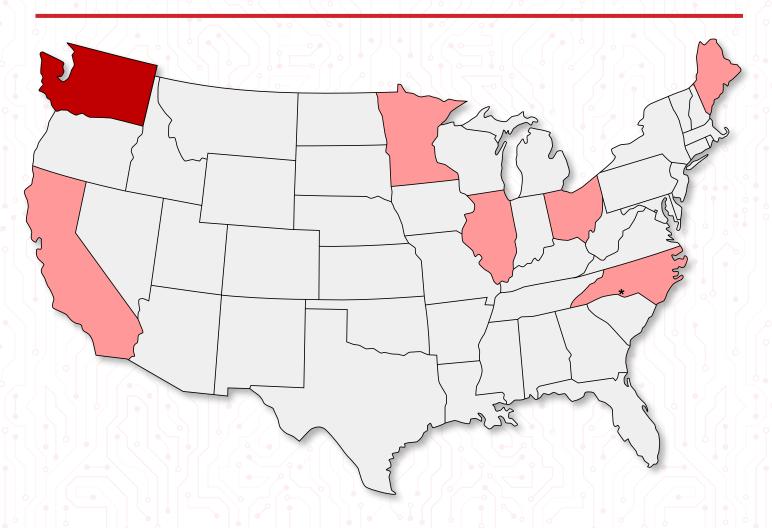
HIGHWAY SAFETY INFORMATION SYSTEM

JULY 2024

FHWA-HRT-24-077

GUIDEBOOK FOR THE

Washington State Data Files







Foreword

The Highway Safety Information System (HSIS) is a roadway-based system that provides quality data on a large number of crash, roadway, and traffic variables. The system comprises data collected by States for managing the highway system and studying highway safety. HSIS is composed of seven States and one urban center: California, Illinois, Ohio, Maine, Minnesota, North Carolina, Washington, and Charlotte, NC. HSIS includes some agencies' highway intersection, interchange, lighting, and curve/grade data. Additional supplementary information includes vulnerable road user infrastructure data, such as sidewalks, greenways, and transit stops.

This guidebook is part of a series of data guidebooks for each HSIS agency that explain the variables and attributes provided by each agency. Each guidebook describes the agency's data system and presents an alphabetized listing of all available variables. All data are derived from police-reported crash records, maintained highway records, and other supplementary inventories.

These guidebooks are available to help researchers, analysts, programmers, and safety professionals use HSIS data to further transportation safety for all road users. Visit the HSIS webpage (https://highways.dot.gov/research/safety/hsis) to request data and learn about other HSIS products. (1)

Shyuan-Ren (Clayton) Chen, Ph.D., P.E., PTOE Acting Director, Office of Safety and Operations Research and Development

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Introduction to the Washington State HSIS Guidebook

Introduction to the Washington State HSIS Guidebook

The Highway Safety Information System (HSIS), established in 1987, is a foundational highway research data system. The State of Washington has participated in the HSIS program since 1993, 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 supports the use of Washington State HSIS data from 2018 and beyond. Data and documentation recorded before 2018 (1993–2017) are available on request to the virtual HSIS Laboratory. Before 2018, the Washington State datasets included variables for the following files:

- 1. Roadway Inventory.
- 2. Horizontal Curve Inventory.
- 3. Vertical Grade.
- 4. Intersection Inventory (2004–2009).
- 5. Accident Characteristics.
- 6. Vehicles Involved in Crashes.
- 7. Vehicle Occupants Involved in Crashes.

The revised Washington State database incorporated into HSIS contains six files, as shown in table 1.

Table 1. Current Washington State database file names.

File Name	Descriptor	
Roadway	Roadway inventory (including traffic information)	
Horizontal Curve	Horizontal curve inventory	
Grade	Vertical grade	
Crash	Crash characteristics	
Unit	Units involved in crashes	
Person	Persons Involved in the crash	

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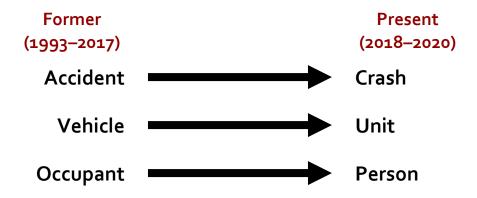
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^{*}Note: Any reference to HSIS by itself refers to the software.

The <u>appendix</u> summarizes revisions the <u>HSIS Laboratory</u> made to the variables. In addition to the revised list of files, several key differences exist between the Washington State HSIS data before and after 2018, as described in the following changes subsections.

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 (1993–2017) and the current file naming convention (2018–2020).



Source: Federal Highway Administration (FHWA).

Figure 1. Graph. Changes to Washington State HSIS data file-naming convention.

Changes in Variable Names

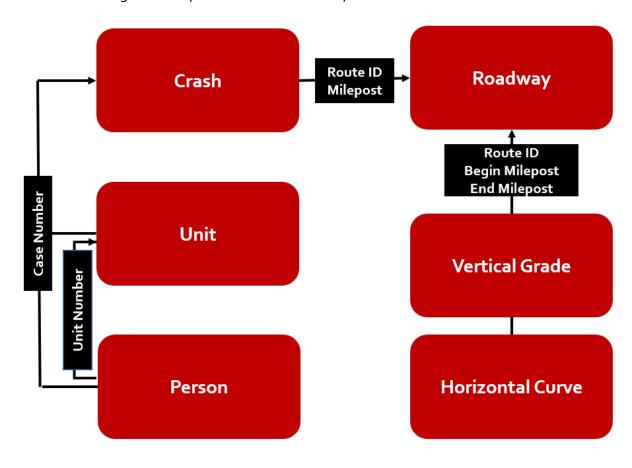
Previous versions of HSIS guidebooks referred to *SAS Name* as the shorthand for the more descriptive names in the HSIS documentation.⁽³⁾ With the modernization effort and increased emphasis on flexibility, this name is now referred to as the *Variable Name*. Furthermore, the descriptive names of variables may be different in this guidebook compared to previous versions. This version may reflect changes in the data or definition of the variable to match updates to Washington State's data documentation. Please consult the virtual <u>HSIS</u> <u>Laboratory</u> 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 2018–2020. Please consult past guidebooks or the virtual HSIS Laboratory for information regarding previously available data.

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 six files. The following sections provide a brief summary of each file.



Source: FHWA. ID = identification.

Figure 2. Chart. Washington State HSIS data files and linking variables.

Roadway File (2020-2022)

This file contains information about the physical layout of Washington State's roads and the traffic characteristics associated with "on-system" roads in the State (i.e., State maintained). The Roadway file includes variables that describe the road width, surface 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).

Washington State also digitally represents data in a directional format, although many data elements are combined into bidirectional values. Table 2 provides an overview of road and traffic variables by format.

Table 2. Variable format in Washington State's Roadway file.

Variable Name	Variable Description	Format
ACCESS_CONTROL	Access control	Bidirectional
LANE_COUNT	Number of lanes (bidirectional)	Bidirectional
MEDIAN_BARRIER	Median barrier type	Bidirectional
MEDIAN_SURFACE	Median surface type	Bidirectional
NHS_INDICATOR	National Highway System	Bidirectional
PAVEMENT_SURFACE_TYPE	Pavement surface type	Single direction
ROAD_WIDTH	Road width (bidirectional)	Bidirectional
RIGHT_SHOULDER_SURFACE	Right shoulder surface type	Single direction
RIGHT_SHOULDER_WIDTH	Right shoulder width	Single direction
LEFT_SHOULDER_SURFACE	Left shoulder surface type	Single direction
LEFT_SHOULDER_WIDTH	Left shoulder width	Single direction
SPECIAL_USE_LANE_SURFACE	Special use lane (surface type)	Single direction
SPECIAL_USE_LANE_WIDTH	Special use lane (width)	Single direction
SPECIAL_USE_LANE_ROAD_SIDE	Special use lane (side)	Single direction
SPECIAL_USE_LANE_TYPE	Special use lane (type)	Single direction
SPEED_LIMIT	Posted speed limit	Bidirectional
LANE_SURFACE_TYPE	Surface type	Single direction
TOTAL_AADT	Annual average daily traffic	Bidirectional
FUNCTIONAL_CLASS	Functional class	Bidirectional
RODWYCLS	Roadway class	Bidirectional

Route ID (identification) is the key linking variable between the base roadway inventory and the associated dataset files: Crash, Horizontal Curve, and Grade. This identifier is the formal route number (e.g., the numerical portion of WA–700) and a directional suffix after the route number. The State-generated suffix is represented as an "i" in the increasing direction of mileposts (typically in the east or north direction) or a "d" in the direction of decreasing mileposts. In other words, WA–900 in the direction of increasing mileposts would have a

Route ID of 900i. Washington State routes have milepost values for the entire State. This variable does not have a county component of the Route ID.

Users should note that certain roadway elements only became available starting in 2020. The appendix and the <u>HSIS Laboratory</u> can help researchers determine the availability of these data.

Horizontal Curve File (2018–2022)

This file is a standalone representation of horizontal geometry or curvature of the roadway. The Horizontal Curve is typically recorded from the beginning of the curve in the direction of increasing mileposts and is only available in the direction of increasing mileposts.

Grade File (2018-2022)

This file is a standalone representation of the vertical grade of the roadway, which is typically based on the midpoint of a vertical curve. The Grade is represented in a percent format, and similar to the Horizontal Curve file, this file is only available in the direction of increasing mileposts.

Crash File (2018–2022)

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 is contained in the corresponding Unit and Person files. Specifically, the Crash file contains information relating to crash-level characteristics and conditions at the time of the crash. The prescribed crash-reporting threshold is currently personal injury or \$1,000 of property damage.

When requesting crash data, requestors should be aware of the difference between linkable crashes and nonlinkable crashes.

Linkable Crashes

The Crash file can be linked to the Unit and Person files using the crash report number (*Case Number*). The Crash file can be linked to the Roadway file by two methods:

- 1. Spatial linkages using GIS software and a latitude and longitude variable in the Crash file.
- 2. A tabular linkage using the Route ID and Milepost variables. Users should note that this method will only link crashes to the direction of increasing mileposts in the Roadway file. This link matches the orientation of the Horizontal Curve and Grade files. Crashes are not linkable to the direction of decreasing mileposts on a divided highway for this method.

Nonlinkable Crashes

Although the Roadway file only represents State-maintained highways in Washington State, HSIS provides all recordable roadway crashes in the State for a particular year. These crashes are not linkable to a road in the network, but they are provided by the HSIS Laboratory to assist researchers with a broader perspective on highway safety. These crashes can be linked in a GIS to road centerline data furnished by a researcher.

Unit File (2018-2022)

This file provides information on the vehicles or units involved in crashes on Washington State roads. The Unit file includes drivers of motor vehicles, bicyclists, pedestrians, and other users who represent an involved party in a crash. The Unit file can be linked to the Person file through the combination of the *Case Number* and *Unit Number* variables.

Person File (2018–2022)

This file includes information on all persons involved in a crash, regardless of whether the individuals are injured. The Person file includes standard variables related to seating positions in a vehicle, person type, sex, race, and injury. For the injury variable, Washington State uses the KABCO classification system (K = fatal, A = incapacitating injury, B = nonincapacitating injury; C = possible injury, and O = no injury), which provides police estimates of injury levels. In addition, supplementary injury codes indicate injuries or fatalities unrelated to the crash.

Using the Files Together

Using the Files Together

Figure 2 highlights the linkages between each of the six Washington State files. Researchers can use these files together to understand the circumstances, location, vehicles, and individuals involved in a crash. HSIS data can be linked and aggregated by using either spatial or tabular relationships. HSIS data follow four different formats; each variable in this quidebook notes the specific format of that variable:

- Numeric: Numeric values absent of alphabetical or special characters. These values 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., US 17 BUS (ROAD ST) & CHURCH ST).
- **Date:** Values representing date and time. Specific formatting is noted in the relevant variable description.

When using the files together, users should note that some variables have the same name in two different files in some cases. For some of these variables, this naming process is by design so that the files can be linked together. Examples of this process include *Case Number* and *Unit Number*. *Case Number* is used to link the Crash, Unit, and Person files. *Unit Number* is used to link the Unit and Person files. For other variables, duplicated variable names across files are because the same information has been collected twice. For example, *City* is recorded by the reporting officer in the Crash file. *City* is also a variable in the Roadway file. In these cases, the <u>HSIS Laboratory</u> has compared and synchronized these variables to provide consistent information.

Requesting HSIS Data

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

In this sample, a research graduate student is interested in exploring signalized intersection crashes involving women in Washington State. Specifically, the student is interested in injury severity related to changes in horizontal curvature and vertical grade. The researcher is also interested in vehicle age as a surrogate for safety features of the vehicle. This feature is part 1 of the student's study. The graduate student anticipates undertaking a part 2 for the study to

spatially combine the HSIS data with county-level socioeconomic data to explore highway safety for women across the State.

The <u>HSIS Laboratory</u> 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 any subsequent phases of the study. The following variables form the structure of the student's request:

Roadway Variables

- Route ID (linkable to the Route ID variable in the Crash, Horizontal Curve, and Grade files).
- Roadway Class.
- Functional Class.
- Median Barrier Type.
- Median Width.
- Posted Speed Limit.
- Number of Lanes—Bidirectional.
- Road Width—Bidirectional.
- AADT.
- County.

Horizontal Curve Variables

- Route ID.
- From Measure.
- To Measure.
- Curve Radius.
- Curve Length.
- Superelevation.

Grade Variables

- Route ID.
- From Measure.
- To Measure.
- Curve Length.
- Percent Grade Ahead.
- Percent Grade Behind.

Crash Variables

- Route ID (linkable to the Route ID variable in the Roadway file).
- *Milepost* (optional for linking crashes to the Roadway file in GIS).
- Case Number (linkable to the Case Number variable in the Unit file).
- Date.
- Crash Severity (general).
- Crash Type.
- Weather Condition.
- Light Condition.
- Roadway Surface.

Unit Variables

- Case Number (linkable to the Case Number variable in the Crash file).
- Unit Number (linkable to the Unit Number variable in the Person file).
- Driver Action.
- Vehicle Traffic Control.
- Vehicle Year.
- Vehicle Type.

Person Variables

- Case Number (linkable to the Case Number variable in the Crash file).
- Unit Number (linkable to the Unit Number variable in the Unit file).
- Age.
- Injury Type.
- Restraint System Type.
- Ejection Status.
- Involved Person Type (provides seat position).

A few things to note about the student's request:

 Several variables are recorded in more than one file. The variable Age is an example because Driver Age is in the Unit file and Age is in the Person file. The request involves both files, so the variable is only included once in the Person file because this variable will capture more than just the driver of the unit.

- The student's request also contains variables that record similar information. For example, the Crash file includes the variable Roadway Characteristic, which may seem redundant with the Roadway variables in the Roadway, Grade, and Horizontal Curve files. However, these data represent different sources, such as the officer reporting the crash at the scene in the case of the Crash file, and internal Washington State records in the case of the Roadway, Grade, and Horizontal Curve files. The student could request all the variables to confirm the roadway geometry in the crash report reflects Washington State's records, or the student could use the State roadway data to ground truth—qualitative observations in the field.
- 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), whereas the Unit file contains an observation for each vehicle involved in the crash. If more than one vehicle is involved in a crash, more than one row will be associated with the same Case Number. Additionally, the Roadway file contains an observation or row for each road segment. Some segments may be associated with multiple crashes, whereas other segments may not be associated with any crashes.

Available Data

Table 3 provides a summary of all variables currently available in HSIS for the six files. Attributes and fields have evolved since Washington State data were introduced into the HSIS data system, and users should carefully consider these changes during the data collection research process.

Table 3. Summary of Washington State HSIS variables by data file.

Variable Name	Variable Description	Data File
TOTAL_AADT	Annual average daily traffic	Roadway
ACCESS_CONTROL	Access control	Roadway
BEGMP	Begin milepost	Roadway
CITY_NAME	City	Roadway
DIVIDED_INDICATOR	Divided indicator	Roadway
ENDMP	End Milepost	Roadway
FUNCTIONAL_CLASS	Functional class	Roadway
LEFT_SHOULDER_SURFACE	Left shoulder surface type	Roadway
LEFT_SHOULDER_WIDTH	Left shoulder width	Roadway
MAINTENANCE_AREA	Maintenance area	Roadway
MEDIAN_BARRIER	Median barrier type	Roadway
MEDIAN_SURFACE	Median surface type	Roadway

Variable Name	Variable Description	Data File
MEDIAN_WIDTH	Median width	Roadway
NHS_INDICATOR	National Highway System	Roadway
LANE_COUNT	Number of lanes (bidirectional)	Roadway
PAVEMENT_SURFACE_TYPE	Pavement surface type	Roadway
SPEED_LIMIT	Posted speed limit	Roadway
DISTRICT_NUMBER	Region	Roadway
REGION_NAME	Region name	Roadway
RIGHT_SHOULDER_SURFACE	Right shoulder surface type	Roadway
RIGHT_SHOULDER_WIDTH	Right shoulder width	Roadway
ROAD_WIDTH	Road width (bidirectional)	Roadway
RODWYCLS	Roadway class	Roadway
ROUTE_ID	Route ID	Roadway
SPECIAL_USE_LANE_ROAD_SIDE	Special use lane (side)	Roadway
SPECIAL_USE_LANE_SURFACE	Special use lane (surface type)	Roadway
SPECIAL_USE_LANE_TYPE	Special use lane (type)	Roadway
SPECIAL_USE_LANE_WIDTH	Special use lane (width)	Roadway
LANE_SURFACE_TYPE	Surface type	Roadway
URBAN_RURAL	Urban/rural	Roadway
ARM	Accumulated route mileage	Horizontal Curve
BEGMP	Begin milepost	Horizontal Curve
CURVE_CENTRAL_ANGLE	Curve central angle	Horizontal Curve
CURVE_DIRECTION	Curve direction	Horizontal Curve
CURVE_LENGTH	Curve length	Horizontal Curve
CURVE_RADIUS	Curve radius	Horizontal Curve
ENDMP	End milepost	Horizontal Curve
MILEPOST	Milepost	Horizontal Curve
ROUTE_ID	Route ID	Horizontal Curve
RRT_RRQ_IDENTIFIER	Related roadway type identifier	Horizontal Curve
STATE_ROUTE	State route number	Horizontal Curve
SUPER_ELEVATION	Superelevation	Horizontal Curve
ARM	Accumulated route mileage	Grade
CURVE_LENGTH	Curve length	Grade
MILEPOST	Milepost	Grade
F_GRADE_AHEAD	Percent grade ahead	Grade
F_GRADE_BACK	Percent grade behind	Grade
ROUTE_ID	Route ID	Grade
RRT_RRQ_IDENTIFIER	Related roadway type identifier	Grade

Variable Name	Variable Description	Data File
ALCFLAG	Alcohol-impaired involved person	Crash
0.05110	indicator	
CASENO	Case number	Crash
CITY	City name	Crash
ADMCLASS	Collision report type	Crash
COUNTY	County name	Crash
LOC_TYPE	Crash location type	Crash
MONTH	Crash month	Crash
REPORT	Crash severity (general)	Crash
SEVERITY	Crash severity (specific)	Crash
TIME	Crash time	Crash
ACCTYPE	Crash type	Crash
ACC_DATE	Date	Crash
WEEKDAY	Day of week	Crash
FUNC_CLS	Federal functional class	Crash
FIRE	Fire	Crash
COLTYPE1	First harmful event	Crash
COLTYPE ₂	Second harmful event	Crash
HAZMAT	Hazardous material carried	Crash
HIT_RUN	Hit and run	Crash
IMPACT	Impact location	Crash
INTENT	Intentional action	Crash
AGENCY	Investigating agency	Crash
GPS_LATY	Latitude	Crash
LIGHT	Light condition	Crash
LOC_CHAR	Location characteristics	Crash
GPS_LATX	Longitude	Crash
MILEPOST	Milepost	Crash
MEDCAUSE	Medically caused	Crash
NO_PEDS	Number of pedestrians	Crash
TOT_INJ	Number of persons injured	Crash
TOT_KILL	Number of persons killed	Crash
NUMVEHS	Number of vehicles	Crash
OBJECT1	Object struck 1	Crash
OBJECT ₂	Object struck 2	Crash
RDQUAL	Related roadway qualifier	Crash
RD_TYPE	Related roadway type	Crash
RD_CHAR1	Roadway characteristics	Crash

Variable Name	Variable Description	Data File
RODWYCLS	Roadway class	Crash
RD_INV	Roadway inventory	Crash
RDSURF	Roadway surface	Crash
ST_FUNC	State functional class	Crash
RTE_NBR	State route number	Crash
DISTRICT	State route region name	Crash
RUR_URB	Urban/rural	Crash
V1CMPDIR	V1 compass direction	Crash
V ₂ CMPDIR	V2 compass direction	Crash
V1DIRCDE	V1 direction	Crash
V ₂ DIRCDE	V ₂ direction	Crash
V1EVENT1	V1 movement	Crash
V2EVENT1	V2 movement	Crash
WEATHER	Weather condition	Crash
WKZONE	Work zone status	Crash
ACCYR	Year	Crash
CASENO	Case number	Unit
COM_BODY	Commercial carrier cargo body	Unit
CMCONFIG	Commercial carrier configuration	Unit
CDHAZNM	Commercial carrier hazmat	Unit
CMAXLES	Commercial carrier number of axles	Unit
COM_GWR	Commercial carrier weight	Unit
DRV_ACTN	Driver action	Unit
DRV_AGE	Driver age	Unit
DRAIRBAG	Driver airbag status	Unit
CONTRIB1	Driver contribution circumstance 1	Unit
CONTRIB2	Driver contribution circumstance 2	Unit
DRV_EJCT	Driver ejection	Unit
DRV_INJ	Driver injury severity	Unit
MISCAT1	Driver miscellaneous action 1	Unit
MISCAT ₂	Driver miscellaneous action 2	Unit
DRV_REST	Driver restraint usage	Unit
DRV_SEX	Driver sex	Unit
INTOX	Driver sobriety	Unit
DRASSESS	Drug recognition expert assessment	Unit
INTER_A	Interstate carrier indicator	Unit
CYC_INJ	Pedalcyclist injury class	Unit
VRD_TYPE	Roadway type	Unit
	1 '''	ı

Variable Name	Variable Description	Data File
EVENT1	Sequence of events 1	Unit
EVENT ₂	Sequence of events 2	Unit
EVENT ₃	Sequence of events 3	Unit
EVENT 4	Sequence of events 4	Unit
V_STATE	State of vehicle registration	Unit
VEH_SEV	Unit injury severity	Unit
UNITNO	Unit number	Unit
VEHCOND1	Vehicle defect 1	Unit
VEHCOND ₂	Vehicle defect 2	Unit
VEHCOND ₃	Vehicle defect 3	Unit
MAKE	Vehicle make	Unit
BODYTYPE	Vehicle model	Unit
SPDLIMIT	Vehicle posted speed	Unit
STOLEN	Vehicle stolen	Unit
TRF_CNTL	Vehicle traffic control	Unit
VEHTYPE	Vehicle type	Unit
VEH_USE	Vehicle usage	Unit
VEHYR	Vehicle year	Unit
AGE	Age	Person
AIRBAG	Air bag type	Person
CASENO	Case number	Person
EJECT	Ejection status	Person
HELMET	Helmet use	Person
INJ	Injury type	Person
SEATPOS	Involved person type	Person
SEX	Person sex	Person
REST1	Restraint system type	Person
UNITNO	Unit number	Person

V1 = vehicle unit 1; V2 = vehicle unit 2.

Roadway File

Roadway File

Annual Average Daily Traffic

Variable Name: TOTAL_AADT

Definition: AADT of the road segment (e.g., 10500).

Field Type: Numeric.

Access Control

Variable Name: ACCESS_CONTROL

Definition: Level of access control on the road segment (e.g., nonlimited access, least

restrictive).

Field Type: Text.

Begin Milepost

Variable Name: BEGMP

Definition: Beginning milepost of the road segment (e.g., 0.5374).

Field Type: Numeric.

City

Variable Name: CITY_NAME

Definition: City where the segment is located (e.g., Spokane).

Field Type: Text.

Divided Indicator

Variable Name: DIVIDED_INDICATOR

Definition: Coded value that indicates the road is median divided.

Field Type: Coded:

Y = yes.

N = no.

End Milepost

Variable Name: ENDMP

Definition: The end milepost of the road segment (e.g., o.68).

Field Type: Numeric.

Functional Class

Variable Name: FUNCTIONAL_CLASS

Definition: Federal functional classification of the road separated further by urban and rural designations (e.g., urban, other principal arterial).

Field Type: Text.

Left Shoulder Surface Type

Variable Name: LEFT_SHOULDER_SURFACE

Definition: Surface or structure type of the shoulder on the left side of the road. This variable applies separately to the applicable direction of travel (e.g., curb).

Field Type: Text.

Left Shoulder Width

Variable Name: LEFT_SHOULDER_WIDTH

Definition: Width of the left shoulder in feet. This variable applies separately to the applicable

direction of travel (e.g., 4).

Field Type: Numeric.

Maintenance Area

Variable Name: MAINTENANCE_AREA

Definition: Applicable Washington State Department of Transportation (WSDOT) maintenance

area (e.g., area 1).

Field Type: Text.

Median Barrier Type

Variable Name: MEDIAN BARRIER

Definition: Type of barrier in the median, if applicable (e.g., cable).

Field Type: Text.

Median Surface Type

Variable Name: MEDIAN_SURFACE

Definition: Type of surface in the median, if applicable (e.g., gravel).

Field Type: Text.

Median Width

Variable Name: MEDIAN_WIDTH

Definition: Width of the median in feet (e.g., 6).

Field Type: Numeric.

National Highway System

Variable Name: NHS_INDICATOR

Definition: Text field that indicates the road is part of the National Highway System

(e.g., yes).⁽⁴⁾

Field Type: Text.

Number of Lanes (Bidirectional)

Variable Name: LANE_COUNT

Definition: Total number of through lanes for both directions of travel (e.g., 4).

Field Type: Numeric.

Pavement Surface Type

Variable Name: PAVEMENT_SURFACE_TYPE

Definition: The detailed surface type associated with paved roads.

Field Type: Coded:

- ACP = asphalt concrete pavement.
- BST = bituminous surface treatment.
- Gravel = gravel.
- PCCP = portland cement concrete pavement.
- Other = other.

Posted Speed Limit

Variable Name: SPEED_LIMIT

Definition: Posted speed limit of the road segment (e.g., 55).

Field Type: Numeric.

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Region

Variable Name: DISTRICT_NUMBER

Definition: Coded value of the applicable WSDOT region (e.g., 6).

Field Type: Numeric.

Region Name

Variable Name: REGION_NAME

Definition: Textual name associated with the applicable WSDOT region (e.g., eastern region).

Field Type: Text.

Right Shoulder Surface Type

Variable Name: RIGHT_SHOULDER_SURFACE

Definition: Surface or structure type of the shoulder on the right side of the road. This variable applies separately to the applicable direction of travel (e.g., asphalt).

Field Type: Text.

Right Shoulder Width

Variable Name: RIGHT_SHOULDER_WIDTH

Definition: Width of the right shoulder in feet. This variable applies separately to the applicable direction of travel (e.g., 6).

Field Type: Numeric.

Roadway Class*

Variable Name: RODWYCLS

The <u>HSIS Laboratory</u> developed the *Roadway Class* variable to readily classify roadway data. This variable is a combination of the *Number of Lanes (Bidirectional)*, *Urban/Rural*, *Median Barrier Type/Width*, and *Functional Class* variables.

Field Type: Text.

Values:

- Urban freeways.
- Urban freeways with fewer than four lanes.
- Urban two-lane roads.
- Urban multilane divided nonfreeways.
- Urban multilane undivided nonfreeways.
- Rural freeways.
- Rural freeways with fewer than four lanes.
- Rural two-lane roads.
- Rural multilane divided nonfreeways.
- Rural multilane undivided nonfreeways.
- Others.

Road Width (Bidirectional)

Variable Name: ROAD_WIDTH

Definition: Width of the travel way in feet for the full cross section that includes both directions of travel (e.g., 48).

Field Type: Numeric.

Route ID

Variable Name: ROUTE ID

Definition: The unique *Route ID* of the road segment. This variable is linkable to other HSIS files (e.g., oo2COBROWNEi).

^{*}Variable created by HSIS Laboratory.

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Field Type: Text.

Special Use Lane (Side)

Variable Name: SPECIAL_USE_LANE_ROAD_SIDE

Definition: Applicable side of the road associated with the special use lane. This variable is relative to the applicable direction of travel.

Field Type: Coded:

- C = center.
- L = left.
- LC = left center.
- R = right.
- RC = right center.

Special Use Lane (Surface Type)

Variable Name: SPECIAL_USE_LANE_SURFACE

Definition: The surface type associated with the special use lane (e.g., bituminous).

Field Type: Text.

Special Use Lane (Type)

Variable Name: SPECIAL_USE_LANE_TYPE

Definition: The functional use type of the special use lane.

Field Type: Coded:

- CL = climbing.
- BL = bicycle lane.
- CU = chain up.
- SV = slow vehicle turnout.
- HV = high occupancy vehicle.
- HL = holding.
- AX = weaving/speed change.
- TW = two-way turn.

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- TR = transit.
- RV = reversible.
- PK = parking.
- RE = ramp extension.
- TS = truck-climbing shoulder.

Special Use Lane (Width)

Variable Name: SPECIAL_USE_LANE_WIDTH

Definition: The width of the special use lane in feet (e.g., 10).

Field Type: Numeric.

Surface Type

Variable Name: LANE_SURFACE_TYPE

Definition: Surface material of the travel way (e.g., asphalt).

Field Type: Text.

Urban/Rural

Variable Name: URBAN_RURAL

Definition: Variable indicating the urban or rural setting of the road segment.

Field Type: Coded:

R = rural.

U = urban.

Horizontal Curve File

Horizontal Curve File

Accumulated Route Mileage

Variable Name: ARM

Definition: Milepost associated with the beginning of the curve. WSDOT uses this milepost for locating curvature on its network (e.g., 0.28).

Field Type: Numeric.

Begin Milepost

Variable Name: BEGMP

Definition: Beginning milepost of the curve (e.g., 0.5374).

Field Type: Numeric.

Curve Central Angle

Variable Name: CURVE CENTRAL ANGLE

Definition: The angle in degrees whose apex is the center of a circle and whose legs are radii intersecting the circle in two distinct points (e.g., 114*55.8).

Field Type: Text.

Curve Direction

Variable Name: CURVE_DIRECTION

Definition: Direction of a curve on a roadway in relation to the direction of travel. This variable is relative to the direction of increasing mileposts.

Field Type: Coded:

L = left.

R = right.

Curve Length

Variable Name: CURVE_LENGTH

Definition: Length of the curve in feet (e.g., 501).

Field Type: Numeric.

Curve Radius

Variable Name: CURVE_RADIUS

Definition: The distance from the center point of a curve to the arc of a curve in feet (e.g., 250).

Field Type: Numeric.

End Milepost

Variable Name: ENDMP

Definition: The end milepost of the curve (e.g., o.68).

Field Type: Numeric.

Milepost

Variable Name: MILEPOST

Definition: Milepost of the beginning of the curve according to the State Route ARM value

(e.g., 19.7).

Field Type: Numeric.

Route ID

Variable Name: ROUTE_ID

Definition: The unique route ID of the curve used to link it to the base road network

(e.g., 018P500872i).

Field Type: Text.

Related Roadway Type Identifier

Variable Name: RRT_RRQ_IDENTIFIER

Definition: Related roadway type (RRT) or related roadway qualifier (RRQ). This number concatenated with the *State Route Number* field and applicable direction (i.e., i or d) results in the *Route ID* (e.g., P500872).

Field Type: Text.

State Route Number

Variable Name: STATE_ROUTE

Definition: Applicable State route number where the curve is located (e.g., 18).

Field Type: Numeric.

Superelevation

Variable Name: SUPER_ELEVATION

Definition: The inclination or banking of the roadway along the curve, which is the height of the outer edge of the pavement with respect to the width of the pavement (e.g., o.1).

Field Type: Numeric.

Grade File

Grade File

Accumulated Route Mileage

Variable Name: ARM

Definition: Milepost associated with the beginning of the curve. WSDOT uses this milepost as a reference point on its road network (e.g., 0.28).

Field Type: Numeric.

Curve Length

Variable Name: CURVE_LENGTH

Definition: Length of the curve in feet (e.g., 501).

Field Type: Numeric.

Milepost

Variable Name: MILEPOST

Definition: Milepost of the middle of the curve according to the State Route ARM value

(e.g., 19.7).

Field Type: Numeric.

Percent Grade Ahead

Variable Name: F__GRADE_AHEAD

Definition: Vertical grade in percent of the roadway ahead of the ARM location. This variable refers to the direction of increasing milepost values (e.g., 1.85).

Field Type: Numeric.

Percent Grade Behind

Variable Name: F__GRADE_BACK

Definition: Vertical grade in percent of the roadway behind the ARM location. This variable refers to the direction of decreasing milepost values (e.g., -2.55).

Field Type: Numeric.

Route ID

Variable Name: ROUTE_ID

Definition: The unique Route ID applicable to the grade measurement (e.g., o18P500872i).

Field Type: Text.

Related Roadway Type Identifier

Variable Name: RRT_RRQ_IDENTIFIER

Definition: RRT or RRQ; this number concatenated with the State Route Number field and applicable direction (i.e., i or d) results in the Route ID (e.g., P500872).

Field Type: Text.

Crash File

Crash File

Alcohol-Impaired Involved Person Indicator

Variable Name: ALCFLAG

Definition: Indicator that a person involved in the crash was under the influence of alcohol.

Field Type: Coded:

o = not impaired.

1 = impaired.

Case Number

Variable Name: CASENO

Definition: Unique case number of the crash. This variable can be used to link the Crash file to the Unit and Person files (e.g., 202000001).

Field Type: Numeric.

City Name

Variable Name: CITY

Definition: City where the crash occurred (e.g., Seattle).

Field Type: Text.

Collision Report Type

Variable Name: ADMCLASS

Definition: Administrative class of road where the crash occurred (e.g., State route).

Field Type: Text.

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County Name

Variable Name: COUNTY

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

Field Type: Text.

Crash Location Type

Variable Name: LOC_TYPE

Definition: Location of the crash in relation to an intersection or driveway (e.g., At intersection

and related).

Field Type: Text.

Crash Month

Variable Name: MONTH

Definition: Month when crash occurred (e.g., January).

Field Type: Text.

Crash Severity (General)

Variable Name: REPORT

Definition: General injury level associated with the crash (e.g., injury).

Field Type: Text.

Crash Severity (Specific)

Variable Name: SEVERITY

Definition: Severity of the crash on the KABCO scale. This variable also indicates when the fatality occurred, if the crash resulted in a fatality (e.g., possible injury).

Field Type: Text.

Crash Time

Variable Name: TIME

Definition: Time of the crash according to a 24-hour clock (e.g., 1800 for 6:00 p.m.).

Field Type: Numeric.

Crash Type

Variable Name: ACCTYPE

Definition: Type of crash and description of the collision (e.g., stroke the rear end of the other

vehicle).

Field Type: Text.

Date

Variable Name: ACC_DATE

Definition: Date when the crash occurred (MM/DD/YYYY).

Field Type: Date.

Day of Week

Variable Name: WEEKDAY

Definition: Day of the week when the crash occurred.

Field Type: Coded:

- 1 = Monday.
- 2 = Tuesday.
- 3 = Wednesday.
- 4 = Thursday.
- 5 = Friday.
- 6 = Saturday.
- 7 = Sunday.

Federal Functional Class

Variable Name: FUNC_CLS

Definition: Federal functional class separated by urban and rural (e.g., urban interstate).

Field Type: Text.

Fire

Variable Name: FIRE

Definition: Indicator that the crash resulted in a vehicle fire (e.g., yes).

Field Type: Text.

First Harmful Event

Variable Name: COLTYPE1

Definition: Objects struck during the collision or action(s) that led to a collision (e.g., fixed

object).

Field Type: Text.

Second Harmful Event

Variable Name: COLTYPE2

Definition: Objects struck during the collision or action(s) that led to a collision (e.g., fixed

object).

Field Type: Text.

Hazardous Material Carried

Variable Name: HAZMAT

Definition: Indicator that hazardous material was being transported and whether it was released (e.g., hazmat transported—released).

Field Type: Text.

Hit and Run

Variable Name: HIT_RUN

Definition: Indicator of a hit and run (e.g., no).

Field Type: Text.

Impact Location

Variable Name: IMPACT

Definition: Location in relation to the roadway where the impact occurred (e.g., lane of primary trafficway).

Field Type: Text.

Intentional Action

Variable Name: INTENT

Definition: Indicator that the crash resulted from an intentional action by any participant (e.g., no).

Field Type: Text.

Investigating Agency

Variable Name: AGENCY

Definition: Agency that investigated and reported the crash (e.g., municipal/city police).

Field Type: Text.

Latitude

Variable Name: GPS_LATY

Definition: The Global Positioning System (GPS) latitude coordinates in Washington State

Plane South where the crash occurred (e.g., 1208303.82).

Field Type: Numeric.

Longitude

Variable Name: GPS_LATX

Definition: The GPS longitude coordinates in Washington State Plane South where the crash

occurred (e.g., 741565.16).

Field Type: Numeric.

Light Condition

Variable Name: LIGHT

Definition: The type/level of ambient lighting at the time of the crash (e.g., daylight).

Field Type: Text.

Location Characteristics

Variable Name: LOC_CHAR

Definition: Additional location information to indicate any special features (e.g., bridge or

overpass).

Field Type: Text.

Milepost

Variable Name: MILEPOST

Definition: Milepost of the crash according to the *State Route ARM* value (e.g., 19.7).

Field Type: Numeric.

Medically Caused

Variable Name: MEDCAUSE

Definition: Indicator that the crash occurred due to a medical reason (e.g., yes).

Field Type: Text.

Number of Pedestrians

Variable Name: NO_PEDS

Definition: Number of pedestrians involved in the crash (e.g., 1).

Field Type: Numeric.

Number of Persons Injured

Variable Name: TOT_INJ

Definition: Total number of persons injured in the crash (e.g., 2).

Field Type: Numeric.

Number of Persons Killed

Variable Name: TOT_KILL

Definition: Total number of persons killed in the crash (e.g., 1).

Field Type: Numeric.

Number of Vehicles

Variable Name: NUMVEHS

Definition: Total number of vehicles involved in the crash (e.g., 3).

Field Type: Numeric.

Object Struck 1

Variable Name: OBJECT1

Definition: Specific type of fixed objects struck in the crash, if applicable (e.g., roadway ditch).

Field Type: Text.

Object Struck 2

Variable Name: OBJECT2

Definition: Specific type of fixed objects struck in the crash if applicable (e.g., roadway ditch).

Field Type: Text.

Related Roadway Qualifier

Variable Name: RDQUAL

Definition: The RRQ of the location where the crash occurred. This variable also applies to the

Route ID, if applicable to the crash (e.g., ABERDN).

Field Type: Text.

Related Roadway Type

Variable Name: RD_TYPE

Definition: The RRT of the location where the crash occurred (e.g., mainline).

Field Type: Text.

Roadway Characteristics

Variable Name: RD_CHAR1

Definition: The general characteristics of the curve and grade of the road where the crash occurred as reported by the responding officer (e.g., straight and level).

Field Type: Text.

Roadway Class*

Variable Name: RODWYCLS

The *Roadway Class* variable was developed by the <u>HSIS Laboratory</u> to readily classify roadway data. This variable is a combination of the *Number of Lanes (Bidirectional)*, *Urban/Rural*, *Median Barrier Type/Width*, and *Functional Class* variables.

Field Type: Text.

Values:

- Urban freeways.
- Urban freeways with fewer than four lanes.
- Urban two-lane roads.
- Urban multilane divided nonfreeways.
- Urban multilane undivided nonfreeways.
- Rural freeways.
- Rural freeways with fewer than four lanes.
- Rural two-lane roads.

^{*}Variable created by HSIS Laboratory.

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- Rural multilane divided nonfreeways.
- Rural multilane undivided nonfreeways.
- Others.

Roadway Inventory

Variable Name: RD_INV

Definition: Roadway inventoried number where the crash occurred (e.g., 405).

Field Type: Numeric.

Roadway Surface

Variable Name: RDSURF

Definition: The condition of the road surface where the crash occurred at the time of the crash (e.g., dry).

Field Type: Text.

State Functional Class

Variable Name: ST_FUNC

Definition: State functional class designation of the road where the crash occurred.

Field Type: Coded:

- R1 = rural—principal arterial.
- R₂ = rural—minor arterial.
- R₃ = rural—collector.
- R4 = rural—unclassified.
- R5 = rural—interstate.
- U1 = urban—principal arterial.
- U2 = urban—minor arterial.
- U₃ = urban—collector.
- U4 = urban—unclassified.
- U₅ = urban—interstate.

State Route Number

Variable Name: RTE_NBR

Definition: Route number associated with the crash (e.g., 167).

Field Type: Text.

State Route Region Name

Variable Name: DISTRICT

Definition: WSDOT region name associated with the crash location (e.g., Northwest).

Field Type: Text.

Urban/Rural

Variable Name: RUR_URB

Definition: Variable indicating the urban or rural setting of the crash (e.g., rural).

Field Type: Text.

V1 Compass Direction

Variable Name: V1CMPDIR

Definition: Compass direction of travel associated with the units (1 and 2) in the crash.

Field Type: Coded:

- N = north.
- NE = northeast.
- E = east.
- SE = southeast.
- S = south.
- SW = southwest.
- W = west.
- NW = northwest.
- Un = unknown.

V2 Compass Direction

Variable Name: V2CMPDIR

Definition: Compass direction of travel associated with the units (1 and 2) in the crash.

Field Type: Coded:

- N = north.
- NE = northeast.
- E = east.
- SE = southeast.
- S = south.
- SW = southwest.
- W = west.
- NW = northwest.
- Un = unknown.

V₁ Direction

Variable Name: V1DIRCDE

Definition: Direction of the units (1 and 2) in the crash related to the roadway (e.g., increasing milepost of major roadway).

Field Type: Text.

V₂ Direction

Variable Name: V2DIRCDE

Definition: Direction of the units (1 and 2) in the crash related to the roadway (e.g., increasing milepost of major roadway).

Field Type: Text.

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V₁ Movement

Variable Name: V1EVENT1

Definition: Relative movements of the units (1 and 2) prior to the crash (e.g., moving straight).

Field Type: Text.

V₂ Movement

Variable Name: V2EVENT1

Definition: Relative movements of the units (1 and 2) prior to the crash (e.g., moving straight).

Field Type: Text.

Weather Condition

Variable Name: WEATHER

Definition: Weather conditions when the crash occurred (e.g., clear or partly cloudy).

Field Type: Text.

Work Zone Status

Variable Name: WKZONE

Definition: Work zone details if the crash occurred in a work zone (e.g., within work zone).

Field Type: Text.

Year

Variable Name: ACCY

Definition: Year the crash occurred.

Field Type: Numeric.

Unit File

Unit File

Case Number

Variable Name: CASENO

Definition: Unique case number of the crash. This variable can be used to link the Unit file to the Crash and Person files (e.g., 202000001).

Field Type: Numeric.

Commercial Carrier Cargo Body

Variable Name: COM_BODY

Definition: Commercial carrier cargo body type (e.g., van/enclosed box).

Field Type: Text.

Commercial Carrier Configuration

Variable Name: CMCONFIG

Definition: Commercial carrier vehicle configuration (e.g., tractor/semitrailer).

Field Type: Text.

Commercial Carrier Hazmat

Variable Name: CDHAZNM

Definition: Indicator that hazardous materials were carried by a commercial vehicle, and if so, whether they were released (e.g., hazmat transported—not released).

Field Type: Text.

Commercial Carrier Number of Axles

Variable Name: CMAXLES

Definition: Number of axles on the commercial carrier (e.g., 5).

Field Type: Numeric.

Commercial Carrier Weight

Variable Name: COM_GWR

Definition: Weight of the commercial carrier in pounds (e.g., 80000).

Field Type: Numeric.

Driver Action

Variable Name: DRV_ACTN

Definition: Action of the unit before the crash (e.g., stopped for traffic).

Field Type: Text.

Driver Age

Variable Name: DRV_AGE

Definition: The age of the driver of the vehicle (or nonmotorist) involved in the crash (e.g., 35).

Field Type: Numeric.

Driver Airbag Status

Variable Name: DRAIRBAG

Definition: Indicator that the airbag was deployed, and if so, its location (e.g., front airbag

deployed).

Field Type: Text.

Driver Contribution Circumstance 1

Variable Name: CONTRIB1

Definition: First violation or factor related to the unit's action that contributed to the crash (e.g., inattention).

Field Type: Text.

Driver Contribution Circumstance 2

Variable Name: CONTRIB2

Definition: Second violation or factor related to the unit's action that contributed to the crash

(e.g., inattention).

Field Type: Text.

Driver Ejection

Variable Name: DRV EJCT

Definition: Indicator that the driver was ejected from the vehicle and the severity of the ejection (e.g., partially ejected).

Field Type: Text.

Driver Injury Severity

Variable Name: DRV_INJ

Definition: Injury severity of the driver of the vehicle (or nonmotorist). This variable is related to the KABCO scale (e.g., suspected serious injury).

Field Type: Text.

Driver Misc Action 1

Variable Name: MISCACT1

Definition: Special miscellaneous action related to the unit (e.g., hit and run).

Field Type: Text.

Driver Misc Action 2

Variable Name: MISCACT2

Definition: Special miscellaneous action related to the unit (e.g., hit and run).

Field Type: Text.

Driver Restraint Usage

Variable Name: DRV_REST

Definition: Type of safety restraint used by the driver (e.g., lap and shoulder used).

Field Type: Text.

Driver Sex

Variable Name: DRV_SEX

Definition: Sex of the driver of the vehicle (or nonmotorist) involved in the crash (e.g., male).

Field Type: Text.

Driver Sobriety

Variable Name: INTOX

Definition: Sobriety of the driver (or nonmotorist) in the vehicle (e.g., had not been drinking).

Field Type: Text.

Drug Recognition Expert Assess

Variable Name: DRASSESS

Definition: Drug recognition expert (DRE) assessment for the driver of the vehicle or

nonmotorist (e.g., DRE requested and assisted).

Field Type: Text.

Interstate Carrier Indicator

Variable Name: INTER_A

Definition: Interstate carrier indicator for commercial vehicles (e.g., intrastate).

Field Type: Text.

Pedalcyclist Injury Class

Variable Name: CYC_INJ

Definition: Injury severity associated with the pedalcyclist involved in the crash (e.g., suspected serious injury).

Field Type: Text.

Roadway Type

Variable Name: VRD_TYPE

Definition: General roadway configuration associated with the unit's location at the time of the crash (e.g., two way—undivided).

Field Type: Text.

Sequence of Events 1

Variable Name: EVENT1

Definition: First event in the crash sequence of this vehicle (e.g., ran off the road).

Field Type: Text.

Sequence of Events 2

Variable Name: EVENT2

Definition: Second event in the crash sequence of this vehicle (e.g., ran off the road).

Field Type: Text.

Sequence of Events 3

Variable Name: EVENT3

Definition: Third event in the crash sequence of this vehicle (e.g., ran off the road).

Field Type: Text.

Sequence of Events 4

Variable Name: EVENT4

Definition: Fourth event in the crash sequence of this vehicle (e.g., ran off the road).

Field Type: Text.

State of Vehicle Registration

Variable Name: V_STATE

Definition: State associated with the vehicle's registration (e.g., Washington).

Field Type: Text.

Unit Injury Severity

Variable Name: VEH_SEV

Definition: Most severe injury associated with the unit (e.g., suspected serious injury).

Field Type: Text.

Unit Number

Variable Name: UNITNO

Definition: Unique unit number. In addition to the *Case Number*, this variable can be used to link the Unit and Person files (e.g., 2).

Field Type: Numeric.

Vehicle Defect 1

Variable Name: VEHCOND1

Definition: Defects present in the vehicle at the time of the crash (e.g., defective brakes).

Field Type: Text.

Vehicle Defect 2

Variable Name: VEHCOND2

Definition: Defects present in the vehicle at the time of the crash (e.g., defective brakes).

Field Type: Text.

Vehicle Defect 3

Variable Name: VEHCOND3

Definition: Defects present in the vehicle at the time of the crash (e.g., defective brakes).

Field Type: Text.

Vehicle Make

Variable Name: MAKE

Definition: Make of the vehicle involved in the crash (e.g., Toyota®).

Field Type: Text.

Vehicle Model

Variable Name: BODYTYPE

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

Field Type: Text.

Vehicle Posted Speed

Variable Name: SPDLIMIT

Definition: Posted speed limit of the road in the vehicle's miles per hour at the time of the crash

(e.g., 45).

Field Type: Numeric.

Vehicle Stolen

Variable Name: STOLEN

Definition: Indicator that the vehicle was stolen (e.g., no).

Field Type: Text.

Vehicle Traffic Control

Variable Name: TRF_CNTL

Definition: Traffic control devices where the crash occurred (e.g., signals).

Field Type: Text.

Vehicle Type

Variable Name: VEHTYPE

Definition: Type of vehicle involved in the crash (e.g., passenger car). This value will be null for

nonmotorists.

Field Type: Text.

Vehicle Usage

Variable Name: VEH_USE

Definition: Special vehicle use type (e.g., trailer—utility).

Field Type: Text.

Vehicle Year

Variable Name: VEHYR

Definition: Model year of the vehicle involved in the crash (e.g., 2015).

Field Type: Numeric.

Person File

Person File

Age

Variable Name: AGE

Definition: Age of the person (e.g., 35).

Field Type: Numeric.

Air Bag Type

Variable Name: AIRBAG

Definition: Indicator that the airbag was deployed, and if so, its location (e.g., front airbag

deployed).

Field Type: Text.

Case Number

Variable Name: CASENO

Definition: Unique case number of the crash. This variable can be used to link the Person file to the Crash and Unit files (e.g., 2020000001).

Field Type: Numeric.

Ejection Status

Variable Name: EJECT

Definition: Indicator that the person was ejected from the vehicle and the severity of the ejection (e.g., partially ejected).

Field Type: Text.

Helmet Use

Variable Name: HELMET

Definition: Indicator that the pedestrian/cyclist/motorcyclist used a helmet at the time of the crash and the type of the helmet (e.g., U.S. Department of Transportation-compliant motorcycle helmet).

Field Type: Text.

Injury Type

Variable Name: INJ

Definition: Severity of injuries the person involved in the crash sustained. This variable is related to the KABCO injury scale (e.g., possible injury).

Field Type: Text.

Involved Person Type

Variable Name: SEATPOS

Definition: Type of persons involved in the crash, including motor vehicle (MV) occupants and nonmotorists (e.g., MV driver).

Field Type: Text.

Person Sex

Variable Name: SEX

Definition: Sex of the person involved in the crash (e.g., male).

Field Type: Text.

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Restraint System Type

Variable Name: REST1

Definition: Safety equipment or restraint used by the person (e.g., lap and shoulder used).

Field Type: Text.

Unit Number

Variable Name: UNITNO

Definition: Unique unit number. In addition to the *Case Number*, this variable can be used to link the Unit and Person files (e.g., 2).

Field Type: Numeric.

Appendix: History of Revisions

Appendix: History of Revisions

Table 4 shows HSIS variables and the years in which changes were made. The changes are described for the relevant variables.

Table 4. History of HSIS revisions.

File	Variable Name	Variable	Description of Change	Year of Change
Crash	AC MLMP	ACC MAINLINE MILEPOST	Variable discontinued	1999
Ciusii	/\C_!\!\L!\!!	//CCIVI//IIIVEIIVE IVIIEEI OST	Variable discontinued Variable recreated	2012
			Variable discontinued	2018
Crash	AC_SRMPI	SRMP AHEAD BACK INDICATOR	Variable discontinued	2018
Crash	ACC DATE	ACC DATE YYMMDD	Variable discontinued	1999
	_		Variable recreated	2018
Crash	ACCTYPE	ACC TYPE	Variable type changed from coded to text	2018
Crash	ADMCLASS	ADMIN CLASS	Variable type changed from coded to text	2018
Crash	AGENCY	INVESTIGATING AGENCY	Variable type changed from coded to text	2018
Crash	ALCFLAG	DRV ALCOHOL FLAG	Variable discontinued	1999
			Variable recreated	2018
Crash	CENTURY	ACC CENTURY	Variable discontinued	1999
Crash	CITY	CITY NUMBER	Variable type changed from coded to text	2018
Crash	COLTYPE1	COLLISION TYPE 1	Variable type changed from coded to text	2018
Crash	COLTYPE ₂	COLLISION TYPE 2	Variable type changed from coded to text	2018
Crash	COUNTY	COUNTY NUMBER	Variable type changed from coded to text	2018
Crash	DAYMTH	ACC DAY OF MONTH	Variable discontinued	2018
Crash	DISTRICT	DISTRICT NUMBER	Variable type changed from coded to text	2018
Crash	FIRE	FIRE	Variable type changed from coded to text	2018
Crash	FORM_REPT_NO	TRAFFIC COLLISION REPORT FORM NUMBER	Variable added Variable discontinued	2012 2018
Crash	FUNC_CLS	FUNCTIONAL CLASS	Variable type changed from coded to text	2018
Crash	GPS_LATX	GPS X	Variable added	1999
Crash	GPS_LATY	GPS Y	Variable added	1999
Crash	GPS_LATZ	GPS Z	Variable added	1999
2.05.1	5. 5_2, 1.2		Variable discontinued	2018
Crash	HAZMAT	HAZARDOUS MATERIAL	Variable type changed from coded to text	2018

File	Variable Name	Variable	Description of Change	Year of Change
Crash	HIT_RUN	HIT AND RUN	Variable added Variable type changed from coded to text	1999 2018
Crash	IMPACT	IMPACT LOCATION	Variable type changed from coded to text	2018
Crash	INTENT	INTENTIONAL ACTION	Variable added Variable type changed from coded to text	1999 2018
Crash	LIGHT	LIGHT CONDITION	Variable type changed from coded to text	2018
Crash	LOC_CHAR	LOCATION CHARACTERISTICS	Variable type changed from coded to text	2018
Crash	LOC_TYPE	ACC LOCATION TYPE	Variable type changed from coded to text	2018
Crash	MAINTDT	LAST MAINTENANCE DATE	Variable discontinued	2018
Crash	MEDCAUSE	MEDICALLY CAUSED	Variable added Variable type changed from coded to text	1999 2018
Crash	MLMP_IND	MAINLINE ARM INDICATOR	Variable discontinued	1999
Crash	MONTH	ACC MONTH	Variable type changed from coded to text	2018
Crash	MVMT	MILLION VEH MILES TRAVELED	Variable discontinued	1999
Crash	NO_PEDS	NUMBER OF PEDESTRAINS	Variable added	1999
Crash	NONMVIND	NON-TRAFFIC INDICATOR	Variable added Variable discontinued	1999 2018
Crash	OBJECT1	OBJECT STRUCK 1	Variable type changed from coded to text	2018
Crash	OBJECT ₂	OBJECT STRUCK 2	Variable type changed from coded to text	2018
Crash	PREFX_CD	PREFIX 1	Variable discontinued	2018
Crash	PROPDAM	PROPERTY DAMAGE AMOUNT	Variable discontinued	1999
Crash	RAMP_IND	RAMP INDICATOR	Variable discontinued	1999
Crash	RD_CHAR1	ROADWAY CHARACTERISTICS	Variable type changed from coded to text	2018
Crash	RD_QUAL	ROADWAY QUALIFIER	Variable discontinued	2018
Crash	RD_REL	ON/OFF ROAD	Variable discontinued	2018
Crash	RD_TYPE	RELATED ROADWAY TYPE	Variable type changed from coded to text	2018
Crash	RDSURF	ROADWAY SURFACE	Variable type changed from coded to text	2018
Crash	REC_TYPE	RECORD TYPE	Variable discontinued	2018
Crash	REPORT	ACC SEVERITY	Variable type changed from coded to text	2018
Crash	REV_MP	REVERSE ARM	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Crash	RODWYCLS	ROADWAY CLASS	Variable type changed from coded to text	2018
Crash	RUR_URB	RURAL URBAN	Variable type changed from coded to text	2018
Crash	SEQNO	SEQUENCE NUMBER	Variable discontinued	1999
Crash	SEVERITY	MOST SEVERE INJURY	Variable type changed from coded to text	2018
Crash	SPILLAGE	FUEL SPILLAGE	Variable discontinued	1999
Crash	SR_ADID	STATE ROUTE ADDITIONAL ID	Variable discontinued	2018
Crash	STREPORT	STATE REPORT	Variable added Variable discontinued	1999 2018
Crash	TIME	ACC TIME	Variable type changed from coded to numeric	2018
Crash	TIMEARR	POLICE ARRIVED TIME	Variable discontinued	2018
Crash	TIMENOTE	POLICE DISPATCHED TIME	Variable discontinued	2018
Crash	V ₁ DIRCDE	V1 DIRECTION	Variable type changed from coded to text	2018
Crash	V ₂ DIRCDE	V ₂ DIRECTION	Variable type changed from coded to text	2018
Crash	V1EVENT1	V1 MOVEMENT	Variable type changed from coded to text	2018
Crash	V2EVENT1	V ₂ MOVEMENT	Variable type changed from coded to text	2018
Crash	WEATHER	WEATHER CONDITION	Variable type changed from coded to text	2018
Crash	WKZONE	WORK ZONE STATUS	Variable added Variable type changed from coded to text	1999 2018
Crash	WSP_UPDT	WSP UPDATE DATE	Variable discontinued	1999
Crash	XRDCLASS	CROSS ROAD CLASS TYPE	Variable added Variable discontinued	1999 2018
Crash	ACCYR	YEAR	Variable added Variable discontinued	2018 2007
Unit	ADD_INFO	ACC VEH ADDITIONAL INFO	Variable discontinued	1999
Unit	CDHAZNM	COMM CARRIER HAZMAT	Variable added	1999
Unit	CDPLACCD	COMM CARRIER PLACARD	Variable added	1999
			Variable discontinued	2018
Unit	CDPLACNO	COMM CARRIER PLACARD	Variable added	1999
		NUM	Variable discontinued	2018
Unit	CDPLACSU	COMM CARRIER PLACARD	Variable added	1999
Unit	CMAXLES	SUFFIX COMM CARRIER NUM OF	Variable discontinued Variable added	1999
Unit	CMCONFIG	COMM CARRIER CONFIG	Variable added Variable type changed from coded to text	1999 2018

File	Variable Name	Variable	Description of Change	Year of Change
Unit	COM_BODY	COMM CARRIER CARGO BODY	Variable added Variable type changed from coded to text	1999 2018
Unit	COM_GWR	COMMERCIAL CARRIER WEIGHT	Variable added	1999
Unit	CONTRIB1	DRV CONTRIB CIRCUMS 1	Variable type changed from coded to text	2018
Unit	CONTRIB ₂	DRV CONTRIB CIRCUMS 2	Variable type changed from coded to text	2018
Unit	CYC_INJ	PEDALCYCLIST INJURY CLASS	Variable type changed from coded to text	2018
Unit	DAMSEV	VEH DAMAGE SEVERITY	Variable discontinued	1999
Unit	DIR_TRVL	VEH MOVEMENT DIRECTION	Variable discontinued	1999
Unit	DRAIRBAG	DRV AIRBAG STATUS	Variable added Variable type changed from coded to text	1999 2018
Unit	DRASSESS	DRUG RECOG EXPERT ASSESS	Variable added Variable type changed from coded to text	1999 2018
Unit	DRV_ACTN	DRV ACTION	Variable type changed from coded to text	2018
Unit	DRV_AGE	DRV AGE	Variable type changed from coded to numeric	2018
Unit	DRV_EJCT	DRV EJECTION	Variable type changed from coded to text	2018
Unit	DRV_INJ	DRV INJURY CLASS	Variable type changed from coded to text	2018
Unit	DRV_REST	DRV RESTRAINT USAGE	Variable type changed from coded to text	2018
Unit	DRV_SEX	DRV SEX	Variable type changed from coded to text	2018
Unit	EVENT1	SEQUENCE OF EVENTS 1	Variable added Variable type changed from coded to text	1999 2018
Unit	EVENT2	SEQUENCE OF EVENTS 2	Variable added Variable type changed from coded to text	1999 2018
Unit	EVENT ₃	SEQUENCE OF EVENTS 3	Variable added Variable type changed from coded to text	1999 2018
Unit	EVENT4	SEQUENCE OF EVENTS 4	Variable added Variable type changed from coded to text	1999 2018
Unit	HELMET	PED/CYC HELMET	Variable type changed from coded to text	2013
Unit	INTER_A	INTERSTATE INDICATOR	Variable added Variable type changed from coded to text	1999 2018

File	Variable Name	Variable	Description of Change	Year of Change
Unit	INTOX	DRV SOBRIETY	Variable added	1996
			Variable type changed from coded	2018
			to text	
Unit	MISCACT1	DRV MISC ACTION 1	Variable type changed from coded	2018
			to text	
Unit	MISCACT2	DRV MISC ACTION 2	Variable type changed from coded	2018
			to text	
Unit	MTC_INJ	PEDALCYCLIST INJURY	Variable added	1999
		CLASS	Variable discontinued	2018
Unit	MTC_INJ_TYPE	PECALCYCLIST INJURY	Variable discontinued	1999
		TYPE		
Unit	OCCUPAC	DRV OCCUPATION	Variable discontinued	1999
Unit	OFF_ACTN	OFFICER ACTION	Variable discontinued	1999
Unit	ON_DUTY	ON DUTY STATUS	Variable added	1999
Unit	OUTSTATE	VEH STATE OF	Variable discontinued	1999
		REGISTRATION		
Unit	PED_CLT	PED/CYC CLOTHING	Variable discontinued	1999
Unit	PED_CUM1	PED/CYC CIRCUMS 1	Variable discontinued	1999
Unit	PED_CUM ₂	PED/CYC CIRCUMS 2	Variable discontinued	1999
Unit	PED_LOC	PED/CYC LOCATION	Variable discontinued	1999
Unit	PED_STUS	PED/CYC STATUS	Variable discontinued	1999
Unit	PED_WLK	PED WALK	Variable discontinued	1999
Unit	PEDACT	PED/CYC ACTIONS	Variable discontinued	1999
Unit	RD_SEP	VEH ROAD SEPARATE	Variable discontinued	1999
Unit	RESIDLOC	DRV RESIDENCE	Variable discontinued	1999
		PROXIMITY		
Unit	SOB_TEST	DRV SOBRIETY	Variable discontinued	1999
Unit	SPDLIMIT	VEH POSTED SPEED	Variable type changed from coded	2013
			to text	
Unit	STOLEN	VEH STOLEN	Variable added	1999
Unit	STYLE	VEH STYLE	Variable discontinued	1999
Unit	SURF_TYP	ROADWAY SURFACE TYPE	Variable discontinued	2018
Unit	TRAILER	TRAILER INFO	Variable discontinued	1999
Unit	TRF_CNTL	VEH TRAFFIC CONTROL	Variable type changed from coded	2018
			to text	
Unit	V_STATE	STATE OF VEH	Variable added	1999
		REGISTRATION		
Unit	VEH_SEV	DRV INJURY SEVERITY	Variable type changed from coded	2018
			to text	
Unit	VEH_USE	VEH USAGE	Variable added	1999
			Variable type changed from coded	2018
			to text	
Unit	VEHCOND1	VEH DEFECT 1	Variable type changed from coded	2018
			to text	
Unit	VEHCOND ₂	VEH DEFECT 2	Variable type changed from coded	2018
			to text	

File	Variable Name	Variable	Description of Change	Year of Change
Unit	VEHCOND ₃	VEH DEFECT 3	Variable added Variable type changed from coded to text	1999 2018
Unit	VEHNO	VEHICLE NUMBER	Variable name changed to UNITNO	2018
Unit	VEHTYPE	VEH TYPE	Variable type changed from coded to text	2018
Unit	VRD_TYPE	ROADWAY TYPE	Variable type changed from coded to text	2018
Person	AGE	DRV/OCC AGE	Variable type changed from coded to numeric	2018
Person	AIRBAG	OCCUPANT AIRBAG	Variable added Variable type changed from coded to text	1999 2018
Person	EJECT	DRV/OCC EJECTION	Codes added to coded values Variable type changed from coded to text	1999 2018
Person	HELMET	PED/CYC HELMET	Variable added Variable type changed from coded to text	2006 2018
Person	INJ	DRV/OCC INJURY	Codes added to coded values Variable type changed from coded to text	1999 2018
Person	NO_OCCS	NUMBER OF OCCUPANTS	Variable added Variable discontinued	1999 2006
Person	REST1	DRV/OCC RESTRAINT	Variable type changed from coded to text	2018
Person	SEATPOS	DRV/OCC SEAT POSITION	Variable type changed from coded to text	2018
Person	SEX	DRV/OCC SEX	Variable type changed from coded to text	2018
Person	VEHNO	VEHICLE NUMBER	Variable name changed to UNITNO	2018
Roadway	AADT	AVER ANNUAL DAILY TRAFFIC	Variable type changed from coded to numeric Variable name changed to TOTAL_AADT	2020
Roadway	ACCES_DT	ACCESS CONTROL DATE	Variable discontinued	2019
Roadway	ACCESS	ACCESS CONTROL TYPE	Variable name changed to ACCESS_CONTROL	2020
			Variable type change from coded to text	2020
Roadway	ACLL_DT1	LEFT ACCEL LANE DATE RD1	Variable discontinued	2018
Roadway	ACLL_DT2	LEFT ACCEL LANE DATE RD ₂	Variable discontinued	2018
Roadway	ACLL_LG1	LEFT ACCEL LANE LENGTH RD1	Variable discontinued	2018
Roadway	ACLL_LG2	LEFT ACCEL LANE LENGTH RD2	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Roadway	ACLL_WD1	LEFT ACCEL LANE WIDTH RD1	Variable discontinued	2018
Roadway	ACLL_WD2	LEFT ACCEL LANE WIDTH RD2	Variable discontinued	2018
Roadway	ACLR_DT1	RIGHT ACCEL LANE DATE RD1	Variable discontinued	2018
Roadway	ACLR_DT2	RIGHT ACCEL LANE DATE RD ₂	Variable discontinued	2018
Roadway	ACLR_LG1	RIGHT ACCEL LANE LENGTH RD1	Variable discontinued	2018
Roadway	ACLR_LG2	RIGHT ACCEL LANE LENGTH RD2	Variable discontinued	2018
Roadway	ACLR_WD1	RIGHT ACCEL LANE WIDTH RD1	Variable discontinued	2018
Roadway	ACLR_WD2	RIGHT ACCEL LANE WIDTH RD2	Variable discontinued	2018
Roadway	ACSEQ_NB	ACC SEQ NUM	Variable discontinued	2018
Roadway	BEGMP	BEGMP	Variable name changed to BEGIN MILEPOST	2020
Roadway	CITY	CITY NUMBER	Variable name changed to CITY_NAME Variable type changed from coded to text	2020
Roadway	CITY_DT	CITY DATE	Variable discontinued	2018
Roadway	CNTL_SEC	CONTROL SECTION	Variable discontinued	2018
Roadway	CNTY_DT	COUNTY DATE	Variable discontinued	2018
Roadway	COMP_DIR	COMPASS DIRECTION	Variable discontinued	2018
Roadway	COUNTY	COUNTY NUMBER	Variable discontinued	2018
Roadway	CTY_ZONE	CITY ZONE TYPE	Variable discontinued	2018
Roadway	DETCH_NB	WSP DETACHEMENT NUM	Variable discontinued	2018
Roadway	DEVCD	LEVEL OF DEVLMPT	Variable discontinued	2018
Roadway	DEVCD_DT	LEVEL OF DEVELMT DATE	Variable discontinued	2018
Roadway	DIR_DT	COMPASS DIRECTION DATE	Variable discontinued	2018
Roadway	DISCN_DT	DISCONTY DATE	Variable discontinued	2018
Roadway	DISCONTY	DISCONTY IND	Variable discontinued	2018
Roadway	DISTR_DT	DISTRICT DATE	Variable discontinued	2018
Roadway	DISTRICT	DISTRICT NUMBER	Variable name changed to DISTRICT_NUMBER Variable type changed from coded to numeric	2020
Roadway	DOMAIN	DOMAIN TYPE	Variable discontinued	2018
Roadway	DOMN_DT	DOMAIN DATE	Variable discontinued	2018
Roadway	ENDMP	CALCULATED ENDING MILEPOST	Variable name changed to END MILEPOST	2020
Roadway	EW_DTE	EAST/WEST INDICATOR DATE	Variable discontinued	2018
Roadway	EW_IND	EAST WEST IND	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Roadway	FED_AID	FED AID CLASS	Variable discontinued	2018
Roadway	FED_CD	FED AID TYPE	Variable discontinued	2018
Roadway	FEDAD_DT	FED-AID DATE	Variable discontinued	2018
Roadway	FUNC_CLS	FEDERAL FUNC CLASS	Variable name changed to	2020
,			FUNCTIONAL_CLASS	
			Variable type changed from coded	2020
			to text	
Roadway	FUNC_DT	FUNCTIONAL CLASS DATE	Variable discontinued	2018
Roadway	HPMS	HPMS SECTION NUMBER	Variable discontinued	2018
Roadway	HPMS_DTE	HPMS DATE	Variable discontinued	2018
Roadway	LANEWID	CALCULATED LANE	Variable discontinued	2018
,		WIDTH		
Roadway	LSHL_DT2	LEFT SHOULDER DATE	Variable discontinued	2018
,		RD ₂		
Roadway	LSHL_DTE	LEFT SHOULDER DATE	Variable discontinued	2018
,		RD1		
Roadway	LSHL_TY2	LEFT SHOULDER TYPE	Variable discontinued	2018
		RD ₂		
Roadway	LSHL_TYP	LEFT SHOULDER TYPE	Variable name changed to	2020
		RD1	LEFT_SHOULDER_SURFACE	
			Variable type changed from coded	2020
			to text	
Roadway	LSHL_WD2	LEFT SHOULDER WIDTH	Variable discontinued	2018
		RD ₂		
Roadway	LSHLDWID	LEFT SHOULDER WIDTH	Variable name changed to	2020
		RD1	LEFT_SHOULDER_SURFACE	
			Variable type changed from coded	2020
			to numeric	
Roadway	LST_UPDT	CONTROL SECTION LAST	Variable discontinued	2018
		UPDATE		
Roadway	MDXN_DTE	MEDIAN CROSSING DATE	Variable discontinued	2018
Roadway	MED_TYPE	MEDIAN TYPE	Variable name changed to	2020
			MEDIAN_SURFACE	
			Variable type changed from coded	2020
Daadaaaa	MEDDARTY	MEDIANIDADDIED TVDE	to text	
Roadway	MEDBARTY	MEDIAN BARRIER TYPE	Variable name changed to	2020
			MEDIAN_BARRIER	2020
			Variable type changed from coded	2020
Poodway	MEDN_DTE	MEDIAN DATE	to text Variable discontinued	2018
Roadway Roadway	MEDWID	MEDIAN WIDTH	Variable discontinued Variable name changed to	
Nuauway	INIEDANID	IVILDIAIN WIDTH	MEDIAN_WIDTH	2020
			Variable type change from coded	2020
			to numeric	2020
Roadway	MEDXNGTY	MEDIAN CROSSING TYPE	Variable discontinued	2010
Roadway	MNT_AREA	MAINTENANCE AREA NBR	Variable discontinued Variable name changed to	2019
Noauway	IVIIN I _AINEA	WAINT LINAINCE AREA INDR	MAINTENANCE_AREA	2020
			Variable type change from numeric	2020
			to text	2020
			to text	1

File	Variable Name	Variable	Description of Change	Year of Change
Roadway	MNT_DTE	MAINTENANCE DATE	Variable discontinued	2018
Roadway	MNTSC_DT	MAINTENANCE SECTION DATE	Variable discontinued	2018
Roadway	MNTSEC	MAINTENANCE SECT NBR	Variable discontinued	2018
Roadway	MT_DTE	LAST MAINT DATE	Variable discontinued	2018
Roadway	MT_PASID	MTN PASS ID	Variable discontinued	2018
Roadway	MTPAS_DT	MOUNTAIN PASS DATE	Variable discontinued	2018
Roadway	MVMT	MILLION VEH MILES TRAVELED	Variable discontinued	2018
Roadway	NHS_DT	NHS DATE	Variable discontinued	2018
Roadway	NHS_IND	NHS INDICATOR	Variable name changed to NHS_INDICATOR Variable type changed from coded to text	2020
Roadway	NO_LANES	TOTAL NUMBER OF LANES	Variable name changed to LANE_COUNT Variable type changed from coded	2020
Roadway	NO_LNDT1	NUMBER OF LANES DATE	to numeric Variable discontinued	2018
Roadway	NO_LNDT2	NUMBER OF LANES DATE RD2	Variable discontinued	2018
Roadway	PGRP_DT	POPULATION GROUP DATE	Variable discontinued	2018
Roadway	POP_GRP	CITY POPULATION	Variable discontinued	2018
Roadway	PRK_ZNE	PARKING ZONE TYPE	Variable discontinued	2018
Roadway	PRKZN_DT	PARKING ZONE TYPE DATE	Variable discontinued	2018
Roadway	RD_ABIND	RDWY AHEAD/BACK IND	Variable discontinued	2018
Roadway	RD_EQDTE	EQUATION DATE	Variable discontinued	2018
Roadway	RD_EQUAT	EQUATION	Variable discontinued	2018
Roadway	RD_LIGHT	INTERSECTION ILLUM-ND	Variable discontinued	2018
Roadway	RD_OPEN	ROAD OPEN DATE	Variable discontinued	2018
Roadway	RD_OWNER	ROADWAY OWNER CODE	Variable discontinued	2018
Roadway	RD_QUAL	RELATED RD QUAL	Variable discontinued	2018
Roadway	RD_RARM	REVERSE ARM	Variable discontinued	2018
Roadway	RD_SRMP	RDWY SRMP	Variable discontinued	2018
Roadway	RD_TYPE	RELATED RD TYPE	Variable discontinued	2018
Roadway	RDAC_MGC	ACCESS MANAGEMENTCLASS	Variable discontinued	2018
Roadway	RDAC_MGS	ACCESS MANAGEMENT SUBCLASS	Variable discontinued	2018
Roadway	RDWY_WD1	ROADWAY WIDTH RD 1	Variable discontinued	2018
Roadway	RDWY_WD2	ROADWAY WIDTH RD 2	Variable discontinued	2018
Roadway	RDWY_WID	ROADWAY WIDTH	Variable name changed to ROAD_WIDTH Variable type changed from coded to numeric	2020

File	Variable Name	Variable	Description of Change	Year of Change
Roadway	REC_TYPE	RECORD TYPE	Variable discontinued	2018
Roadway	ROAD_INV	ROUTE TYPE ID	Variable name changed to ROUTE_ID	2020
Roadway	RODWYCLS	ROADWAY CLASSIFICATION	Variable discontinued	2018
Roadway	RSHL_DT2	RIGHT SHOULDER DATE RD ₂	Variable discontinued	2018
Roadway	RSHL_DTE	RIGHT SHOULDER DATE RD1	Variable discontinued	2018
Roadway	RSHL_TY2	RIGHT SHOULDER TYPE RD ₂	Variable discontinued	2018
Roadway	RSHL_TYP	RIGHT SHOULDER TYPE RD1	Variable name changed to RIGHT_SHOULDER_SURFACE Variable type changed from coded	2020
			to text	
Roadway	RSHL_WD2	RIGHT SHOULDER WIDTH RD2	Variable discontinued	2018
Roadway	RSHLDWID	RIGHT SHOULDER WIDTH RD1	Variable name changed to RIGHT_SHOULDER_WIDTH Variable type changed from coded	2020
			to numeric	
Roadway	RTE_NBR	ROUTE NUMBER	Variable discontinued	2018
Roadway	RURURB	RURAL URBAN	Variable name changed to URBAN_RURAL	2020
Roadway	SEG_LNG	RD CALCULATED SECT LNGTH	Variable discontinued	2018
Roadway	SPD_LIMT	POSTED SPEED LIMIT	Variable name changed to SPEED_LIMIT Variable type changed from coded	2020
			to numeric	
Roadway	ST_FUNC	STATE FUNC CLASS	Variable discontinued	2018
Roadway	SURF_TY2	SURFACE TYPE RD2	Variable discontinued	2018
Roadway	SURF_TYP	SURFACE TYPE RD1	Variable name changed to LANE_SURFACE_TYPE	2020
			Variable type changed from coded to text	2020
Roadway	SWS_DT	STATEWIDE SYSTEM DATE	Variable discontinued	2018
Roadway	SWS_IND	STATEWIDE SYSTEM IND	Variable discontinued	2018
Roadway	TERRAIN	TERRAIN TYPE	Variable discontinued	2018
Roadway	TERRN_DT	TERRAIN DATE	Variable discontinued	2018
Roadway	TRF_CNTL	INTERSECTION CONTROL TYPE	Variable discontinued	2018
Roadway	TRFCN_DT	TRAFFIC CONTROL DATE	Variable discontinued	2018
Roadway	TRKPCTS	TRUCK PERCENTAGE	Variable discontinued	2018
Roadway	TRLL_DT1	LEFT TURN LANE DATE RD1	Variable discontinued	2018
Roadway	TRLL_DT2	LEFT TURN LANE DATE RD ₂	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Roadway	TRLL_LG1	LEFT TURN LANE LENGTH RD1	Variable discontinued	2018
Roadway	TRLL_LG2	LEFT TURN LANE LENGTH RD2	Variable discontinued	2018
Roadway	TRLL_WD1	LEFT TURN LANE WIDTH RD1	Variable discontinued	2018
Roadway	TRLL_WD2	LEFT TURN LANE WIDTH RD2	Variable discontinued	2018
Roadway	TRLR_DT1	RIGHT TURN LANE DATE RD1	Variable discontinued	2018
Roadway	TRLR_DT2	RIGHT TURN LANE DATE RD ₂	Variable discontinued	2018
Roadway	TRLR_LG1	RIGHT TURN LANE LENGTH RD1	Variable discontinued	2018
Roadway	TRLR_LG2	RIGHT TURN LANE LENGTH RD2	Variable discontinued	2018
Roadway	TRLR_WD1	RIGHT TURN LANE WIDTH RD1	Variable discontinued	2018
Roadway	TRLR_WD2	RIGHT TURN LANE WIDTH RD2	Variable discontinued	2018
Roadway	UBREG_DT	URBAN NUMBER DATE	Variable discontinued	2018
Roadway	URB_DT	URBAN REGION DATE	Variable discontinued	2018
Roadway	URB_NBR	URBAN AREA NUMBER	Variable discontinued	2018
Roadway	URB_REG	URBAN REGION NUMBER	Variable discontinued	2018
Roadway	WSP_DIST	WSP DISTRICT NUMBER	Variable discontinued	2018
Roadway	WSP_DT	WSP DATE	Variable discontinued	2018
Roadway	ZONE_DT	ZONE DATE	Variable discontinued	2018
Horizontal	BEGMP	HORIZ CURVE BEGIN	Variable discontinued	2018
Curve		MLPOST	Variable added and name changed to BEGIN MILEPOST	2020
Horizontal	CURV_ANG	HORIZ CURVE CEN ANGLE	Variable discontinued	2018
Curve			Variable added and name changed to CURVE_CENTRAL_ANGLE	2020
Horizontal Curve	CURV_DT	HORIZ CURVE DATE	Variable discontinued	2019
Horizontal Curve	CURV_INV	STATE RTE TYPE ID	Variable discontinued Variable added and name changed to ROUTE_ID	2018 2020
Horizontal Curve	CURV_LGT	HORIZ CURVE LGT (FT)	Variable discontinued Variable added and name changed to CURVE_LENGTH	2018 2020
Horizontal Curve	CURV_MAX	HORIZ CURVE MAX SUPER	Variable discontinued Variable added and name changed to SUPER_ELEVATION	2018 2020
Horizontal Curve	CURV_NUM	HORIZ CURVE CONTRACT NUM	Variable discontinued	2018
Horizontal Curve	CURV_RAD	HORIZ CURVE RAD	Variable discontinued Variable added and name changed to CURVE_RADIUS	2018 2020

File	Variable Name	Variable	Description of Change	Year of Change
Horizontal	DEG_CURV	DEGREE OF CURVATURE	Variable discontinued	2018
Curve				
Horizontal	DIR_CURV	HORIZ CURVE DIRN	Variable discontinued	2018
Curve			Variable added and name changed	2020
			to CURVE_DIRECTION	
Horizontal	ENDMP	HORIZ CURVE END	Variable discontinued	2018
Curve		MLPOST	Variable added and name changed to END MILEPOST	2020
Horizontal Curve	LEGAL_SP	LEGAL SPEED LIMIT	Variable discontinued	2018
Horizontal Curve	MILEPOST	MILEPOST	Variable created	2018
Horizontal Curve	OVERLAP	CURVE OVERLAP IND	Variable discontinued	2018
Horizontal	RTE_NBR	ROUTE NUMBER	Variable discontinued	2018
Curve			Variable added and name changed to STATE_ROUTE	2020
Horizontal Curve	SEG_LNG	HORIZ CURVE LGT (MI)	Variable discontinued	2018
Grade	BEGMP	GRADE BEGIN MILEPOST	Variable discontinued	2018
Grade	DIR_GRAD	DIRECTION OF GRADE	Variable discontinued	2018
Grade	ENDMP	GRADE END MILEPOST	Variable discontinued	2018
Grade	GRAD_DT	VERT ALIGN DATE OF CHNG	Variable discontinued	2018
Grade	GRAD_INV	STATE RTE TYPE ID	Variable discontinued	2018
			Variable added and name changed	2020
			to ROUTE_ID	
Grade	GRAD_NUM	VERT ALIGN CONTRACT NUM	Variable discontinued	2018
Grade	GRAD_TYP	VERT CURVE TYPE	Variable discontinued	2018
Grade	LEGAL_SP	LEGAL SPEED LIMIT	Variable discontinued	2018
Grade	MILEPOST	MILEPOST	Variable created	2018
Grade	PCT_GRAD	PERCENT GRADE	Variable discontinued	2018
			Variable added and broken into	2020
			two new variables:	
			FGRADE_AHEAD and FGRADE_BACK	
Grade	RTE_NBR	ROUTE NUMBER	Variable discontinued	2018
			Variable added and name changed to STATE_ROUTE	2020
Grade	SEG_LNG	GRADE LENGTH (MI)	Variable discontinued	2018
Grade	VCUR_LGT	VERTICAL CURVE LENGTH	Variable discontinued	2018
-			Variable added and name changed to CURVE_LENGTH	2020
Ramp	AADT	AVER ANNUAL DAILY TRAFFIC	Variable discontinued	2018
Ramp	BEGMP	BEGMP	Variable discontinued	2018
Ramp	CITY	CITY NUMBER	Variable discontinued	2018
Ramp	CITY_DT	CITY DATE	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Ramp	CNTL_SEC	CONTROL SECTION	Variable discontinued	2018
Ramp	CNTY_DT	COUNTY DATE	Variable discontinued	2018
Ramp	COUNTY	COUNTY NUMBER	Variable discontinued	2018
Ramp	CTY_ZONE	CITY ZONE TYPE	Variable discontinued	2018
Ramp	DEVCD	LEVEL OF DEVLMPT	Variable discontinued	2018
Ramp	DEVCD_DT	LEVEL OF DEVELMT DATE	Variable discontinued	2018
Ramp	DISTR_DT	DISTRICT DATE	Variable discontinued	2018
Ramp	DISTRICT	DISTRICT NUMBER	Variable discontinued	2018
Ramp	ENDMP	CALCULATED ENDING MILEPOST	Variable discontinued	2018
Ramp	EW_DTE	EAST/WEST INDICATOR DATE	Variable discontinued	2018
Ramp	EW_IND	EAST WEST IND	Variable discontinued	2018
Ramp	FED_AID	FED AID CLASS	Variable discontinued	2018
Ramp	FED_CD	FED AID TYPE	Variable discontinued	2018
Ramp	FEDAD_DT	FED-AID DATE	Variable discontinued	2018
Ramp	FUNC_CLS	FEDERAL FUNC CLASS	Variable discontinued	2018
Ramp	FUNC_DT	FUNCTIONAL CLASS DATE	Variable discontinued	2018
Ramp	LANEWID	CALCULATED LANE WIDTH	Variable discontinued	2018
Ramp	LSHL_DTE	LEFT SHOULDER DATE RD1	Variable discontinued	2018
Ramp	LSHL_TYP	LEFT SHOULDER TYPE RD1	Variable discontinued	2018
Ramp	LSHLDWID	LEFT SHOULDER WIDTH	Variable discontinued	2018
Ramp	LST_UPDT	CONTROL SECTION LAST UPDATE	Variable discontinued	2018
Ramp	MNT_AREA	MAINTENANCE AREA NBR	Variable discontinued	2018
Ramp	MNT_DATE	MAINTENANCE DATE	Variable discontinued	2018
Ramp	MNTSC_DT	MAINTENANCE SECTION DATE	Variable discontinued	2018
Ramp	MNTSEC	MAINTENANCE SECT NBR	Variable discontinued	2018
Ramp	MT_DTE	LAST MAINT DATE	Variable discontinued	2018
Ramp	NO_LANE1	NUMBER LANES INC	Variable discontinued	2018
Ramp	NO_LANE2	NUMBER LANES DEC	Variable discontinued	2018
Ramp	NO_LANES	TOTAL NUMBER OF LANES	Variable discontinued	2018
Ramp	NO_LNDT1	NUMBER OF LANES DATE RD1	Variable discontinued	2018
Ramp	NO_LNDT2	NUMBER OF LANES DATE Variable discontinued RD2		2018
Ramp	PGRP_DT	POPULATION GROUP DATE	Variable discontinued	2018
Ramp	POP_GRP	CITY POPULATION	Variable discontinued	2018
Ramp	RD_EQUAT	EQUATION	Variable discontinued	2018
Ramp	RD_LIGHT	INTERSECTION ILLUM-ND	Variable discontinued	2018
Ramp	RD_OPEN	ROAD OPEN DATE	Variable discontinued	2018
Ramp	RD_OWNER	ROADWAY OWNER CODE	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Ramp	RD_QUAL	RELATED RD QUAL	Variable discontinued	2018
Ramp	RD_RARM	REVERSE ARM	Variable discontinued	2018
Ramp	RD_SRMP	RDWY SRMP	Variable discontinued	2018
Ramp	RD_TYPE	RELATED RD TYPE	Variable discontinued	2018
Ramp	RDWY_WD1	ROADWAY WIDTH RD 1	Variable discontinued	2018
Ramp	RDWY_WID	TOTAL ROADWAY WIDTH	Variable discontinued	2018
Ramp	RDWYWDD1	ROADWAY WIDTH DATE	Variable discontinued	2018
Ramp	REC_TYPE	RECORD TYPE	Variable discontinued	2018
Ramp	ROAD_INV	ROUTE TYPE ID	Variable discontinued	2018
Ramp	RSHL_DTE	RIGHT SHOULDER DATE RD1	Variable discontinued	2018
Ramp	RSHL_TYP	RIGHT SHOULDER TYPE RD1	Variable discontinued	2018
Ramp	RSHLDWID	RIGHT SHOULDER WIDTH	Variable discontinued	2018
Ramp	RTE_NBR	ROUTE NUMBER	Variable discontinued	2018
Ramp	RURURB	RURAL URBAN	Variable discontinued	2018
Ramp	SEG_LNG	RD CALCULATED SECT LNGTH	Variable discontinued	2018
Ramp	ST_FUNC	STATE FUNC CLASS	Variable discontinued	2018
Ramp	SURF_TYP	SURFACE TYPE	Variable discontinued	2018
Ramp	TRF_CNTL	INTERSECTION CONTROL TYPE	Variable discontinued	2018
Ramp	TRFCN_DT	TRAFFIC CONTROL DATE	Variable discontinued	2018
Ramp	TRKPCTS	TRUCK PERCENTAGE	Variable discontinued	2018
Ramp	UBREG_DT	URBAN NUMBER DATE	Variable discontinued	2018
Ramp	URB_DT	URBAN REGION DATE	Variable discontinued	2018
Ramp	URB_NBR	URBAN AREA NUMBER	Variable discontinued	2018
Ramp	URB_REG	URBAN REGION NUMBER	Variable discontinued	2018
Ramp	WSP_DIST	WSP DISTRICT NUMBER	Variable discontinued	2018
Ramp	WSP_DT	WSP DATE	Variable discontinued	2018
Special Use Lane	LENGTH	LENGTH OF SLN IN FEET	Variable discontinued	2018
Special Use Lane	SLN_ABID	SPECIAL USE LANES AHEAD BACK INDICATOR	Variable discontinued	2018
Special Use Lane	SLN_DATE	SPECIAL LANE DATE	Variable discontinued	2018
Special Use Lane	SLN_DIST	SLN DISTRICT NUMBER	Variable discontinued	2018
Special Use Lane	SLN_DSDT	SLN DISTRICT DATE	Variable discontinued	2018
Special Use Lane	SLN_INV	SLN ROAD INV-SR TYPE ID	Variable discontinued	2018
Special Use Lane	SLN_MLPT	SPEC USE LANES ARM	Variable discontinued	2018
Special Use Lane	SLN_MTDT	SPEC USE LANES MAINT DTE	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Special Use Lane	SLN_QUAL	RELATED ROAD QUAL	Variable discontinued	2018
Special Use Lane	SLN_RARM	SPEC USE LANES RV ARM	Variable discontinued	2018
Special Use Lane	SLN_RDTY	RELATED ROAD TYPE	Variable discontinued	2018
Special Use Lane	SLN_RTNO	ROUTE NUMBER	Variable discontinued	2018
Special Use Lane	SLN_SFTY	SPECIAL LANE SURFACE TYPE	Variable discontinued Variable moved to Roadway file, now called SPECIAL_USE_LANE_SURFACE Variable type changed from coded	2018 2020 2020
Special Use Lane	SLN_SIDE	SLN LEFT/RIGHT SIDE IND	to text Variable discontinued Variable moved to Roadway file, now called SPECIAL_USE_LANE_ROAD_SIDE	2018 2020
Special Use Lane	SLN_SRMP	SPEC USE LANES SRMP	Variable discontinued	2018
Special Use Lane	SLN_TYPE	SPECIAL LANE TYPE	Variable discontinued Variable moved to Roadway file, now called SPECIAL_USE_LANE_TYPE	2018 2020
Special Use Lane	SLN_WID	SPECIAL LANE WIDTH	Variable discontinued Variable moved to Roadway file, now called SPECIAL_USE_LANE_TWIDTH Variable type changed from coded to numeric	2018 2020 2020
Bridge	BRDG_DT	BRIDGE DATE	Variable discontinued	2018
Bridge	BRDG_LGT	BRIDGE LIGHTING	Variable discontinued	2018
Bridge Bridge	BRDG_NBR BRDG_OWN	BRIDGE NUMBER BRIDGE XROAD OWNER CD	Variable discontinued Variable discontinued	2018
Bridge	BRDG_XRD	BRIDGE XROAD DESC	Variable discontinued	2018
Bridge	CURV_ANG	HORIZ CURVE CEN ANGLE	Variable discontinued	2018
Bridge	CURV_DT	HORIZ CURVE DATE	Variable discontinued	2018
Bridge	CURV_LGT	HORIZ CURVE LENGTH (FT)	Variable discontinued	2018
Bridge Bridge	CURV_MAX CURV_NUM	HORIZ CURVE MAX SUPER HORIZ CURVE CONTRACT NUM	Variable discontinued Variable discontinued	2018
Bridge	CURV_RAD	HORIZ CURVE RADIUS	Variable discontinued	2018
Bridge	CURV_TYP	HORIZ CURVE TYPE	Variable discontinued	2018
Bridge	DIR_CURV	HORIZ CURVE DIRN	Variable discontinued	2018
Bridge	DIST_DT	DISTRICT DATE	Variable discontinued	2018
Bridge	DISTNUM	DISTRICT NUMBER	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Bridge	GRAD_AHD	VERT ALIGN GRADE AHEAD	Variable discontinued	2018
Bridge	GRAD_BAK	VERT ALIGN GRADE BACK Variable discontinued		2018
Bridge	GRAD_DT	VERT ALIGN DATE		
Bridge	GRAD_LGT	VERT CURVE LENGTH (FT)	Variable discontinued	2018
Bridge	GRAD_NUM	VERT ALIGN CONTRACT	Variable discontinued	2018
9-	S	NUM		
Bridge	GRAD_TYP	VERT CURVE TYPE	Variable discontinued	2018
Bridge	IN_DIR	DIRECTION OF INVENTORY	Variable discontinued	2018
Bridge	IN_INV	STATE RTE TYPE ID	Variable discontinued	2018
Bridge	IN_MLPT	ACCUM ROUTE MILEPOST	Variable discontinued	2018
Bridge	IN_RTNBR	ROUTE NUMBER	Variable discontinued	2018
Bridge	IN_TYPE	RELATED ROAD TYPE	Variable discontinued	2018
Bridge	REC_TYPE	RECORD TYPE	Variable discontinued	2018
Bridge	SPD_DTE	SPEED DATE	Variable discontinued	2018
Bridge	SPD_LIMT	LEGAL SPEED LIMIT	Variable discontinued	2018
Bridge	STR_ALIS	STREET NAME ALIAS	Variable discontinued	2018
Bridge	STR_DTE	STRUCTURE DATE	Variable discontinued	2018
Bridge	TUN_NAME	TUNNEL NAME	Variable discontinued	2018
Bridge	TUN_NUM	TUNNEL NUMBER	Variable discontinued	2018
Bridge	TUNL_DT	TUNNEL DATE	Variable discontinued	2018
Bridge	UNX_DT	UNXING DATE	Variable discontinued	2018
Bridge	UNX_LGT	UNXING LIGHTING	Variable discontinued	2018
Bridge	UNX_OVHD	OVHD BRIDGE NUM	Variable discontinued	2018
Bridge	UNX_XRD	UNXROAD DESC	Variable discontinued	2018
Bridge	UNX_XRDO	UNXROAD OWNER CD	Variable discontinued	2018
Left/Right	DISCNTY	DISCONTINUITY	Variable discontinued	2018
Crossing	DISCIT!	INDICATOR	Turiusie discorrenioed	2010
Left/Right	FACT_DES	FACILITY DESC	Variable discontinued	2018
Crossing	_			
Left/Right Crossing	FACT_DT	FACILITY DATE	Variable discontinued	2018
Left/Right Crossing	FACT_OWN	FACILITY OWNER	Variable discontinued	2018
Left/Right Crossing	FACT_TYP	FACILITY TYPE	Variable discontinued	2018
Left/Right Crossing	FLY_DT	FLYER STOP DATE	Variable discontinued	2018
Left/Right Crossing	FLY_NUM	FLYER STOP NUMBER	Variable discontinued	2018
Left/Right Crossing	FLY_OWN	FLYER STOP OWNER	Variable discontinued	2018
Left/Right Crossing	LOT_DT	PARK RIDE LOT DATE	Variable discontinued	2018
Left/Right Crossing	LOT_NUM	PARK RIDE LOT NUMBER	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Left/Right	LOT_OWN	PARK RIDE LOT OWNER	Variable discontinued	2018
Crossing		CD		
Left/Right	LR_ABIND	LR AHEAD/BACK IND	Variable discontinued	2018
Crossing				
Left/Right	LR_DESC	MISC FEATURE DESC	Variable discontinued	2018
Crossing				
Left/Right	LR_DISTR	DISTRICT NUMBER	Variable discontinued	2018
Crossing				2010
Left/Right	LR_INV	LEFT RIGHT ROAD	Variable discontinued	2018
Crossing		INVENTORED		
Left/Right	LR_MLPT	LR ACCUM ROUTE	Variable discontinued	2018
Crossing	_	MILEPOST		
Left/Right	LR_MTDTE	LEFT RIGHT	Variable discontinued	2018
Crossing		MAINTENANCE DATE		
Left/Right	LR_QUAL	RELATED ROAD QUAL	Variable discontinued	2018
Crossing				
Left/Right	LR_RARM	LEFT RIGHT REVERSE ARM	Variable discontinued	2018
Crossing	_			
Left/Right	LR_RDTY	RELATED ROAD TYPE	Variable discontinued	2018
Crossing	_			
Left/Right	LR_RTNBR	ROUTE NUMBER	Variable discontinued	2018
Crossing	_			
Left/Right	LR_SEC	CONTROL SECTION	Variable discontinued	2018
Crossing	_			
Left/Right	LR_SIDE	LEFT/RIGHT SIDE IND	Variable discontinued	2018
Crossing	_	·		
Left/Right	LR_SRMP	LEFT RIGHT SRMP	Variable discontinued	2018
Crossing				
Left/Right	LRDIS_DT	DISTRICT DATE	Variable discontinued	2018
Crossing				
Left/Right	LRMIS_DT	MISC FEATURE DATE	Variable discontinued	2018
Crossing				
Left/Right	LST_UPDT	LAST UPDATE DATE	Variable discontinued	2018
Crossing				
Left/Right	MARK_DT	MILEPOST MARKER DATE	Variable discontinued	2018
Crossing				
Left/Right	MARK_IND	MILEPOST MARKER AB	Variable discontinued	2018
Crossing		IND		
Left/Right	MARK_NUM	MILEPOST MARKER	Variable discontinued	2018
Crossing		NUMBER		
Left/Right	PKZNE_DT	PARKING ZONE DATE	Variable discontinued	2018
Crossing				
Left/Right	PKZNE_TY	PARKING ZONE TYPE	Variable discontinued	2018
Crossing				
Left/Right	REC_TYPE	RECORD TYPE	Variable discontinued	2018
Crossing				
Left/Right	REST_DT	REST AREA DATE	Variable discontinued	2018
Crossing				

File	Variable Name	Variable	Description of Change	Year of Change
Left/Right	REST_NAM	REST AREA NAME	Variable discontinued	2018
Crossing	KEST_INAM	REST AREA NAIVIE	variable discontinued	2010
Left/Right	REST_NUM	REST AREA NUMER	Variable discontinued	2018
Crossing	KE31_IVOIVI	REST AREA NOWER	variable discontinued	2018
Left/Right	REST_TYP	REST AREA TYPE	Variable discontinued	2018
Crossing	KE31_IIF	RESTARLATIFE	variable discontinued	2018
Left/Right	WGHT_DT	WEIGHT STATION DATE	Variable discontinued	2018
Crossing	WGHI_DI	WEIGHT STATION DATE	variable discontinued	2018
Left/Right	WGHT_NUM	WEIGHT STATION	Variable discontinued	2018
Crossing	WGHT_NOW	NUMBER	variable discontinued	2018
Left/Right	WGHT_TYP	WEIGHT STATION TYPE	Variable discontinued	2018
Crossing	Wdin_iii	WEIGHT STATION THE	variable discontinued	2010
Left/Right	XRD_DESC	CROSSROAD ID DESC	Variable discontinued	2018
Crossing	AND_DESC	CKO33KOAD ID DE3C	variable discontinued	2010
Left/Right	XRD_DT	CROSSROAD DATE	Variable discontinued	2018
Crossing	AND_D1	CROSSROAD DATE	variable discontinued	2010
Left/Right	XRD_OWN	CROSSROAD OWNER CD	Variable discontinued	2018
Crossing	ARD_OWN	CROSSROND OWNER CD	variable discorrenioed	2010
Left/Right	XRD_TYP	CROSSROAD CONFIG	Variable discontinued	2018
Crossing	////S_111	TYPE	variable discontinued	2010
Railroad	DIR_INV	RDWY DIR OF INVENTORY	Variable discontinued	2018
Railroad	REC_TYPE	RECORD TYPE	Variable discontinued	2018
Railroad	RR_ABIND	RR CROSSING AB IND	Variable discontinued	2018
Railroad	RR_DISTR	DISTRICT NUMBER	Variable discontinued	2018
Railroad	RR_INV	RR CROSSING ROAD INV	Variable discontinued	2018
Railroad	RR_MLPT	RR XING ACCUM ROUTE MLPST	Variable discontinued	2018
Railroad	RR_MTDTE	RR CROSSING MAINT DTE	Variable discontinued	2018
Railroad	RR_QUAL	RELATED ROAD QUAL	Variable discontinued	2018
Railroad	RR_RARM	RR CROSSING REVERSE	Variable discontinued	2018
		ARM		2020
Railroad	RR_RDTY	RELATED ROAD TYPE	Variable discontinued	2018
Railroad	RR_RTNBR	ROUTE NUMBER	Variable discontinued	2018
Railroad	RR_SRMP	RR CROSSING SRMP	Variable discontinued	2018
Railroad	RRDIS_DT	DISTRICT DATE	Variable discontinued	2018
Railroad	RRX_DTE	RR XING DATE	Variable discontinued	2018
Railroad	RRX_NUM	RR XING AAR NUM	Variable discontinued	2018
Railroad	RRX_TYPE	RR XING TYPE	Variable discontinued	2018

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