'7'	'Dark Unknown Lighting'
'90'	'Other'
'99'	'Unknown'

Measure

Variable Name: ROUTE_MEASURE

Definition: Measure or milepost of the crash that is used to link the crash to the roadway via the linear referencing system (LRS).

Field Type: Numeric.

Minimum Damage Threshold

Variable Name: MINIMUM_DAMAGE_IND

Definition: Indicator that the minimum damage (i.e., dollar amount) threshold for a reportable crash was met.

Field Type: Coded.

'1'	'Yes'
'2'	'No'
'99'	'Unknown'

Number of Vehicles

Variable Name: NUMBER_OF_VEHICLES_INVOLVED

Definition: Number of vehicles involved in the crash.

Field Type: Numeric.

Relationship to Intersection

Variable Name: INTERSECTION_RELATED_IND

Definition: Indicator that a crash is related to an intersection.

Field Type: Coded.

'1'	'Yes
'2'	'No'
'99'	'Unknown'

Route ID

Variable Name: ROUTE_ID

Definition: The combined route system and route number where the crash occurred. This variable is used to link crashes to the Roadway file through tables (e.g., '0500023945680207-I').

Field Type: Text.

School Bus Involved Crash

Variable Name: BUS_INVOLVED_CODE

Definition: Indicator that a school bus was involved in the crash.

Field Type: Coded.

'1'	'Yes, Involved Directly'
'2'	'Yes, Involved Indirectly'
'3'	'No'

Total Number of Fatalities

Variable Name: NUMBER_OF_FATALITIES

Definition: Total number of persons killed in the crash.

Field Type: Numeric.

Township Number

Variable Name: TOWNSHIP_GNIS_FEATURE_ID

Definition: Number of the township where the crash occurred.

Field Type: Coded.

Additional Information: Access the codes through the United States Geological Survey (USGS): https://www.usgs.gov/u.s.-board-on-geographic-names/download-gnis-data.

Weather Conditions 1

Variable Name: WEATHER_CODE

Weather Conditions 2

Variable Name: WEATHER_SECONDARY_CODE

Definition: Weather conditions at the time the crash occurred.

Field Type: Coded.

'01'	'Clear'
'02'	'Cloudy'
'03'	'Rain'
'04'	'Snow'
'05'	'Sleet, Hail, (Freezing Rain or Drizzle)'
'06'	'Fog/Smog/Smoke'
'07'	'Blowing Sand/Soil/Dust/Snow'
'08'	'Severe Crosswinds'
'90'	'Other'
'99'	'Unknown'

Worker Present

Variable Name: WORKERS_PRESENT_CODE

Definition: Indicator that work zone workers were present at the time of the crash.

Field Type: Coded.

'1'	'Yes'
'2'	'No'
'99'	'Unknown'

Work Zone Location

Variable Name: WORK_ZONE_LOCATION_CODE

Definition: Location of the crash in a work-zone.

Field Type: Coded.

'1'	'Before the First Warning Sign'
'2'	'Advance Warning Area'
'3'	'Transition Area'
'4'	'Activity Area'
'5'	'Termination Area'
'6'	'After the End of Work Zone Sign'
'90'	'Other'

Work Zone Marked

Variable Name: WORKZONE_IND

Definition: Indicator that a crash occurred in a work zone.

Field Type: Coded.

'1'	'Yes'
'2'	'No'
'99'	'Unknown'

Year

Variable Name: YEAR

Definition: Applicable year the crash occurred.

Field Type: Text.

Unit File

Color of Vehicle

Variable Name: VEHICLE_COLOR

Definition: The color of the vehicle involved in the crash.

Field Type: Coded.

'ALU'	'Aluminum (non-NCIC)'
'AME'	'Amethyst (purple)'
'BGE'	'Beige'
'BLK'	'Black'
'BLU'	'Blue'
'BRN'	'Brown (non- NCIC)'
'BRO'	'Brown'
'BRZ'	'Bronze
'BUR'	'Burgundy (non- NCIC)'
'CAM'	'Camouflage'
'COM'	'Chrome'
'CPR'	'Copper'
'CRM'	'Cream'
'DBL'	'Blue, Dark'
'DGR'	'Green, Dark'
'GLD'	'Gold'
'GRN'	'Green'
'GRY'	'Gray'
'LAV'	'Lavender (purple)'
'LBL'	'Blue, Light'
'LGR'	'Green, Light'
'LVD'	'Lavender (non- NCIC)'
'MAR'	'Maroon'
'MUL'	'Multicolored'
'MVE'	'Mauve (purple)'
'ONG'	'Orange'
'PLE'	'Purple'
'PNK'	'Pink'
'RED'	'Red'
'RST'	'Rusty'
'SIL'	'Silver'
'STS'	'Stainless Steel (non- NCIC)'
'TAN'	'Tan'
'TEA'	'Teal (green)'

'TPE'	'Taupe (brown)'
'TRQ'	'Turquoise (blue)'
'UNK'	'Unknown'
'WHI'	'White'
'YEL'	'Yellow'

Fire In Vehicle

Variable Name: FIRE_CODE

Definition: Indicator that the vehicle was involved in a fire.

Field Type: Coded.

'1'	'Yes'
'2'	'No'
'99'	'Unknown'

Incident ID

Variable Name: INCIDENT_ID

Definition: Unique ID of the crash.

Field Type: Numeric.

Most Harmful Event

Variable Name: MOST_HARMFUL_EVENT_CODE

Definition: Most harmful event in the crash.

Field Type: Coded.

'8'	'Pedestrian'
'9'	'Pedalcyclist (Bicyclist)'
'10'	'Motor Vehicle In Transport'
'11'	'Parked Motor Vehicle'
'12'	'Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle'
'13'	'Train – LRT'
'14'	'Train – Passenger'
'15'	'Train – Cargo'
'16'	'Deer'
'17'	'Other Animal - Alive at Time of Crash'
'18'	'Other Animal - Dead Before Crash'
'20'	'Separation of Units'
'21'	'Ran Off Roadway Right'

‘22’	‘Ran Off Roadway Left’
‘23’	‘Cross Median’
‘24’	‘Cross Centerline’
‘25’	‘Other - Non Fixed Object’
‘28’	‘Utility Pole/Light Support’
‘30’	‘Traffic Signal or Signal Structure’
‘31’	‘RR / LRT Crossing Device’
‘32’	‘Roadway Sign or Sign Structure’
‘33’	‘Downhill Runaway’
‘34’	‘Fell/Jumped From Motor Vehicle’
‘35’	‘Other Post, Pole or Support’
‘36’	‘Construction or Maintenance Equipment’
‘37’	‘Reentering Roadway’
‘38’	‘Thrown or Falling Object’
‘39’	‘Cargo/Equipment Loss or Shift’
‘41’	‘Bridge Pier or Support’
‘42’	‘Bridge Overhead Structure’
‘43’	‘Bridge Rail’
‘46’	‘Culvert’
‘47’	‘Curb’
‘48’	‘Ditch’
‘49’	‘Embankment’
‘50’	‘Snowbank’
‘51’	‘Other - Non-Motorist’
‘55’	‘Cable Median Barrier’
‘56’	‘Concrete Traffic Barrier’
‘57’	‘Other Traffic Barrier’
‘60’	‘Impact attenuator/ Crash Cushion’
‘61’	‘Guardrail (Face)’
‘62’	‘Guardrail (End)’
‘67’	‘Mailboxes/Posts’
‘68’	‘Hydrant’
‘69’	‘Standing Tree/Shrubbery’
‘70’	‘Fence (Non-Median Barrier)’
‘71’	‘Parking Meter’
‘75’	‘Other - Fixed Object’
‘83’	‘Overturn/Rollover’
‘84’	‘Immersion (Full or Partial)’
‘85’	‘Fire/Explosion’
‘86’	‘Jackknife’
‘89’	‘Other Non-Collision’

'99'	'Unknown'

Motor Carrier Body Type

Variable Name: CARGO_BODY_TYPE_CODE

Definition: Body type of the motor carrier involved in the crash.

Field Type: Coded.

'6'	'Van/Enclosed Box'
'8'	'Dump'
'9'	'Concrete Mixer'
'10'	'Auto Transporter'
'11'	'Garbage/Refuse'
'12'	'Hopper (Grain/Chips/Gravel)'
'13'	'Pole Trailer'
'14'	'Log'
'15'	'Bus (9 to 15 seats including Driver)'
'16'	'Intermodal Container Chassis'
'17'	'Vehicle Towing Another Vehicle'
'18'	'No Cargo Body - (Bobtail, Light Motor Vehicle with Hazardous Materials (HM) Placard, etc.)'
'19'	'Flatbed'
'20'	'Cargo Tank'
'21'	'Bus (more than 15 seats including Driver)'
'90'	'Other'
'99'	'Unknown'

Contributing Factor 1

Variable Name: PRIMARY_CONTRIBUTOR_CODE

Contributing Factor 2

Variable Name: SECONDARY_CONTRIBUTOR_CODE

Definition: Contributing factor/action at time of crash.

Field Type: Coded.

'10'	'No Clear Contributing Action'
'11'	'Defective Brakes'
'12'	'Defective Tire or Tire Failure'
'13'	'Defective Lights (Head, Signal, Tail)'
'14'	'Defective Windows/Windshield Glass'
'15'	'Oversize/Overweight Trucks'
'16'	'Vision Obscured'

'17'	'Defective Exhaust System'
'18'	'Defective Body, Doors'
'19'	'Defective Power Train'
'20'	'Defective Suspension'
'21'	'Defective Wheels'
'22'	'Defective Mirrors'
'23'	'Defective Wipers'
'24'	'Defective Steering'
'25'	'Truck Coupling / Trailer Hitch / Safety Chains'
'90'	'Other'
'99'	'Unknown'

Posted Speed Limit

Variable Name: POSTED_SPEED

Definition: Posted speed limit in miles per hour of the roadway that applies to the unit at the time of the crash.

Field Type: Numeric.

Roadway Grade Code

Variable Name: ROADWAY_GRADE_CODE

Definition: The grade category of the roadway that the unit was on at the time of the crash.

Field Type: Coded

'21'	'Level'
'22'	'Hillcrest'
'23'	'Uphill'
'24'	'Downhill'
'25'	'Sag (Bottom)'

State of Vehicle Registration

Variable Name: LICENSE_PLATE_STATE_CODE

Definition: Two letter abbreviation of the State in which the vehicle is registered (e.g., 'MN').

Field Type: Text.

Traffic Control Condition

Variable Name:TRAFFIC_CONTROL_CONDITION_CODE

Definition: The condition of the traffic control device if there was one involved in the crash.

Field Type: Coded

'1' 'Operational'
'2' 'Not Operational'
'3' 'Enhanced – Flashing, Blinking, or Illuminated'
'5' 'Traffic Control Missing'

Trafficway Design

Variable Name: TRAFFICWAY_DESIGN_CODE

Definition: Design of the road indicates one or two-way, and whether the road is divided.

Field Type: Coded

'11'	'One Way Trafficway'
'12'	'Two-Way, Not Divided'
'13'	'Two-Way, Not Divided, With Continuous Left Turn Lane'
'14'	'Two-Way, Divided, Unprotected Median'
'15'	'Two-Way, Divided, Median Barrier'
'90'	'Other'
'99'	'Unknown'

Type of Vehicle

Variable Name: VEHICLE_MODEL

Definition: Model of the vehicle involved in the crash (e.g., 'Silverado').

Field Type: Text.

Unit ID

Variable Name: UNIT_ID

Definition: Unique number of the unit in the crash. This is used to link the Person file to the unit level data.

Field Type: Numeric.

Unit Type

Variable Name: UNIT_TYPE_CODE

Definition: Type of unit.

Field Type: Coded.

'1'	'Hit-And-Run Vehicle or Unknown Driver'
'2'	'Motor Vehicle in Transport'

'3'	'Parked/Stalled Motor Vehicle'
'4'	'Working Vehicle / Equipment'
'5'	'Pedestrian'
'6'	'Bicycle'
'7'	'Other Cycle (Unicycle, Tricycle, etc.)'
'8'	'Other Personal Conveyance (Wheelchair, Horse, Buggy, Skates, Skateboard, Segway, etc.)'

Vehicle Carrying Hazardous Material Variable Name: HAZMAT_CLASS_CODE

Definition: What type of hazardous material the vehicle was carrying when the crash occurred, if it was carrying any.

Field Type: Coded.

'1'	'Explosives'
'2'	'Gases - Compressed, Dissolved or Refrigerated'
'3'	'Flammable Liquid'
'4'	'Flammable Solids - Combustible, Water Reactive'
'5'	'Oxidizing Substances - Organic Peroxides'
'6'	'Poisonous (Toxic) and Infectious Substances'
'7'	'Radioactive Material'
'8'	'Corrosives'
'9'	'Miscellaneous Dangerous Goods'
'98'	'Unknown'

Vehicle Direction Variable Name: DIRECTION_OF_MOVEMNT_CODE

Definition: Direction the vehicle was traveling when the crash occurred.

Field Type: Coded.

'1'	'Northbound'
'2'	'Southbound'
'3'	'Eastbound'
'4'	'Westbound'
'10'	'Not on Roadway'
'99'	'Unknown'

Vehicle Make

Variable Name: VEHICLE_MAKE

Definition: Make of the vehicle involved in the crash (e.g., 'CHEV').

Field Type: Text.

Additional Information: This is a four-character code indicating the vehicle make. If a code in the data is unclear as to what the make is, please contact the HSIS Laboratory.

Vehicle Towed

Variable Name: TOWED_IND

Definition: Whether the vehicle involved in the crash was towed from the scene.

Field Type: Coded.

'2'	'Not Towed'
'3'	'Towed Due to Disabling Damage'
'4'	'Towed, But Not Due to Disabling Damage'

Year

Variable Name: YEAR

Definition: Applicable year of the crash.

Field Type: Numeric.

Person File

Age

Variable Name: AGE

Definition: Age of the person involved in the crash.

Field Type: Numeric.

Airbag Deployed

Variable Name: AIRBAG_CODE

Definition: Type of airbag deployed in the crash (if applicable).

Field Type: Coded.

'5'	'Deployed – Front'
'6'	'Deployed – Side'
'7'	'Deployed – Curtain'
'8'	'Deployed – Other (Knee, Air Belt, etc.)'
'9'	'Deployed Combination'
'10'	'Not Deployed'
'98'	'Not Applicable'
'99'	'Unknown'

Blood Alcohol Test Result

Variable Name: ALCOHOL_TEST_RESULT_CODE

Definition: Blood alcohol test results for the person.

Field Type: Coded.

'0'	'0'
'1'	'Positive for Alcohol at the .01% BAC'
'2'	'Positive for Alcohol at the .02% BAC'
'3'	'Positive for Alcohol at the .03% BAC'
'4'	'Positive for Alcohol at the .04% BAC'
'5'	'Positive for Alcohol at the .05% BAC'
'6'	'Positive for Alcohol at the .06% BAC'
'7'	'Positive for Alcohol at the .07% BAC'
'8'	'Positive for Alcohol at the .08% BAC'
'9'	'Positive for Alcohol at the .09% BAC'
'10'	'Positive for Alcohol at the .10% BAC
'11'	'Positive for Alcohol at the .11% BAC'
'12'	'Positive for Alcohol at the .12% BAC'
'13'	'Positive for Alcohol at the .13% BAC'

‘14’	‘Positive for Alcohol at the .14% BAC’
‘15’	‘Positive for Alcohol at the .15% BAC’
‘16’	‘Positive for Alcohol at the .16% BAC’
‘17’	‘Positive for Alcohol at the .17% BAC’
‘18’	‘Positive for Alcohol at the .18% BAC’
‘19’	‘Positive for Alcohol at the .19% BAC’
‘20’	‘Positive for Alcohol at the .20% BAC’
‘21’	‘Positive for Alcohol at the .21% BAC’
‘22’	‘Positive for Alcohol at the .22% BAC’
‘23’	‘Positive for Alcohol at the .23% BAC’
‘24’	‘Positive for Alcohol at the .24% BAC’
‘25’	‘Positive for Alcohol at the .25% BAC’
‘26’	‘Positive for Alcohol at the .26% BAC’
‘27’	‘Positive for Alcohol at the .27% BAC’
‘28’	‘Positive for Alcohol at the .28% BAC’
‘29’	‘Positive for Alcohol at the .29% BAC’
‘30’	‘Positive for Alcohol at the .30% BAC’
‘31’	‘Positive for Alcohol at the .31% BAC’
‘32’	‘Positive for Alcohol at the .32% BAC’
‘33’	‘Positive for Alcohol at the .33% BAC’
‘34’	‘Positive for Alcohol at the .34% BAC’
‘35’	‘Positive for Alcohol at the .35% BAC’
‘36’	‘Positive for Alcohol at the .36% BAC’
‘37’	‘Positive for Alcohol at the .37% BAC’
‘38’	‘Positive for Alcohol at the .38% BAC’
‘39’	‘Positive for Alcohol at the .39% BAC’
‘40’	‘Positive for Alcohol at the .40% BAC’
‘41’	‘Positive for Alcohol at the .41% BAC’
‘42’	‘Positive for Alcohol at the .42% BAC’
‘43’	‘Positive for Alcohol at the .43% BAC’
‘44’	‘Positive for Alcohol at the .44% BAC’
‘45’	‘Positive for Alcohol at the .45% BAC’
‘46’	‘Positive for Alcohol at the .46% BAC’
‘47’	‘Positive for Alcohol at the .47% BAC’
‘48’	‘Positive for Alcohol at the .48% BAC’
‘49’	‘Positive for Alcohol at the .49% BAC’
‘50’	‘Positive for Alcohol at the .50% BAC’
‘51’	‘Positive for Alcohol at the .51% BAC’
‘52’	‘Positive for Alcohol at the .52% BAC’
‘53’	‘Positive for Alcohol at the .53% BAC’
‘54’	‘Positive for Alcohol at the .54% BAC’

'55'	'Positive for Alcohol at the .55% BAC'
'56'	'Positive for Alcohol at the .56% BAC'
'57'	'Positive for Alcohol at the .57% BAC'
'58'	'Positive for Alcohol at the .58% BAC'
'59'	'Positive for Alcohol at the .59% BAC'
'60'	'Positive for Alcohol at the .60% BAC'
'61'	'Positive for Alcohol at the .61% BAC'
'62'	'Positive for Alcohol at the .62% BAC'
'63'	'Positive for Alcohol at the .63% BAC'
'64'	'Positive for Alcohol at the .64% BAC'
'65'	'Positive for Alcohol at the .65% BAC'
'66'	'Positive for Alcohol at the .66% BAC'
'67'	'Positive for Alcohol at the .67% BAC'
'68'	'Positive for Alcohol at the .68% BAC'
'69'	'Positive for Alcohol at the .69% BAC'
'70'	'Positive for Alcohol at the .70% BAC'
'72'	'Pending'
'98'	'Not Applicable'
'99'	'Unknown'

Blood Alcohol Test Type

Variable Name: ALCOHOL_TEST_TYPE_CODE

Definition: Type of alcohol test administered to the person.

Field Type: Coded.

'1'	'Blood'
'3'	'PBT (Breath)'
'4'	'Urine'
'5'	'Breath Data Master (DMT)'
'98 '	'Not Applicable'
'99'	'Unknown'

Driver License Class

Variable Name: DL_CLASS

Definition: Class of driver license of the driver involved in the crash.

Field Type: Coded.

'1'	'A Commercial – Any Vehicle or Combination'
'2'	'B Commercial – Any Basic Single Unit Motor Vehicle'
'3'	'C Commercial – Any Class D Vehicle Transporting Hazmat and For School Bus'

'4'	'D The Normal (Not Commercial) Driver's License'
'5'	'I ID Card Only'
'6'	'T Lifetime ID Card Only (65 Years and Older)'
'7'	'M Moped License Only'
'8'	'IP Instruction Permit'
'10'	'X (Not Licensed)'
'12'	'A Commercial Permit'
'13'	'B Commercial Permit'
'14'	'D Commercial Permit'
'15'	'LL Limited Driver's License'
'16'	'LP Limited Learners Permit'
'17'	'MP Motorcycle Instruction Permit'
'18'	'MB Motorized Bicycle Permit'

Driver - License Restriction 1 — Variable Name: DL_RESTRICTION1_CODE

Driver - License Restriction 1 — Variable Name: DL_RESTRICTION2_CODE

Driver - License Restriction 1 — Variable Name: DL_RESTRICTION3_CODE

Definition: Presence of a driver's license restriction(s).

Field Type: Coded.

'01'	'None'
'02'	'Corrective Lenses'
'03'	'Mechanical Devices'
'04'	'Prosthetic Aid'
'05'	'Automatic Transmission'
'06'	'Outside Mirror'
'07'	'Limit to Daylight Hours'
'08'	'Limit to Employment Only'
'09'	'Limited – Other'
'10'	'Learners Permit'
'11'	'CDL – Intrastate'
'12'	'Vehicles Without Air Brakes'
'13'	'Except Class A Bus'
'14'	'Except Class A and Class B Bus'
'15'	'Except Tractor Trailer'
'16'	'Farm Waiver'
'18'	'No Passenger in CMV Bus'
'19'	'FMCSA Medical Waiver'

'20'	'Bus < 24 Capacity'
'21'	'No Cargo in CMV Tank Vehicle'
'22'	'Air Over Hydraulic Brake System'
'23'	'Automatic Transmission CMV'
'24'	'Any Use of Alcohol/Drugs Invalidates License'
'25'	'Hand Operated Brakes'
'26'	'Complete Hand Controls'
'27'	'Hand Operated Light Beam Control'
'28'	'Elevated Driver Seat'
'29'	'No Freeway Driving'
'30'	'Ignition Interlock Required'
'31'	'Also Valid for 3-Wheel Motorcycle'
'32'	'Bioptic Lenses'
'33'	'Left Foot Accelerator'
'34'	'Limited Mile Radius From Home'
'35'	'MPH Limited to Max Speed'
'36'	'Outside Rearview Mirrors'
'37'	'Pedal Extender'
'38'	'Power Steering'
'39'	'Prism Lenses'
'40'	'No Rush Hour Driving'
'41'	'MC With Rear Wheel Stabilizers Only'
'42'	'Seasonal Farm Work'
'43'	'Steering Wheel Knob'
'44'	'Turn Signal Extender'
'90'	'Other'
'98'	'Not Applicable'
'99'	'Unknown'

Driver License State

Variable Name: DL_STATE_CODE

Definition: State abbreviation associated with the applicable driver's license (e.g., 'MN').

Field Type: Coded.

Drug Test Performed

Variable Name: DRUG_TEST_STATUS_CODE

Definition: Drug test performed on driver (if applicable).

Field Type: Coded.

'1'	'Yes, Test Given'
'2'	'No, Test Not Given'
'3'	'Test Refused'
'99'	'Unknown'

Ejection from Vehicle

Variable Name: EJECTION_CODE

Definition: Indicated that occupant was ejected when the crash occurred.

Field Type: Coded.

'1'	'Trapped, Extricated (By Mechanical Means)'
'2'	'Trapped, Freed by Non-Mechanical Means'
'3'	'Partially Ejected'
'4'	'Totally Ejected'
'5'	'Not Ejected or Trapped'
'98'	'Not Applicable'
'99'	'Unknown'

Incident ID

Variable Name: INCIDENT_ID

Definition: Unique identifier for the crash. This is linkable to Unit and Crash files.

Field Type: Numeric.

Injury Severity

Variable Name: INJURY_SEVERITY_CODE

Definition: Severity of injuries sustained in the crash by person.

Field Type: Coded.

'1'	'Killed'
'2'	'Suspected Serious Injury (A)'
'3'	'Suspected Minor Injury (B)'
'4'	'Possible Injury (C)'
'5'	'No Apparent Injury'
'99'	'Unknown'

Person ID

Variable Name: PERSON_ID

Definition: Unique number of the person involved in the crash.

Field Type: Numeric.

Physical Condition 1

Variable Name: PHYSICAL_CONDITION_CODE

Physical Condition 2

Variable Name: PHYSICAL_CONDITION2_CODE

Definition: Physical condition of the driver involved in the crash.

Field Type: Coded.

'5'	'Apparently Normal (Including No Drugs/Alcohol)'
'6'	'Physical Disability (Short Term or Long Term)'
'7'	'Medical Issue (Ill, Sick or Fainted)'
'8'	'Emotional (Depression, Angry, Disturbed, etc.)'
'9'	'Asleep or Fatigued'
'10'	'Has Been Drinking Alcohol'
'11'	'Has Been Taking Illicit Drugs'
'12'	'Has Been Taking Medications'
'90'	'Other'
'99'	'Unknown'

Position in Vehicle

Variable Name: POSITION_CODE

Definition: Occupant position in vehicle when the crash occurred.

Field Type: Coded.

'1'	'Driver (Include Motorcycle Driver)'
'2'	'Front Center'
'3'	'Front Right (Include MC Sidecar)'
'4'	'Second Seat Left (Include MC Passenger)'
'5'	'Second Seat Center'
'6'	'Second Seat Right'
'7'	'Third Seat Left'
'8'	'Third Seat Center'
'9'	'Third Seat Right'
'10'	'Outside of Vehicle'
'11'	'Fourth Row Left'
'12'	'Fourth Row Middle'
'13'	'Fourth Row Right'
'14'	'Fifth or Other Row (Bus, 15 Passenger Van, etc.)'
'15'	'Sleeper Section of Cab (truck)'

'16'	'Trailing Unit'
'17'	'Other Enclosed Cargo Area'
'18'	'Other Unenclosed Cargo Area (pickup truck bed, etc.)'
'19'	'Riding on Motor Vehicle Exterior (Non-Trailing Unit)'
'99'	'Unknown'

Safety Equipment Used

Variable Name: SAFETY_EQUIPMENT_USE_CODE

Definition: Type of safety equipment used by person at the time of crash.

Field Type: Coded.

'5'	'None Used, Motor Vehicle Occupant'
'6'	'Lap and Shoulder Belt Used'
'7'	'Lap Belt Only Used'
'8'	'Shoulder Belt Only Used'
'9'	'Restraint Used-Type Unknown'
'10'	'Child restraint system Not Used'
'11'	'Child Restraint System Seat Used Improperly'
'12'	'Child Restraint System - Rear Facing'
'13'	'Child Restraint System - Forward Facing'
'14'	'Booster Seat Properly'
'15'	'Child Restraint Type Unknown'
'16'	'Helmet Used, Unknown If DOT-Compliant'
'17'	'No Helmet'
'18'	'None'
'19'	'No Protective Pads'
'20'	'Protective Pads Used (Elbows, Knees, Shins, etc.)'
'21'	'Dark Clothing'
'22'	'Light Clothing'
'23'	'Reflective Clothing (Jacket, Backpack, etc.)'
'24'	'Lighting'
'25'	'Helmet Used, DOT-Compliant'
'26'	'Helmet Used, Other than DOT-Compliant'
'27'	'Unknown if Helmet Worn'
'28'	'No Helmet'
'29'	'DOT Compliant Three-Quarter'
'30'	'DOT Compliant Half'
'31'	'DOT Compliant Full Face'
'32'	'DOT Non-Compliant Three-Quarter'
'33'	'DOT Non-Compliant Half'

'34'	'DOT Non-Compliant Full Face'
'35'	'Full protective gear (motorcycle specific jacket, pants, boots, and gloves)'
'36'	'Reflective or brightly colored clothing (jacket, helmet, gear, etc.)'
'37'	'Body airbags'
'90'	'Other'
'98'	'Not Applicable'
'99'	'Unknown'

Sex

Variable Name: GENDER_CODE

Definition: Sex of the person involved in the crash.

Field Type: Coded.

'M'	'Male'
'F'	'Female'
'99'	'Unknown'

Transported to Hospital Method

Variable Name: TRANSPORT_TYPE_CODE

Definition: How occupant was transported to the hospital.

Field Type: Coded.

'1'	'Not Transported'
'2'	'EMS Ground'
'3'	'EMS Air'
'90'	'Other'
'99'	'Unknown'

Unit ID

Variable Name: UNIT_ID

Definition: Unit unique ID number linkable to the Unit and Crash files.

Field Type: Numeric.

Year

Variable Name: YEAR

Definition: Applicable year of the crash.

Field Type: Numeric.

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File	Variable Name	Variable	Description of Change	Year of Change
Accident/ Crash	ACC_DATE	Date accident occurred	Variable name changed to "DATE_TIME_OF_INCIDENT"	2016
Accident/ Crash	ACCDIGM	Diagram of accident code	Variable discontinued	2015
Accident/ Crash	ACCTYPE	Type of accident	Variable name changed to "CRASH_TYPE_CODE"	2016
Accident/ Crash	ACCYR	Year accident occurred	Variable discontinued	2016
Accident/ Crash	AGENCY	Agency	Variable created Variable discontinued	2003 2016
Accident/ Crash	AMBL_NBR	Ambulance number	Variable discontinued	2000
Accident/ Crash	CASENO	Accident number	Variable name changed to "INCIDENT_ID"	2016
Accident/ Crash	CITY	City	Variable created Variable name changed to "CITY_NAME"	2000 2016
Accident/ Crash	COUNTY	County	Variable name changed to "COUNTY_NAME"	2016
Accident/ Crash	DISTRICT	District	Variable discontinued	2016
Accident/ Crash	DIV_CODE	Road design	Variable discontinued	2016
Accident/ Crash	HAZMAT	Hazardous material carried	Variable discontinued	1990
Accident/ Crash	HIT_RUN	Hit and run	Variable created Variable discontinued	1990 2016
Accident/ Crash	HOUR	Hour accident occurred	Variable discontinued	2016
Accident/ Crash	INTERCH	Interchange element code	Variable discontinued	2016
Accident/ Crash	LIGHT	Light conditions	Variable name changed to "LIGHT_CONDITION_CODE"	2016
Accident/ Crash	LOC_BIKE	Location of pedestrian/bike accident	Variable discontinued	1991
Accident/ Crash	LOC_HARM	Location of first harmful event	Variable discontinued	2016
Accident/ Crash	LOC_NARR	Location description	Variable discontinued	2016
Accident/ Crash	LOC_TYPE	Relation to intersection	Variable name changed to "INTERSECTION_RELATED_IND" Change in coding	2016 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Accident/ Crash	LOC_WRK_ZONE	Location of accident in work zone	Variable created Variable name changed to "WORK_ZONE_LOCATION_CODE" Change in coding	2003 2016 2016
Accident/ Crash	LOCN_REL	Location reliability	Variable created Variable discontinued	1990 2016
Accident/ Crash	MILEPOST	Modified reference point	Variable name changed to "ROUTE_MEASURE"	2016
Accident/ Crash	MIN_DOLLAR	Minimum dollar threshold	Variable created Variable name changed to "MINIMUM_DAMAGE_IND" Change in coding	2003 2016 2016
Accident/ Crash	NUMVEHS	Number of vehicles involved	Variable name changed to "NUMBER_OF_VEHICLES_INVOLVED"	2016
Accident/ Crash	OBJECT1	Fixed object struck	Variable discontinued	2000
Accident/ Crash	OFF_TYPE	Type of investigating officer	Variable discontinued	2016
Accident/ Crash	ON_BRDG	Accident occurred on bridge	Variable name changed to "BRIDGE_IND"	2016
Accident/ Crash	PHOTOS	Photos	Variable created Variable name changed to "PHOTOS_TAKEN_CODE" Change in coding	2003 2016 2016
Accident/ Crash	POP_FROM_CITY	Population of city	Variable created Variable discontinued	2003 2016
Accident/ Crash	POP_FROM_COUNTY	Population of county	Variable created Variable discontinued	2003 2016
Accident/ Crash	POP_GRP	Rural/urban population codes	Variable discontinued	2016
Accident/ Crash	PUBDMG	Public property damage	Variable discontinued	2015
Accident/ Crash	RD_CHAR1	Road characteristics	Variable discontinued	2015
Accident/ Crash	RDSURF	Road surface conditions	Variable discontinued	2015
Accident/ Crash	RDWORK	Roadwork being performed	Variable discontinued	2003
Accident/ Crash	RODWYCLS	Roadway classification	Variable discontinued	2016

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File	Variable Name	Variable	Description of Change	Year of Change
Accident/ Crash	RTE_NBR	Route number	Variable discontinued	2016
Accident/ Crash	RTE_SYS	Route system	Variable discontinued	2016
Accident/ Crash	RTSYSNBR	Combined route system/route number	Variable name changed to "ROUTE_ID"	2016
Accident/ Crash	SCHLBUS	School bus involved accident	Variable name changed to "BUS_INVOLVED_CODE" Change in coding	2016 2016
Accident/ Crash	SEVERITY	Accident severity	Variable name changed to "CRASH_SEVERITY_CODE" Change in coding	2016 2016
Accident/ Crash	SPEED	Posted speed limit	Variable name changed to "POSTED_SPEED"	2016
Accident/ Crash	TOT_INJ	Number of persons injured	Variable discontinued	2016
Accident/ Crash	TOT_KILL	Total number of persons killed	Variable name changed to "NUMBER_OF_FATALITIES"	2016
Accident/ Crash	TRF_CNTL	Traffic control devices	Variable discontinued	2015
Accident/ Crash	TRFCNTLW	Traffic control working	Variable discontinued	2015
Accident/ Crash	TRVL_DIR	Travel direction	Variable discontinued	2015
Accident/ Crash	TWNSHIP	Township number	Variable name changed to "TOWNSHIP_GNIS_FEATURE_ID"	2016
Accident/ Crash	VEH_MOV1	Vehicle movement	Variable discontinued	1990
Accident/ Crash	WAST_MAT	Waste material carried	Variable discontinued	1991
Accident/ Crash	WEATHER	Weather conditions	Variable discontinued	2003
Accident/ Crash	WEATHER1	Weather conditions	Variable name changed to "WEATHER_CODE"	2016
Accident/ Crash	WEATHER2	Weather conditions	Variable name changed to "WEATHER_SECONDARY_CODE"	2016
Accident/ Crash	WEEKDAY	Day of week accident occurred	Variable discontinued	2016
Accident/ Crash	WORK_ZONE	Workzone marked	Variable created Variable name changed to "WORKZONE_IND" Change in coding	2003 2016 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Accident/ Crash	WRKS_PRESNT	Worker present	Variable created Variable name changed to "WORKERS_PRESENT_CODE" Change in coding	2003 2016 2016
Int.	AADT1	Year 1 AADT	Variable discontinued	
Int.	AADT111	Segment 1, leg 1, year 1 AADT	Variable discontinued	2001
Int.	AADT112	Segment 1, leg 1, year 2 AADT	Variable discontinued	2001
Int.	AADT113	Segment 1, leg 1, year 3 AADT	Variable discontinued	2001
Int.	AADT114	Segment 1, leg 1, year 3 AADT	Variable discontinued	2001
Int.	AADT115	Segment 1, leg 1, year 3 AADT	Variable discontinued	2001
Int.	AADT2	Year 2 AADT	Variable added Variable discontinued	2001 2016
Int.	AADT3	Year 3 AADT	Variable added Variable discontinued	2001 2016
Int.	AADT4	Year 4 AADT	Variable added Variable discontinued	2001 2016
Int.	AADT5	Year 5 AADT	Variable added Variable discontinued	2001 2016
Int.	ADTYR1	AADT year 1	Variable added Variable name changed to "adt_entering_volume_year"	2001 2016
Int.	ADTYR112	Segment 1, leg 1, year 2	Variable discontinued	2001
Int.	ADTYR113	Segment 1, leg 1, year 3	Variable discontinued	2001
Int.	ADTYR114	Segment 1, leg 1, year 4	Variable discontinued	2001
Int.	ADTYR115	Segment 1, leg 1, year 5	Variable discontinued	2001
Int.	ADTYR2	AADT year 2	Variable added Variable discontinued	2001 2016
Int.	ADTYR3	AADT year 3	Variable added Variable discontinued	2001 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Int.	ADTYR4	AADT year 4	Variable added Variable discontinued	2001 2016
Int.	ADTYR5	AADT year 5	Variable added Variable discontinued	2001 2016
Int.	AP_BP_TL	Approach bypass/turn lanes	Variable added Variable discontinued	2001 2016
Int.	AP_CNTL	Approach traffic control	Variable added Variable discontinued	2001 2016
Int.	AP_COMNT	Approach comments	Variable added Variable discontinued	2001 2016
Int.	AP_SPD	Approach speed limit	Variable added Variable discontinued	2001 2016
Int.	AP_SPD111	Segment 1, leg 1, approach speed limit	Variable discontinued	2001
Int.	AP_TLOFF	Number of approaching thru lanes during off-peak period	Variable added Variable discontinued	2001 2016
Int.	AP_TLPEK	Number of approaching thru lanes during peak period	Variable added Variable discontinued	2001 2016
Int.	APCNTL11	Segment 1, leg 1, approach traffic control	Variable discontinued	2001
Int.	BEGMP	Calculated beginning milepost	Variable added Variable discontinued	2001 2016
Int.	CNTL_CAT	Central office category	Variable discontinued	2016
Int.	DESC	Intersection description	Variable added Variable discontinued	2001 2016
Int.	DIR	Approach direction	Variable added Variable discontinued	2001 2016
Int.	DIRECT11	Segment 1, leg number 1 direction	Variable discontinued	2001
Int.	DIST_CAT	Category assigned by district	Variable discontinued	2016

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File	Variable Name	Variable	Description of Change	Year of Change
Int.	EFEC_DTE	Date of accident geocoding	Variable discontinued	2016
Int.	ELEM_NBR	Interchange element code	Variable discontinued	2015
Int.	ENDMP	Calculated ending milepost	Variable added Variable discontinued	2001 2016
Int.	GEN_ENIV	General environment	Variable discontinued	
Int.	INT_DESC	Verbal description of an approach or an intersection/interchange	Variable added Variable discontinued	2001 2016
Int.	INT_ID	Intersection id	Variable added Variable discontinued	2001 2016
Int.	INT_SYNB	Combined rte_sys/rte_nbr	Variable name changed to "primary_route_id"	2016
Int.	INT_TYPE	Intersection type	Variable discontinued	2001
Int.	LEG_NBR	Leg/approach number	Variable added Variable discontinued	2001 2016
Int.	LEGNBR11	Segment 1, leg number 1	Variable discontinued	2001
Int.	LOLIMT	Lower limit	Variable added Variable discontinued	2001 2016
Int.	LOLIMT1	Segment 1 lower limit	Variable discontinued	2001
Int.	LV_TLOFF	Number of leaving approach thru lanes during off-peak period	Variable added Variable discontinued	2001 2016
Int.	LV_TLPEK	Number of leaving approach thru lanes during peak period	Variable added Variable discontinued	2001 2016
Int.	MILEPOST	Modified reference point location	Variable discontinued	2001
Int.	MPOFFSET	Intersection milepost	Variable added Variable discontinued	2001 2016
Int.	MPOFSET2	Leg milepost	Variable added Variable discontinued	2001 2016
Int.	NBR_LEG1	Number of legs on segment 1	Variable discontinued	2001
Int.	NBR_LEGS	Number of legs into intersection	Variable added Variable discontinued	2001 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Int.	NBR_RTES	Number of routes into intersection	Variable added Variable discontinued	2001 2016
Int.	RAIL_NBR	Railroad crossing number	Variable discontinued	2015
Int.	RDESC	Approach road description	Variable added Variable discontinued	2001 2016
Int.	RDESC1	Road description	Variable discontinued	2001
Int.	RDWY_LGH	Roadway lighting	Variable name changed to "lighting_exists"	2016
Int.	RECORD_ID	Unique identifier for each record	Variable added Variable discontinued	2001 2016
Int.	REF_PNT	Reference point	Variable discontinued	2015
Int.	REFPNT1	Reference point - route 1	Variable discontinued	2001
Int.	RTE_NBR	Route number	Variable name changed to "primary_route_id"	2016
Int.	RTE_NBR2	Leg route number	Variable discontinued	2016
Int.	RTE_SYS	Route system	Variable discontinued	2016
Int.	RTENBR1	Route number - route 1	Variable discontinued	2001
Int.	RTESYS1	Route system - route 1	Variable discontinued	2001
Int.	RTESYS2		Variable discontinued	2016
Int.	SFTY_CLS	Safety improvement classification	Variable discontinued	2016
Int.	SFTY_IMD	Safety improvement district	Variable discontinued	2016
Int.	SFTY_IMY	Safety improvement year	Variable discontinued	2016
Int.	SFTY_PRJ	Safety improvement project number	Variable discontinued	2016
Int.	SIGN_CON	Traffic signals construction	Variable discontinued	2016
Int.	SIGN_PED	Traffic signals pedestrian signals	Variable name changed to "Pedestrian"	2015
Int.	SIGN_PLA	Signal head placement	Variable discontinued	2016
Int.	SIGN_PRO	Traffic signal progression	Variable discontinued	2016
Int.	SIGN_TIM	Traffic signal timing	Variable discontinued	2016
Int.	SPEC_ENV	Specific environment	Variable discontinued	2016
Int.	TRAF_DEV	Traffic control devices	Variable discontinued	2015

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File	Variable Name	Variable	Description of Change	Year of Change
Int.	TRAF_PHS	Traffic signals number of phases	Variable discontinued	2015
Int.	TRAF_PRE	Traffic signals preemption	Variable discontinued	2016
Int.	TRAF_TMF	Flashing signal time off	Variable discontinued	2016
Int.	TRAF_TMO	Flashing signal time on	Variable discontinued	2016
Int.	TRAFCNTL	Traffic control devices	Variable name changed to "traffic_control_exists"	2016
Int.	TRF_CNTL	Traffic control devices revised	Variable added Variable discontinued	2001 2016
Int.	TYPEDESC	Intersection description revised	Variable discontinued	2016
Int.	UPLIMT1	Segment 1 upper limit	Variable discontinued	2001
Occ./ Person	AIRBAG	Airbag deployed	Variable added Variable name changed to "AIRBAG_CODE" Change in coding	2000 2016 2016
Occ./ Person	ALCOHOL_RESULT	Blood alcohol test result	Variable added Variable name changed to "ALCOHOL_TEST_RESULT_CODE" Change in coding	2003 2016 2016
Occ./ Person	ALCOHOL_TEST	Blood alcohol test performance	Variable added Variable name changed to "ALCOHOL_TEST_TYPE_CODE" Change in coding	2003 2016 2016
Occ./ Person	BIRTH_DT	Birthday	Variable discontinued	2016
Occ./ Person	CASENO	Accident number	Variable name changed to "INCIDENT_ID"	2016
Occ./ Person	CORN_RPT	Coroner report record	Variable added Variable discontinued	1991 2016
Occ./ Person	DL_CLASS	Driver license class	Change in coding	2016
Occ./ Person	DL_STATE	Driver license state	Variable name changed to "DL_STATE_CODE"	2016
Occ./ Person	DL_WITHD	Driver license withdrawal	Variable added Variable discontinued	1990 1998

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File	Variable Name	Variable	Description of Change	Year of Change
Occ./ Person	DRIV_REC	Driver recommendation	Variable added Variable discontinued	1990 2016
Occ./ Person	DRUG_TEST	Drug test performed	Variable added Variable name changed to "DRUG_TEST_STATUS_CODE" Change in coding	2003 2016 2016
Occ./ Person	EJECT	Ejection from vehicle	Variable name changed to "EJECTION_CODE" Change in coding	2016 2016
Occ./ Person	EQUIP_TYPE	Type of safety equipment	Variable name changed to "SAFETY_EQUIPMENT_USE_CODE" Change in coding	2016 2016
Occ./ Person	FAT_NUM	Fatality number	Variable discontinued	2015
Occ./ Person	FATLDATE	Fatality date	Variable added Variable discontinued	1998 2016
Occ./ Person	HOSP	Injured taken to hospital	Variable discontinued	2016
Occ./ Person	HOSPTRAN	Transported to hospital method	Variable name changed to "TRANSPORT_TYPE_CODE" Change in coding	2016 2016
Occ./ Person	INJ	Injury severity	Variable name changed to "INJURY_SEVERITY_CODE" Change in coding	2016 2016
Occ./ Person	LIS_RSTR	Driver license restrictions	Variable name changed to "DL_RESTRICTION1_CODE" Change in coding	2016 2016
Occ./ Person	LIS_RSTR	Driver license restrictions	Variable name changed to "DL_RESTRICTION2_CODE" Change in coding	2016 2016
Occ./ Person	LIS_RSTR	Driver license restrictions	Variable name changed to "DL_RESTRICTION3_CODE" Change in coding	2016 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Occ./ Person	PHYSCOND	Physical condition	Variable name changed to "PHYSICAL_CONDITION_CODE" Change in coding	2016 2016
Occ./ Person	PHYSCOND	Physical condition	Variable name changed to "PHYSICAL_CONDITION2_CODE" Change in coding	2016 2016
Occ./ Person	RES_CNTY	Residence county	Variable discontinued	2016
Occ./ Person	REST1	Safety equipment used	Variable name changed to "SAFETY_EQUIPMENT_USE_CODE" Change in coding	2016 2016
Occ./ Person	SEATPOS	Position in vehicle	Variable name changed to "POSITION_CODE" Change in coding	2016 2016
Occ./ Person	SEX	Sex of injured/killed occupant	Variable name changed to "GENDER_CODE" Change in coding	2016 2016
Occ./ Person	VALID_LICENSE	Valid driver license	Variable name changed to "DL_STATUS_CODE"	2016
Occ./ Person	VEHNO	Vehicle number	Variable name changed to "UNIT_ID"	2016
Occ./ Person	VIOLATIONS	Driver cited for violations	Variable discontinued	2015
Occ./ Person	WORK_REL	Work related accident	Variable added Variable discontinued	1990 2003
Road	AADT	Calculated average AADT	Variable name changed to "CURRENT_VOLUME"	2016
Road	ACCESS	Control of access	Variable name changed to "ACCESS_CONTROL" Code change from categorical (number) to text	2016 2016
Road	ADLN_RD1	Additional lanes - road 1	Variable name changed to " ADDITIONAL_LANE_LEFT" Code change from categorical (number) to text	2016 2016
Road	ADLN_RD2	Additional lanes - road 2	Variable name changed to " ADDITIONAL_LANE_LEFT " Code change from categorical (number) to text	2016 2016
Road	BAS_TKR1	Base thickness - road 1	Variable discontinued	2016

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File	Variable Name	Variable	Description of Change	Year of Change
Road	BEGMP	Calculated begin milepost	Variable discontinued	2016
Road	BRK_CD	Break code	Variable discontinued	2016
Road	CITY_NBR	City number	Variable added Variable name changed to "CITY_NAME" Code change from categorical (number) to text	2001 2016 2016
Road	COMM_ADT	Calculated average commercial AADT	Variable name changed to " COMMERCIAL_AADT "	2016
Road	COUNTY	County	Variable name changed to "COUNTY_NAME" Code change from categorical (number) to text	2016 2016
Road	CURB1	Curbs - road 1	Variable name changed to "CURB_SIDE" Change in coding	2016 2016
Road	CURB2	Curbs - road 2	Variable discontinued	2016
Road	DESC	Roadway description	Variable added Variable discontinued	2001 2016
Road	DIR_CDE	Direction code	Variable added Variable discontinued	2001 2016
Road	DISTRICT	District	Variable name changed to "DISTRICT_NAME" Code change from categorical (number) to text	2016 2016
Road	ENDMP	Calculated ending milepost	Variable discontinued	2016
Road	FED_AID	Federal aid system	Variable discontinued	2016
Road	FED_SYSD	Federal aid system - designated	Variable discontinued	2016
Road	FED_SYSR	Federal aid system - regular	Variable discontinued	2016
Road	FEDADRTE	Federal aid route	Variable added Variable discontinued	2003 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Road	FUNC_CLS	Functional class	Variable name changed to "FUNCTIONAL_CLASS" Code change from categorical (number) to text	2016 2016
Road	H_COUNT	Number of count stations per section	Variable discontinued	2016
Road	INTE_CAT	Intersection category	Variable discontinued	2015
Road	INV_DTE	Inventory date	Variable discontinued	2016
Road	LANEWID	Lane width	Variable name changed to "TRAVEL_WIDTH"	2016
Road	LEGRTNUM	Legislative route number	Variable added Variable discontinued	2003 2016
Road	LSHL_TY2	Left shoulder type - road 2	Variable discontinued	2016
Road	LSHL_TYP	Left shoulder type - road 1	Variable name changed to " PAVED_SHOULDER_LEFT" Change in coding	2016 2016
Road	LSHL_TYP	Left shoulder type - road 1	Variable name changed to " UNPAVED_SHOULDER_LEFT " Change in coding	2016 2016
Road	LSHL_WD2	Left shoulder width - road 2	Variable discontinued	2016
Road	LSHLDWID	Left shoulder width - road 1	Variable name changed to "PAVED_SHOULDER_LEFT_WIDTH" Change in coding	2016 2016
Road	LSHLDWID	Left shoulder width - road 1	Variable name changed to " UNPAVED_SHOULDER_LEFT_WIDTH " Change in coding	2016 2016
Road	MANTAREA	Maintenance area of the roadway	Variable added Variable name changed to "MAINTENANCE_DISTRICT_NAME"	2001 2016
Road	MED_TYPE	Median type	Variable name changed to "MEDIAN_TYPE" Code change from categorical (number) to text	2016 2016

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File	Variable Name	Variable	Description of Change	Year of Change
Road	MEDWID	Median width (in feet)	Variable name changed to "MEDIAN_WIDTH" Code change from categorical (number) to numeric	2016 2016
Road	MVMT	Million vehicle miles traveled	Variable discontinued	2016
Road	NBRVOL	Total number of traffic volume counts	Variable discontinued	1999
Road	NBRVOLB	Number of blank traffic volume counts	Variable discontinued	1999
Road	NBRVOLF	Number of full traffic volume counts	Variable discontinued	1999
Road	NO_LANE1	Number through lanes towards increasing milepoints	Variable discontinued	2016
Road	NO_LANE2	Number through lanes towards decreasing milepoints	Variable discontinued	2016
Road	NO_LANES	Total number of lanes	Variable name changed to “TOTAL_LANES”	2020
Road	ONEWAY	Divided and one-way code	Variable name changed to "FACILITY_TYPE" Code change from categorical (number) to numeric	2016 2016
Road	PARKING1	Parking on road 1	Variable name changed to "PARKING_LEFT" and “PARKING_RIGHT” Code change from categorical (number) to numeric	2016 2016
Road	PARKING2	Parking on road 2	Variable name changed to "PARKING_LEFT" and “PARKING_RIGHT” Code change from categorical (number) to numeric	2016 2016
Road	REF_PST	Reference post	Variable discontinued	2016
Road	REMARK	Remarks - type of record	Variable discontinued	2016
Road	RODWYCLS	Roadway classification	Variable discontinued	2016
Road	ROW	Right of way width	Variable discontinued	2016

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File	Variable Name	Variable	Description of Change	Year of Change
Road	RSHL_TY2	Right shoulder type - road 2	Variable discontinued	2016
Road	RSHL_TYP	Right shoulder type - road 1	Variable name changed to " PAVED_SHOULDER_RIGHT " Change in coding	2016 2016
Road	RSHL_TYP	Right shoulder type - road 1	Variable name changed to " UNPAVED_SHOULDER_RIGHT" Change in coding	2016 2016
Road	RSHL_WD2	Right shoulder width - road 2	Variable discontinued	2016
Road	RSHLDWID	Right shoulder width - road 1	Variable name changed to "PAVED_SHOULDER_RIGHT_WIDTH" Change in coding	2016 2016
Road	RSHLDWID	Right shoulder width - road 1	Variable name changed to " UNPAVED_SHOULDER_RIGHT_WIDTH" Change in coding	2016 2016
Road	RTE_NBR	Route number	Variable name changed to "ROUTE_ID"	2016
Road	RTE_SYS	Route system	Variable discontinued	2016
Road	RTSYSNBR	Combined route system/route number	Variable discontinued	2016
Road	SEG_LNG	Calculated section length	Variable discontinued	2016
Road	SIDE_WLK	Sidewalks	Variable discontinued	2016
Road	STM_SEW	Storm sewers	Variable discontinued	2016
Road	SUF_TYP1	Surface specification number - road 1	Variable discontinued	2016
Road	SUF_TYP2	Surface specification number - road 2	Variable discontinued	2016
Road	SUR_TKR1	Surface thickness – road 1	Variable discontinued	2016
Road	SUR_TKR2	Surface thickness – road 2	Variable discontinued	2016
Road	SURF_TY2	Surface type - road 2	Variable discontinued	2016

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File	Variable Name	Variable	Description of Change	Year of Change
Road	SURF_TYP	Surface type - road 1	Variable name changed to "BASIC_PAVEMENT_TYPE" Code change from categorical (number) to numeric	2016 2016
Road	SURF_WD2	Surface width - road 2 (in feet)	Variable discontinued	2016
Road	SURF_WID	Surface width - road 1 (in feet)	Variable discontinued	2016
Road	TURN_LN	Turning lanes toward increasing mileposts	Variable discontinued	2016
Road	TURN_LN2	Turning lanes toward decreasing mileposts	Variable discontinued	2016
Road	UPDATE_	Date of update	Variable discontinued	2016
Road	URB_MNC	Urban/municipal code	Variable name changed to "CTU_CLASS" Code change from categorical (number) to numeric	2016 2016
Road	VOLGRP	Traffic volume group	Variable name changed to "DAILY_FACTOR_GROUP"	2016
Road	VOLTYP	Traffic volume type	Variable name changed to "DATA_TYPE" Change in coding	2016 2016
Vehicle/ Unit	CASENO	Accident number	Variable name changed to "ACCIDENT_NUMBER" Change in coding	2016 2016
Vehicle/ Unit	COLOR1	Color of vehicle	Variable name changed to "VEHICLE_COLOR"	2016
Vehicle/ Unit	CONTRIB1	First contributing factor	Variable name changed to "PRIMARY_CONTRIBUTOR_CODE" Change in coding	2016 2016
Vehicle/ Unit	CONTRIB2	Second contributing factor	Variable name changed to "SECONDARY_CONTRIBUTOR_CODE" Change in coding	2016 2016
Vehicle/ Unit	DAMSEV	Vehicle damage severity	Variable discontinued	2016
Vehicle/ Unit	DRV_AGE	Age of driver	Variable name changed to "AGE"	2016
Vehicle/ Unit	DRV_INJ	Driver injury	Variable discontinued	2016

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File	Variable Name	Variable	Description of Change	Year of Change
Vehicle/ Unit	DRV_SEX	Sex of driver	Variable discontinued	2016
Vehicle/ Unit	EVENT1	Sequence of event - 1	Variable discontinued	2016
Vehicle/ Unit	EVENT2	Sequence of event - 2	Variable discontinued	2016
Vehicle/ Unit	EVENT3	Sequence of event - 3	Variable discontinued	2016
Vehicle/ Unit	EVENT4	Sequence of event - 4	Variable discontinued	2016
Vehicle/ Unit	FIRE	Fire in vehicle	Variable name changed to "FIRE_CODE" Change in coding	2016 2016
Vehicle/ Unit	HAZMTL	Vehicle carrying hazardous material	Variable name changed to "HAZMAT_CLASS_CODE" Change in coding	2016 2016
Vehicle/ Unit	INTRANSPORT	Was vehicle in transit	Variable added Variable discontinued	2003 2016
Vehicle/ Unit	LICTYPE	Valid driver license	Variable discontinued	1990
Vehicle/ Unit	MAKE	Make of vehicle	Variable added Variable name changed to "VEHICLE_MAKE"	1990 2016
Vehicle/ Unit	MCAXLDN	Motor carrier axles down	Variable added Variable discontinued	1991 2003
Vehicle/ Unit	MCAXLUUP	Motor carrier axles up	Variable added Variable discontinued	1991 2003
Vehicle/ Unit	MCBDTYP	Motor carrier body type	Variable added Variable name changed to "CARGO_BODY_TYPE_CODE"	1991 2016
Vehicle/ Unit	MCGVWRCD	Motor gross vehicle weight code	Variable added Variable discontinued	1991 2003
Vehicle/ Unit	MCHZPLAC	Motor hazard material placard card	Variable added Variable discontinued	1991 2003
Vehicle/ Unit	MCSOURCE	Source of identification	Variable added Variable discontinued	1995 2003
Vehicle/ Unit	MCTRHTCH	Motor trailer hitch code	Variable added Variable discontinued	1995 2003

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File	Variable Name	Variable	Description of Change	Year of Change
Vehicle/ Unit	MISCACT1	Action prior to accident	Variable discontinued	2016
Vehicle/ Unit	MODEL	Motor model	Variable added Variable discontinued	1997 2003
Vehicle/ Unit	MOST_EVENT	Most harmful event	Variable added Variable name changed to "MOST_HARMFUL_EVENT_CODE" Change in coding	2003 2016 2016
Vehicle/ Unit	MVCLASS	Motor vehicle class	Variable added Variable discontinued	1997 2003
Vehicle/ Unit	MVTYPE	Motor vehicle type	Variable added Variable discontinued	1997 2003
Vehicle/ Unit	NUMOCCS	Number of occupants	Variable added Variable discontinued	1991 2016
Vehicle/ Unit	PHYSCOND	Physical condition of the driver	Variable discontinued	2016
Vehicle/ Unit	SERIES	Series of vehicles	Variable discontinued	2016
Vehicle/ Unit	TOWAWAY	Vehicle towed	Variable name changed to "TOWED_IND" Change in coding	2016 2016
Vehicle/ Unit	TOWING	Towing flag	Variable added Variable discontinued	1991 2016
Vehicle/ Unit	V_DAMAGE	Vehicle damage area	Variable discontinued	2016
Vehicle/ Unit	VEH_DIR	Direction vehicle was traveling	Variable added Variable name changed to "DIRECTION_OF_MOVEMENT_CODE" Change in coding	1990 2016 2016
Vehicle/ Unit	VEH_USE	Special vehicle use	Variable added Variable discontinued	2003 2005
Vehicle/ Unit	VEHNO	Relative vehicle number	Variable name changed to "UNIT_ID"	2016
Vehicle/ Unit	VEHSTATE	State of vehicle registration	Variable added Variable name changed to "LICENSE_PLATE_STATE_CODE"	1997 2016

Appendix A: History of Revisions

File	Variable Name	Variable	Description of Change	Year of Change
Vehicle/ Unit	VEHTYPE	Type of vehicle	Variable name changed to "VEHICLE_MODEL"	2016
Vehicle/ Unit	VEHYR	Model year of vehicle	Variable discontinued	2016
Vehicle/ Unit	WAIVED	Commercial vehicle inspection waived	Variable added Variable discontinued	2003 2005
Vehicle/ Unit	WASTE_MT	Vehicle carrying waste material	Variable discontinued	1990