HSIS

HIGHWAY SAFETY INFORMATION SYSTEM

Guidebook for State Data Files

OHIO

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Introduction to the Ohio HSIS Guidebook

The Ohio data system that is provided to HSIS includes the following basic files:

- Accident data (Accident, vehicle and occupant)
- Roadway Inventory File
- State Supplemental Inventory, containing curve and grade data
- "Points" File (intersections, railroad grade-crossings, underpasses, etc.)

Data from all of these files are captured by HSIS. Raw file data are provided to the Highway Safety Research Center where they are retained as backup information. The documentation (variable listings, definitions, etc) for these raw files and for the SAS files that are developed from them is available at FHWA offices. The conversion programs developed by HSRC and LENDIS to convert the files into SQL and SAS formats are also available at the HSIS offices at FHWA.

Beginning in 2004, the HSIS system was converted from a SYBASE relational database to an ORACLE relational database for internal use. Data files for a given State are linked and manipulated by HSIS staff using SAS code and, as in the past, we have continued to produce SAS format libraries for each of the variables in each of the files. This Guidebook will concern these SAS files - their formats, completeness, and quality. However, researchers requesting data from HSIS can request the output in various formats such as SAS, Microsoft Excel® and Access®, dBase, ASCII, etc.

As noted above, the SAS accident data is in three separate subfiles, the first containing the basic accident information on a case-by-case basis, and then separate files containing information on vehicles and occupants in each accident case. The vehicle and occupant data can be linked to the basic accident data for specific cases using the accident case number. The accident subfile can be linked to the Roadlog file using three common variables – county, route number, and milepost.

Unlike an Accident file record that is referenced to a point on the roadway, each record on the Roadlog file contains information on a homogenous section of the roadway (i.e. a stretch of road which is consistent in terms of certain characteristics), with each new section being defined by a new beginning reference point. Each record on this Roadlog file contains current characteristics of the road system including surface type and width, shoulder and median information, lane information, etc. Information on curves and grades is captured in

separate curve and grade files. The Curve File has data on all horizontal curves while the Grade File has information on grades greater than 3 percent. For curves having a degree of curvature greater than 90 degrees, Ohio designates them as "angle points" and that data is captured in a separate Angle Point File. Ohio doesn't maintain a separate intersection inventory file. However, a "Points" file is available that contains point descriptors for a number of items including at-grade intersections, overpasses, underpasses, bridges etc. Details of these accident and roadlog files are presented in the following section.

DETAILS OF MAJOR FILES -
The Accident Files

Prior to mid-2011, an accident was reported if it involved a personal injury or total property damage of $400 or more. However, in some cases crashes with damages below $400 were also recorded on accident report forms. Ohio increased the reporting threshold from $400 to $1,000 on 09/07/2011. The Ohio State Highway Patrol (SHP) and the local sheriff's offices do most of the crash reporting in Ohio. Ohio doesn't include accidents reported by citizens in their system. All police reports statewide are sent to the Ohio Department of Public Safety. Prior to 1997, the Department of Public safety was responsible for keypunching and location coding the accidents (after performing QC checks). After 1997, this task was outsourced to private contractors. (Note that 1997 is the first year of Ohio data in the HSIS system.)

All agencies across Ohio use the same accident report form to report accidents. A new form with major changes was introduced in 2000. In addition to this, as noted above, the State Highway Patrol began to outsource the data coding to private contractors in 1997.

Approximately 137,000 crashes occur in Ohio statewide each year. The HSIS data set contains a subset of these accidents that occurred on the state-inventoried system. This data set includes approximately 150,000 accidents per year, approximately 270,000 vehicles per year and approximately 326,604 occupants per year. Police officers reporting accident locate them within 0.01 miles of a given milepost. There are physical mileposts available on all rural state routes and some county routes, and on Interstates in all incorporated areas. It is estimated that about 10% of the accidents in the accident subfiles cannot be matched to segments on the roadlog file. Ohio DOT suspects outsourcing of the location coding to be the main reason for this. Since the majority of the HSIS analyses involve linkage with roadway data, a decision was made to delete these accidents from the accident subfiles. This results in approximately a 10 percent reduction in the total number of accidents (and vehicle and occupants) in the files.

In general, Ohio accident files capture information on all relevant variables. Our discussions with Ohio DOT staff revealed that they think the police make some errors in coding the angle, left turn, and head on crashes at intersections. They expect the new accident report forms being used in 2000 and later correct this shortcoming since it provides a sequence of events and pre-crash maneuvers/directions. Also, due to the change in accident report form in 2000, a number of variables has been changed or added in the Ohio accident files in subsequent years.

Approximately 75 percent of the accidents on the linkable file are property damage only and less than 0.5 percent is fatal accidents. Approximately 70 percent vehicles are multi-vehicle in nature, while the remaining 30 percent are single-vehicle accidents of one type or the other.

An assessment of the completeness and accuracy of the data is based on conversations with OH staff and a series of single-variable tabulations run each year for key analysis variables. These quality-control runs allow the HSIS staff to examine both the percent uncoded for each variable and changes across time in the individual codes within each key variable. These yearly runs are performed on all formatted variables. These runs have consistently indicated that almost all of the variables in the three subfiles have very few uncoded and very few error codes. Where high numbers of uncoded cases or inconsistencies in codes are found, a "NOTE" has been included under the pertinent variable in the later SAS format sections.

In addition to the quality-control checks noted above, in order to further check the accuracy of some of the accident variables, a series of comparisons were made of variables that should have been somewhat similar on the accident subfiles according to their definitions (both within the same subfiles and across subfiles). For example, NUMPEDS variable is populated largely only when ACCTYPE is pedestrian. Again, if there are any cases in which variables are either less than totally consistent with other variables or have changed across time, a "NOTE" will be included in the SAS formats section that follows.

The Roadway Inventory Files

The Ohio roadway inventory files contain current characteristics of the state road system for each year. These data are divided into five files within the HSIS system. The first is the basic roadway characteristics file (i.e. the "Roadlog") containing information on the roadway mainline cross-section. The second is a Curve File, which contains information on each horizontal curve on any inventoried segments (except for curves of degree greater than 90 – see below). The third is the Grade File, which contains information on each vertical grade that is greater than 3 percent. Fourth is the Angle Points File, which has information on those curves that have a degree of curvature greater than 90 degrees. And fifth is the Points File, which contains point descriptors for a number of items such as at-grade intersections, railroad grade-crossings, etc. Ohio provides the curve and grade information in a single inventory file named "State Supplemental Inventory." HSIS staff processes this inventory file and creates three separate files -- the curve file, the grade file and the angle point file. All the roadway inventory files are developed by the ODOT staff based on as-built plans. Updates on the file

are done based on the respective project plans. In general the ODOT Roadway inventory office feels that the data is quite accurate.

The Roadlog File

The ODOT Roadway Inventory section of the Office of Technical services is responsible for maintaining inventory of all public highway in Ohio, about 116,000 miles in total. Of these, there is detailed inventory information on approximately 19,500 miles of roadway, which is captured by HSIS and is shown in Table 1 below. This includes all functional classes of roads within the state system – Freeways, Arterials and collector, both rural and urban. This file contains information on approximately 1,500 miles of Interstates, 4,000 miles of U.S. Routes and 14,000 miles of State Routes. Currently there are nine roadlog inventory files in the HSIS system, 1997 – 2011. Because a new record is generated each time any of the items in the file changes, the sections that are generated are fairly short, resulting in a large number of individual records. The approximately 19,500 miles of inventory information is divided into approximately 32,000 records, resulting in an average section length of 0.61 miles.

Table 1 HSIS roadway mileage by roadway category (2011 data)

Roadway Category	Mileage
Urban freeways	1,316.01
Urban freeways < 4 Lanes	12.94
Urban multilane divided non-freeways	479.65
Urban multilane undivided non- freeways	1,090.96
Urban 2 In highways	2,183.18
Rural freeways	721.8
Rural freeways < 4 Ins	1.43
Rural multilane divided non-freeways	1,028.12
Rural multilane undivided non-freeways	157.54
Rural 2 In highways	12,501.74
Other	8.19
Total	19,501.56

The file contains general cross section information related to travel way widths (indicated by surface widths and roadway widths), number of lanes, median width and other variables. All standard cross-section variables appear to be present except for individual measures of shoulder width (paved and unpaved) and shoulder type for each side (inside and outside) of the roadway in the 1997-2000 data. For these years, the total shoulder width for both sides can be calculated based on "Surface Width" and "Roadway Width" but not distributed to each side. From 2001 onwards, new variables are added that give inside and outside shoulder widths. Thus it is important to note here that the shoulder width variables available in the HSIS file are not populated for 1997 – 2000 data.

It is noted that in some cases, OH data has two different variables providing the same information. For example, surface type is described by the two different variables SURF_TYP and SRF_TYPF. This is because OH collects some additional variables that are required by FHWA for HPMS reporting or other purposes. Data analysis by HSIS staff and conversations with ODOT staff revealed that in general, where two variables explain the same characteristic, the non-FHWA required variable is more detailed and reliable due to the updating system. The only exception is for "access control," where ODOT recommended the use of the FHWA variable. Appropriate notes are provided under each of these variables in the formats section that follows.

Unlike most states, OH data contains both the standard location variables -- County / Route / Beginning and Ending Mileposts -- and a link/node linear referencing system for each segment. However, since the crashes do not have link/node indicators, county/route/milepost is still used to locate the crashes on an individual roadway segment. The link/node referencing system allows the state to track and update information easily and accurately.

Traffic information in the form of Average Daily Traffic is included for each section on the file. This information is covered by three variables -- total AADT, AADT for passenger cars and trucks type A; and AADT for truck types B and C. A detailed description of the traffic count procedures in included below in the section "Traffic Monitoring Procedures."

Two new variables, RODWYCLS and MVMT, have been created by HSIS staff in the roadway segment file of each of the HSIS states. The RODWYCLS (Roadway Class) variable is based on the combination of rural/urban, access control, number of lanes and median type variables. This variable classifies each roadway segment into one of ten roadway types described in the later "Format" section. This variable is also included as an accident-file variable by matching each crash to its corresponding roadway segment. The MVMT variable (Million Vehicle Miles of Travel) is calculated for each segment in the roadway file by multiplying the segment length, AADT and 365 days in a year, and dividing by one million.

Both these variables were created in response to inquiries from data users, whose most frequent questions have concerned either crash frequencies or rates (per MVMT) for one or more of these roadway classes.

To assess the accuracy of roadway inventory variables in this roadlog file and the related files concerning points, curves and grades, we questioned the ODOT staff and examined a series of single-variable tables for key variables in each of the files. The ODOT staff feels that the overall quality of the variables in all the three files is very high. It should be noted that the data developed by ODOT is based on as-built plans and is updated systematically each year. Project plans are used for these updates. In addition, a field person in each highway district completes a "field sheet" to verify changes in the system each year and these are sent to the Roadway Inventory group for use in the computer file updates. This is a more extensive update system than in most HSIS states.

In addition to information received from ODOT staff, single-variable tabulations were run to examine the questions of reporting completeness and data accuracy. Here, study of percentage of "unknown", "not applicable" and "not stated" values for more than 30 key variables in the Roadlog file indicate that, in general, the data are coded to a high degree of completeness. For most variables, there were no missing data. The data also appear to be quite consistent across years, and similar variables appear to have similar values. We also attempted to determine if there was consistency between pairs of similar variables found in the Inventory File. In general, there was. For example, the total mileage for divided highways appeared to be consistent with total mileage for segments having a valid median width. Notes are included for those few variables that were found to be inconsistent in the format section of the guidebook.

In general, based on both the interviews and the data comparisons conducted, the data are felt to be quite accurate. In the limited number of cases where possible inaccuracies or missing values were found or where more detailed definitions might be critical in future analyses, notes are included under the specific variables in the later format section.

The Curve File

As noted above, Ohio has been providing curve data to HSIS since 1997. However, beginning in or around 2009, Ohio staff stopped the systematic updating of the curve data. They are attempting to develop a new GIS-based curve-update method, but that has not been completed. Ohio DOT and HSIS staffs agree that the 2009 curve file in HSIS should be accurate enough for use with at least the 2010 roadway information due to the fact that there

are only a limited number of changes to curves in any given year. The decision of whether or not to use the 2009 data in analyses using post-2010 data will be left up to the user. The following narrative describes the 1997-2009 curve data.

The Curve File contains information on all horizontal curves present on the 19,500 miles of inventoried data present in the roadlog file. The total length of all curves present in this file is about 1,120 miles, which is captured by approximately 18,500 records, resulting in an average curve length of approximately 0.06 miles. The file currently contains information on curve length, degree of curve and direction of curve. The inventory group is currently examining the possibility of collecting ball-bank data for future inclusion. A segment on this file can be located using the begin milepost, end milepost, county, route number and station equation information – similar to the roadlog file. Again, as-built plans are used to create this file and project plans to update information, similar to what is followed for all the five roadway inventory files. Our discussions with Ohio staff indicated that, though the quality of data may be slightly inferior compared to the cross-section data, it is free of any major shortcomings.

The Grade File

As with the curve file, systematic updating of the grade data stopped in or around 2009. See the discussion in the preceding section. The following narrative describes the 1997-2009 grade data.

The Grade File has information on all vertical grades greater than 3 percent. Total length of all grades present in this file is about 2,340 miles, which is captured by approximately 20,000 records, resulting in an average grade length of approximately 0.11 miles. The file currently contains information on the grade length, direction of grade and percent of grade. This file can be linked to the other files using the same location variables – county, route number, begin milepost, end milepost and station equation. Since the curve file and grade file are developed from the same inventory, the way in which these files are created and updated and the data quality are similar.

The Angle Points File

Sharp horizontal curves having degree of curvature greater than 90 degrees are designated by ODOT as "angle points". All variables and the manner in which the file is developed remain similar to that of the Curve File. While even these sharp curves would have some curve length in reality, the segment length in this file is set to zero for all the records.

The Points File

Ohio doesn't have a computerized intersection inventory file but has a "Points" file that contains point descriptors for a number of features including at-grade intersections, overpasses, underpasses, bridges, railroad crossings etc. (Note that Ohio is building a detailed intersection file that should be available around 2015.) The file has approximately 58,000 intersections, 4,500 interchanges, 5,000 bridges and 1,800 railroad crossings.

For intersections and interchanges, the file contains a mainline milepost for all state-system crossing routes (i.e., all intersections or interchanges where an Interstate, State Route or U. S. Route crosses an Interstate, State Route or U. S. Route), and a mainline milepost for many intersections where a state-system road intersects with a county or local road or street. ODOT staff is continually updating the file by adding additional intersections with city or county crossing roads, but the file cannot be yet considered a census of all intersections. For all intersection of two state-system roads, there is location information for both the mainline and the crossing route, which makes it possible to link to roadlog inventory information (and accident information) on both intersecting routes. There is no information on signalization, channelization, type of intersections/interchanges etc. Ohio is making efforts to include this information in the future. There are approximately 200 interstate-to- interstate junctions, 6,000 state-to-state and 900 US route-to-US route intersections. Like all other roadway inventory file, this file has been developed from as-built plans and updated based on project plans.

The Intersection File

(NOTE: This file will not be ready for distribution by HSIS until mid-2015.)

In the 2010 – 2011 period, Ohio DOT staff began development of an intersection file for use with FHWA's SafetyAnalyst software. The file is expected to be completed in mid-2015 and will become part of HSIS at that time. It contains information on approximately 47,500 intersections – all intersections on state-system roads (i.e., Interstates, US routes and State routes) where the minor (crossing) route is either another state-system route or a county, township or municipal route. Intersections with lower-volume urban streets and commercial driveways are not included. The data are separated into two separate files – a General Intersection File and a Legs File. The General Intersection Subfile contains various descriptors of the intersection location and crossing routes, type of intersection, traffic control, urban/rural setting, whether the crossing roads are offset or not, and a unique intersection identification number than can be used to link to each leg. In addition, the General Intersection Subfile includes AADTs (and AADT years) for both the major and minor

roads for 1995-present. Not all years would have an AADT estimate for any given intersection.

The Legs subfile, as the name implies, describes each of the intersection approach legs. Each leg or approach record contains variables related to the direction of approach; the number of thru, exclusive left turn and exclusive right turn lanes on the approach; left-turn phasing; speed limit; one way/two way, and turn prohibitions on the leg.

The intersections were identified from the road inventory file (line breaks in the Linear Reference system). The inventory data were extracted from video images collected for Ohio's 2009 and 2010 video log file. Inventory data was also extracted from Google Street View images if the video log images were not present or not sufficient. DOT staff feels that the data are sufficiently accurate for use in safety analyses due to the care taken in the data collection process.

It is noted that in the original version of the file, AADT information is present for two routes – a "major road" and a "minor road." If there are more than two crossing routes (e.g., a five-leg intersection), no AADT data is available for the additional leg. The "major road" is the highest priority route based on route type – Interstate, then US and then State Route. The "minor road" will then be the road with the second highest priority. MN staff is exploring the possibility of adding AADT information from additional legs in the future.

Traffic Monitoring Procedures

The Traffic Monitoring Section of the Office of Technical Services is in charge of collecting traffic counts information. This information is covered by three variables – total AADT, AADT for passenger vehicles, and AADT for medium and large trucks. These data are based on a combination of permanent counters that count traffic 24-hours each day for 365 days each year and a series of short-term counts conducted each year. Ohio has 180 automatic traffic recorders (ATRs) recording 24- hour, full-year data. Vehicle class / length data is collected at 136 stations and weigh-in-motion collected at 37 stations. These data are used to develop seasonal and daily adjustment factors for the 27,600 short counts that are done on a three- year cycle. Each short count is for 24-48 hours. Ohio attempts to collect vehicle classification data during these short counts also. At times, only volume data is collected and the 48-hour period is shortened. In some cases only the number of axle impulses is counted. The ODOT utilizes consultants to collect data for the short term count program.

To convert the short-term coverage counts to AADT, Ohio applies adjustments for seasonal differences in the daily traffic. For seasonal corrections, each coverage count

location is assigned to one of the functional classes where permanent counters are located. The seasonal factors are based on averages from all ATRs in that group. Thus Ohio adjusts short-term counts to AADT using seasonal adjustment factors for each functional class.

When a road section is not counted during a given year, annual adjustment factors are developed and applied to the most recent prior year's count. Ohio develops two types of annual adjustment factors – one that can be applied from year to year and second that is a cumulative adjustment factor that can be applied from any given year to the current year. Average growth factors are created each year for each functional class of roadway using ATR data and data from short counts for the current year. The adjustment factor applied to a particular uncounted section is based on its functional class. Ramp balancing is frequently used to calculate mainline limited access roadway segment volumes. This procedure is necessary because collecting data on mainline interstate segments is unsafe for crews due to the high volumes of traffic on Ohio's interstate roadways.

As noted earlier, some of the short AADT counts measure only the number of axles passing a particular location. To adjust that to the actual volume at that location, axle correction factors are applied. Axle correction factors are calculated by combining data from Automatic Traffic Recorders (ATR's) and 48-hour vehicle classification counts. An average axle correction factor is calculated for each functional classification of highway. These factors are obtained by computing the total number of axles crossing a point and dividing that by the total number of vehicles. These factors are then applied to those short term AADT counts which collect only the number of axles to get a count of the number of vehicles passing that section.

ODOT's count program has expanded significantly over the last 10 years. In addition to increasing the number of data collection stations across the state, we have incorporated automated software programs to help us process and report the data. ODOT is very confident that we produce quality traffic monitoring data.

Issue Related to Merging of Files

As noted above, the accident data are subdivided into three subfiles – accident, vehicle and occupant. The Accident and Vehicle Subfiles can be linked together using the accident report number (i.e., CASENO). When linking the occupant subfile, the additional linking variable related to vehicle number (i.e., VEHNO) must match so that the occupants are associated with the vehicle in which they were traveling. To link vehicles with accidents, first sort both subfiles by CASENO. To link the Occupant file with the other two subfiles, first sort

both the Vehicle subfile and Occupant subfile by case number and vehicle number. Next sort the Accident subfile by case number. Alternatively, the separate subfiles can be linked by specifying as SQL JOIN operation with the constraining condition that case number and vehicle number from each table are equal. SQL processing does not require the data to be pre-sorted and the output will not be in any particular sort order unless ORDER BY is specified.

The Accident Subfile can be linked to the Roadlog File using the CNTYRTE and MILEPOST variables in the crash record, and the CNTY_RTE, BEGMP and ENDMP variables in the Roadlog File. (Note that the "station equation" is included as part of county-route in the HSIS variables.) Similarly, the accident subfiles can be linked to Curve, Grade, and Angle Points using similar variables found in each respective file. To link the Accident File and the Points File, CNTYRTE and MILEPOST variables from the Accident file are matched with CNTY_RTE and MILEPOST variables of the Points File. To extract data on the intersecting (crossing) state-system route in the Points File, the Roadlog File can be linked to the XMILEPST and XCNTYRTE variables.

To prepare the Accident Subfile for linking with the Roadlog File using a SAS data step process, the analyst must sort both the Accident and the Roadway File into location order by CNTYRTE and MILEPOST on the Accident file and by CNTY_RTE and BEGMP on the roadlog file. Similar sorts would be done with other files to be merged. For the alternative SQL join, the analyst must specify an exact match on CNTYRTE and a range match where MILEPOST occurs between BEGMP and ENDMP. (Programs to accomplish this merging and division are available from HSIS staff at FHWA).

Finally, where appropriate and possible, a format that defines categories within a given variable has been developed for HSIS SAS variables. These categories are shown in the pages below. If you are an SAS user and wish to receive a formatting program that includes these SAS formats (with linkage to the pertinent variable name), please request these from the HSIS staff who provide the data file to you.

Composite List of Variables

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
AADT	WEIGHTED AVERAGE TOTAL ADT	Roadlog	NUM	108
AADT_BC	ADT FOR TYPE B AND C TRUCKS	Roadlog	NUM	109
AADT_PT	ADT FOR PASSENGER CARS AND A TYPE TRUCKS	Roadlog	NUM	109
AADT_YR	YEAR OF ADT COUNTS	Roadlog	CHA(2)	110
ACC_DATE	ACCIDENT DATE YYYYMMDD	Accident	CHA(8)	35
ACCESS	ACCESS CONTROL	Accident	CHA(1)	35
ACCESS	ACCESS CONTROL	Angle Point	CHA(1)	164
ACCESS	ACCESS CONTROL	Curve	CHA(1)	150
ACCESS	ACCESS CONTROL	Grades	CHA(1)	157
ACCESS	ACCESS CONTROL	Roadlog	CHA(1)	110
ACCTYPE	TYPE OF CRASH(FIRST HARMFUL EVENT)	Accident	NUM	36
ACCYR	ACCIDENT YEAR	Accident	NUM	36
ACCYR	ACCIDENT YEAR	Vehicle	CHA(4)	59
AGE	OCCUPANT AGE	Occupants	NUM	92
AGENCY	INVESTIGATING AGENCY	Accident	CHAR(1)	37
AGENCYID	INTERSECTION ID	Intersection	CHA(18)	172
AGENCYSITESUBTYPE	SITE SUBTYPE	Intersection	CHA(3)	172
AIRBAG	AIRBAG	Occupants	NUM	93
AIRBAG_SW	AIRBAG SWITCH	Occupants	NUM	93
AIRBAG_SAW	AIRBAG SWITCH	Occupants	NUM	93
ALCOHOL TEST STATUS	ALCOHOL TEST STATUS	Occupants	NUM	94
ALTROUTENAMES	COINCIDING ROUTE NAME MAJRD	Intersection	CHA(1)	172
ALTSTTYP	ALCOHOL TEST TYPE	Occupants	NUM	94

Composite List of Variables

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
ALSTTYP	ALCOHOL TEST TYPE	Occupants	NUM	94
ANGLE	TURN CRASH INDICATOR	Accident	NUM	37
ANIMAL	ANIMAL TYPE	Accident	NUM	37
AREA_CDE	AREA CODE	Roadlog	NUM	110
AREATYPE	AREA TYPE	Intersection	CHA(1)	172
AREACODE	AREA CODE	Angle Point	NUM	164
AREACODE	AREA CODE	Curves	NUM	150
AREACODE	AREA CODE	Grades	NUM	157
BAC	BLOOD ALCOHOL CONTENT IN %	Occupants	CHA(3)	95
BEGMP	BEGIN LOG POINT OF CURVE	Angle Point	NUM	164
BEGMP	BEGIN LOG POINT OF CURVE	Curves	NUM	150
BEGMP	BEGIN LOG POINT OF CURVE	Grades	NUM	157
BEGMP	BEGINNING MILE POST	Roadlog	NUM	110
BODY	BODY TYPE	Vehicle	CHA(2)	60
CASENO	UNIQUE ACCIDENT CASE NUMBER	Accident	CHA(11)	37
CASENO	UNIQUE ACCIDENT CASE NUMBER	Occupants	CHA(11)	95
CASENO	UNIQUE ACCIDENT CASE NUMBER	Vehicle	CHA(11)	61
CDL_CLASS	TRUCK / BUS CDL CLASS	Vehicle	CHA(1)	61
CHNG_YR	RECORD CHANGE YEAR	Point	CHA(4)	140
CIT_LOC_CDE	CITATION LOCAL CODE	Occupants	NUM	95
CITATION	CITATION GIVEN	Occupants	CHA(11)	95
CITY	FIPS CODE	Intersection	CHAR(5)	172
CNT_TLOG	COUNTY TRUE LOG	Roadlog	NUM	110
CNTY_RTE	COUNTY ROUTE	Point	CHA(8)	140
CNTY_RTE	COUNTY ROUTE	Curves	CHA(8)	151

Composite List of Variables

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
CNTY_RTE	COUNTY ROUTE	Grades	CHA(8)	158
CNTY_RTE	COUNTY ROUTE	Angle Point	CHA(8)	165
CNTY_RTE	COUNTY ROUTE	Roadlog	CHA(8)	111
CNTYLOG	COUNTY TRUE LOG	Point	CHA(4)	140
CNTYRTE	COUNTY ROUTE	Accident	CHA(8)	38
COMMENT	COMMENT	Intersection	CHA(48)	172
COMMENT_TXT	LEG COMMENT	Intersection	CHA(128)	179
CONTRIB1	CONTRIBUTING VEHICLE	Vehicle	NUM	61
CORRIDOR	CORRIDOR (FUTURE VARIABLE)	Intersection	CHA(1)	173
COUNTY	COUNTY	Accident	CHA(3)	38
COUNTY	COUNTY	Point	CHA(3)	140
COUNTY	COUNTY	Curves	CHA(3)	151
COUNTY	COUNTY	Grades	CHA(3)	158
COUNTY	COUNTY	Angle Point	CHA(3)	165
COUNTY	COUNTY	Roadlog	CHA(3)	111
COUNTY	COUNTY	Intersection	CHA(3)	173
DAMAGE	VEHICLE DAMAGE SEVERITY	Vehicle	NUM	63
DAMSEV	VEHICLE DAMAGE SCALE	Vehicle	NUM	63
DAMSEV2	VEHICLE DAMAGE SCALE	Vehicle	NUM	64
DEG_CURV	DEGREE OF CURVE	Curves	NUM	151
DEG_CURV	DEGREE OF CURVE	Angle Point	NUM	165
DESC	LOCATION DESCRIPTION	Point	CHA(32)	140
DESC	DESCRIPTION	Curves	CHA(18)	151
DESC	DESCRIPTION	Grades	CHA(18)	158

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
DESC	DESCRIPTION	Angle Point	CHA(32)	165
DIR_CURV	DIRECTION OF CURVE	Angle Point	CHA(18)	165
DIR_CURV	DIRECTION OF CURVE	Curves	CHA(18)	151
DIR_GRAD	DIRECTION OF GRADE	Grades	CHA(1)	158
DIR_REF	DIRECTION FROM REFERENCE	Accident	CHA(1)	40
DIR_TRVL	DIRECTION OF VEHICLE	Vehicle	NUM	64
DIST_OFF	DISTANCE OFFSET	Accident	CHA(3)	41
DISTRICT	DISTRICT	Accident	NUM(8)	41
DISTRICT	DISTRICT	Point	NUM(8)	140
DISTRICT	DISTRICT	Curves	NUM(8)	151
DISTRICT	DISTRICT	Grades	NUM(8)	158
DISTRICT	DISTRICT	Angle Point	NUM(8)	165
DISTRICT	DISTRICT	Roadlog	NUM(8)	111
DISTRICT	MAINTENANCE DISTRICT	Intersection	CHAR(2)	173
DIV_CODE	ROAD IDENTIFICATION	Accident	CHA(1)	41
DIVIDED	DIVIDED HIGHWAY INDICATOR	Angle Point	CHA(1)	166
DIVIDED	DIVIDED HIGHWAY INDICATOR	Curves	CHA(1)	152
DIVIDED	DIVIDED HIGHWAY INDICATOR	Grades	CHA(1)	158
DIVIDED	ROAD IDENTIFICATION	Roadlog	CHA(1)	111
DL_CLASS	DL CLASS	Occupants	CHA(2)	96
DL_CLASS	DL CLASS	Vehicle	CHA(2)	67
DL_STATE	DL STATE	Occupants	CHA(2)	96
DL_STATE	DL STATE	Vehicle	CHA(2)	67
DLCOUNTY	COUNTY	Vehicle	CHA(3)	67
DLCOUNTY	DL COUNTY	Occupants	CHA(3)	96

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
DRG_RES1	DRUG TEST 1 RESULT	Occupants	NUM	96
DRG_RES2	DRUG TEST 2 RESULT	Occupants	NUM	97
DRUG_INV	DRUGS INVOLVED	Occupants	NUM	97
DRUG_TEST _STATUS	DRUGS TEST STATUS	Occupants	NUM	97
DRUG_TEST _TYPE	DRUG TEST TYPE	Occupants	NUM	98
DRV_AGE	DRIVER AGE	Vehicle	NUM	68
DRV_FLAG	DRIVE PRESENCE	Vehicle	CHA(1)	68
DRV_INJ	DRIVER INJURY	Vehicle	NUM	69
DRV_REST	DRIVER SAFETY EQUIPMENT	Vehicle	NUM	69
DRV_SEX	DRIVER SEX	Vehicle	CHA(1)	70
EJECT	EJECTED FROM VEHICLE	Occupants	NUM	98
EMER_USE	IN EMERGENCY RESPONSE	Vehicle	NUM	70
ENDMP	END LOG POINT OF CURVE	Angle Point	NUM	166
ENDMP	END LOG POINT OF CURVE	Curves	NUM	152
ENDMP	END LOG POINT OF CURVE	Grades	NUM	159
ENDMP	END MILE POST	Roadlog	NUM	111
EVENT1	SEQUENCE OF EVENTS 1	Vehicle	NUM	70
EVENT2	SEQUENCE OF EVENTS 2	Vehicle	NUM	70
EVENT3	SEQUENCE OF EVENTS 3	Vehicle	NUM	70
EVENT4	SEQUENCE OF EVENTS 4	Vehicle	NUM	70
F_HARM	FIRST HARMFUL EVENT	Vehicle	NUM	72
FAULT	VIOLATOR	Accident	NUM	41
FED_ACES	FEDERAL ACCESS CONTROL	Roadlog	CHA(1)	112

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
FED_FACI	FHWA TYPE OF FACILITY	Roadlog	CHA(1)	112
FED_MEDW	FHWA MEDIAN WIDTH	Roadlog	CHA(3)	112
FED_SPSY	FHWA SPECIAL SYSTEMS	Roadlog	CHA(2)	113
FIPS_CDE	FIPS CODE	Roadlog	CHA(5)	113
FIPSMUNI	FIPS CODE	Accident	CHA(5)	41
FIRE	FIRE	Vehicle	NUM	72
FLIP_IND	INDICATES DUPLICATE RECORD	Accident	CHA(1)	42
FRWY_IND	FREEWAY / NON-FREEWAY INDICATOR	Accident	CHA(1)	42
FUNC_CLS	FUNCTIONAL CLASS	Angle Point	CHA(2)	166
FUNC_CLS	FUNCTIONAL CLASS	Curves	CHA(2)	152
FUNC_CLS	FUNCTIONAL CLASS	Grades	CHA(2)	159
FUNC_CLS	FUNCTIONAL CLASS	Roadlog	CHA(2)	114
FUNCLS	FUNCTIONAL CLASSFICATION	Accident	NUM	43
GISID	GIS ID	Intersection	CHAR(14)	173
GROWTHFACTOR	AADT GROWTH FACTOR	Intersection	CHAR(1)	173
GVWR	TRUCK/BUS WEIGHT	Vehicle	NUM	73
HAZMATRL	HAZARDOUS MATERIAL RELEASED	Vehicle	NUM	73
HAZPLACD	HAZARDOUS MATERIAL PLACARD	Vehicle	NUM	73
HELMET	HELMET USE	Occupants	CHA(1)	98
HOUR	HOUR OF DAY	Accident	NUM	44
HOV	FHWA HOV VEHICLES	Roadlog	NUM	114
HPMS	HPMS CODES	Roadlog	CHA(1)	115
ID_CNTRL	ID CONTROL CODE	Roadlog	CHA(1)	115
INFLUENCE_ZONE_NBR	LEG INFLUENCE ZONE LENGTH	Intersection	CHA(128)	179

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
INJ	OCCUPANT INJURY	Occupants	NUM	99
INSURFLG	VEHICLE INSURED	Vehicle	NUM	73
INTER_IND	INTERSTATE HIGHWAY INDICATOR	Accident	CHA(1)	44
INTERSECTIONTYPE1	INTERSECTION TYPE	Intersection	NUM(8)	174
INV_DATE	YEAR OF CODING CHANGE	Angle Point	NUM	166
INV_DATE	YEAR OF CODING CHANGE	Curves	NUM	152
INV_DATE	YEAR OF CODING CHANGE	Grades	NUM	159
INV_DTE	INVENTORY DATE	Roadlog	CHA(4)	115
JUR_TYPE	JURISDICTION	Accident	CHA(1)	45
JUR_TYPE	JURISDICTION	Roadlog	CHA(1)	115
JURISDICTION	JURISDICTION	Intersection	NUM(8)	174
LEFT_TURN_PHASING_CD	LEG LEFT-TURN PHASING	Intersection	CHA(128)	179
LEG_DIRECTION	DIRECTION OF THE LEG	Intersection	CHA(128)	180
LEG_ID	LEG ID	Intersection	CHA(128)	180
LEG_LEFT_TURN_LANES_NBR	NO. OF LEFT TURN LANES ON LEG	Intersection	NUM	180
LEG_MIEDIAN_TYPE_CD	LEG MEDIAN TYPE	Intersection	CHA(128)	180
LEG_RIGHT_TURN_LANES_NBR	NO. OF RIGHT TURN LANES ON LEG	Intersection	NUM	180
LEG_THRU_LANES_NBR	NO. OF LEG THRU APPROACH LANES	Intersection	NUM	181
LEG_TYPE_CD	LEG TYPE CODE	Intersection	CHA(128)	181
LIGHT	LIGHT CONDITION	Accident	CHA(1)	45

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
LOC_CASE	LOCAL REPORT NUMBER	Accident	CHA(10)	45
LOC_TYPE	LOCATION	Accident	NUM	46
LOG_SUFX	LOG POINT SUFFIX	Point	CHA(1)	141
LRS_BGPT	LRS BEGINNING MILE POST	Roadlog	CHA(7)	116
LRS_BNDE	LRS B NODE	Roadlog	CHA(4)	116
LRS_EDPT	LRS ENDING MILE POINT	Roadlog	CHA(7)	116
LRS_ENDE	LRS END NODE	Roadlog	CHA(4)	117
LRS_ID	LRS INVENTORY ROUTE NUMBER(10 CHARC) + LRS SUBROUTE NUMBER	Roadlog	CHA(12)	117
LRS_INRT	LRS INVENTORY ROUTE NUMBER	Roadlog	CHA(10)	117
LRS_NDCN	LRS NODE CODE (COUNTY/STATE)	Roadlog	CHA(2)	118
LRS_NDNM	LRS NODE NAME	Roadlog	CHA(10)	118
LRS_NDSQ	LRS NODE SEQUENCE NUMBER	Roadlog	CHA(3)	118
LRS_NRDE	LRS NODE RTE DESIGNATION	Roadlog	CHA(5)	118
LRS_SBRT	LRS SUBROUTE NUMBER	Roadlog	CHA(2)	118
MAJBEGININFLUENCEZONE	INFLUENCE ZONE BEG MAJRD	Intersection	NUM(8)	174
MAJENDINFLUENCEZONE	INFLUENCE ZONE END MAJRD	Intersection	NUM(8)	174
MAJOR_AADT_11	MAJOR ROAD AADT	Intersection	NUM	175
MAJORROADDIRECTION	DIRECTION MAJOR ROAD	Intersection	CHA(2)	175
MAJORROADLOCSYSTEM	LOCATION SYSTEM MAJOR ROAD	Intersection	CHA(1)	175
MAJORROADNAME	NAME MAJOR ROAD	Intersection	CHA(27)	175
MAJORROADOFFSET	MILEPOST MAJOR ROAD	Intersection	NUM(8)	175

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
MAJORROADSECTION	SECTION MAJOR ROAD	Intersection	CHA(1)	175
MAKE	MAKE OF VEHICLE	Vehicle	CHA(4)	74
MED_TYPE	FHWA MEDIAN TYPE	Roadlog	CHA(1)	119
MED_WID	MEDIAN WIDTH	Roadlog	NUM	119
MI_CLASS	MILE CLASS INCORPORATED/ UNINCORPORATED)	Roadlog	CHA(1)	120
MILE_CLS	MILE CLASS	Angle Point	CHA(1)	166
MILE_CLS	MILE CLASS	Curves	CHA(1)	152
MILE_CLS	MILE CLASS	Grades	CHA(1)	159
MILEPOST	MILEPOST	Accident	NUM	46
MILEPOST	LOG POINT	Point	NUM	141
MINBEGININFLUENCEZONE	INFLUENCE ZONE BEG MINRD	Intersection	NUM(8)	175
MINENDINFLUENCEZONE	INFLUENCE ZONE END MINRD	Intersection	NUM(8)	175
MINOR_AADT_11	MINOR ROAD AADT	Intersection	NUM	176
MINORROADLOCSYSTEM	LOCATION SYSTEM MINOR ROAD	Intersection	CHA(1)	176
MINORROADNAME	NAME MINOR ROAD	Intersection	CHA(27)	176
MINORROADOFFSET	MILEPOST MINOR ROAD	Intersection	NUM(8)	176
MINORROADROUTENAME	ROUTE NUMBER MINOR ROAD	Intersection	CHA(25)	176
MINORROADROUTETYPE	ROUTE TYPE MINOR ROAD	Intersection	CHA(2)	176
MINORROADSECTION	SECTION MINOR ROAD	Intersection	CHA(1)	176
MISCACT1	PRE-CRASH ACTIONS	Vehicle	NUM	74
MODEL	MODEL OF VEHICLE	Vehicle	NUM	75

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
MOSTHARM	MOST HARMFUL EVENT	Vehicle	NUM	75
MOVMNT	MOVEMENT OF VEHICLE	Vehicle	NUM	76
MUN_NAM	MUNICIPALITY NAME	Roadlog	CHA(16)	120
MUNI_CDE	MUNICIPAL CODE	Point	NUM	141
MUNICODE	MUNICIPALITY CODE	Accident	CHA(3)	46
MVMT	MILLION VEHICLE MILES OF TRAVEL	Accident	NUM	46
MVMT	MILLION VEHICLE MILES OF TRAVEL	Roadlog	NUM	120
NHS	NATIONAL HIGHWAY SYSTEM INDICATOR	Accident	CHA(1)	47
NHS_CDE	NATIONAL HIGHWAY SYSTEM CODE	Roadlog	CHA(1)	120
NHS_INTR	NHS INTERMODAL NUMBER	Roadlog	CHA(2)	121
NO_LANES	NUMBER OF LANES	Accident	CHA(1)	47
NO_LANES	NUMBER OF LANES	Angle Point	NUM	167
NO_LANES	NUMBER OF LANES	Curves	NUM	153
NO_LANES	NUMBER OF LANES	Grades	NUM	160
NO_LANES	NUMBER OF LANES	Roadlog	NUM	121
NUM_OCCS	NUMBER OF OCCUPANTS	Vehicle	NUM	77
NUMPEDS	NUMBER OF PEDESTRIANS	Accident	NUM	48
NUMVEH	NUMBER OF VEHICLES	Vehicle	NUM	77
NUMVEHS	NUMBER OF VEHICLES	Accident	NUM	48
OBJECT1	OBJECT STRUCK BY VEHICLE	Vehicle	NUM	77
ODT_ATFAULT	ODOT-AT-FAULT-FLAG	Vehicle	CHA(1)	78
ODT_PERSON_CNT	ODOT-PEOPLE-FOUND-COUNT	Vehicle	NUM	78
OFFSETDISTANCE	MINOR ROAD OFFSET DISTANCE	Intersection	NUM	176
OFFSETINTERSECTION	MINOR ROAD OFFSET FLAG	Intersection	CHA(1)	177

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
OPENEDTOTRAFFIC	DATE OPENED TO TRAFFIC	Intersection	CHAR(1)	177
OPERATION_WAY_CD	LEG ONE WAY/TWO WAY	Intersection	CHA(128)	181
OVRLDIR	OVERLAP LOG DIRECTION	Point	CHA(1)	141
OWNERID	VEHICLE OWNERSHIP	Vehicle	NUM	78
P_TYPE	OCCUPANT TYPE	Occupants	CHA(1)	99
PAS_NHS	PAS/NHS INTERSECTION MARKER	Roadlog	CHA(1)	121
PAV_ROUG	PAVEMENT ROUGHNESS	Roadlog	CHA(3)	121
PAVECOND	PAVEMENT CONDITION	Roadlog	CHA(2)	122
PCT_GRAD	PERCENT OF GRADE	Grades	NUM	160
PEDS_INJ	PEDESTRIANS INJURED	Accident	NUM	48
PEDS_KILLED	PEDESTRIANS KILLED	Accident	NUM	48
PED_LOC	NON-MOTORIST LOCATION PRIOR TO IMPACT	Vehicle	NUM	79
PHYSCOND	PEDESTRIAN PHYSICAL CONDITION	Occupants	NUM	99
PK_LANES	PEAK LOAD LANES	Roadlog	CHA(3)	122
POC1	POINT OF IMPACT	Vehicle	NUM	80
POP_GRP	POPULATION	Accident	CHA(1)	48
POP_GRP	POPULATION	Roadlog	CHA(4)	122
PUB_PROP	PUBLIC PROPERTY DAMAGE	Vehicle	CHA(1)	80
PUBDMG	PUBLIC PROPERTY DAMAGE	Accident	CHA(1)	49
RAMP	RAMP CODE	Accident	CHA(2)	49
REL_RD	RELATION TO ROADWAY	Vehicle	NUM	49
RD_CHAR1	CONTOUR OF ROADWAY	Accident	NUM	49
RD_WIDTH	ROADWAY WIDTH THRU LANES N/MEDIANS	Roadlog	NUM	123
RDSURF	ROAD CONDITION	Accident	NUM	50

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
REC_TYPE	RECORD TYPE	Point	CHA(1)	142
REST1	SAFETY EQUIPMENT	Occupants	NUM	100
RODWYCLS	ROAD TYPE	Accident	CHA(2)	50
RODWYCLS	ROADWAY TYPES	Roadlog	CHA(2)	123
ROUTENAME	ROUTE NUMBER MAJOR ROAD	Intersection	CHA(6)	177
ROUTETYPE	ROUTE TYPE MAJOR ROAD	Intersection	CHA(2)	177
RTE_DIR	ROUTE DIRECTION	Point	CHA(2)	143
RTE_NBR	ROUTE NUMBER	Accident	CHA(5)	50
RTE_NBR	STATE ROUTE NUMBER	Point	CHA(5)	143
RTE_NBR	STATE ROUTE NUMBER	Curves	CHA(5)	153
RTE_NBR	STATE ROUTE NUMBER	Grades	NUM	160
RTE_NBR	STATE ROUTE NUMBER	Angle Point	CHA(5)	167
RTE_NBR	STATE ROUTE NUMBER	Roadlog	CHA(5)	124
RTE_PREF	STATE ROUTE PREFIX	Point	CHA(1)	143
RTE_SUFX	STATE ROUTE SUFFIX	Point	CHA(1)	144
RTE_SUFX	STATE ROUTE SUFFIX	Curves	CHA(1)	154
RTE_SUFX	STATE ROUTE SUFFIX	Grades	CHA(1)	161
RTE_SUFX	STATE ROUTE SUFFIX	Angle Point	CHA(1)	168
RTE_SUFX	STATE ROUTE NUMBER SUFFIX	Roadlog	CHA(1)	124
RTE_TYPE	ROUTE TYPE	Roadlog	NUM	124
RURUID	POPULATION (OVE/UNDER 5000)	Roadlog	CHA(1)	125
SAFTJUR	ORIGINAL JURISDICTION CODED BY HIGHWAY SAFETY	Accident	CHA(1)	51
SCENIC	SCENIC BYWAYS	Roadlog	CHA(1)	125

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	
SCH_WZON	SPECIAL AREA CODE	Accident	NUM	51
SEATPOS	SEATING POSITION	Occupants	NUM	101
SEG_LNG	SEGMENT LENGTH	Angle Point	NUM	168
SEG_LNG	SEGMENT LENGTH	Curves	NUM	154
SEG_LNG	SEGMENT LENGTH	Grades	NUM	161
SEG_LNG	SEGMENT LENGTH	Roadlog	NUM	125
SEQ_NBR	SEQUENCE NUMBER	Point	CHA(1)	144
SEQ_NBR	SEQUENCE NUMBER	Curves	NUM	154
SEQ_NBR	SEQUENCE NUMBER	Grades	NUM	161
SEQ_NBR	SEQUENCE NUMBER	Angle Point	CHA(1)	168
SEQ_NBR	SEQUENCE NUMBER	Roadlog	CHA(1)	125
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SEVERITY_OH	CRASH SEVERITY (ORIGINAL)	Accident	NUM	51
SEX	OCCUPANT GENDER	Occupants	CHA(1)	102
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SHWD_RIGHT_OUTSIDE	SHOULDER RIGHT OUTSIDE	Roadlog	NUM	127
SHWD_LEFT_OUTSIDE	SHOULDER LEFT OUTSIDE	Roadlog	NUM	126
SHWD_RIGHT_INSIDE	SHOULDER RIGHT INSIDE	Roadlog	NUM	126
SOB_TST	ALCOHOL INVOLVED	Occupants	NUM	102
SPD_LIMT	SPEED LIMIT OF ROAD	Vehicle	NUM	81
SPDLIMT	SPEED LIMIT	Roadlog	NUM	127
SPECDESC	SPECIAL DESCRIPTION	Point	CHA(1)	145
SPEED_LIMIT_NBR	LEG SPEED LIMIT	Intersection	NUM	182

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
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SRF_BASL	LEFT SIDE SURFACE BASE TYPE	Roadlog	CHA(1)	128
SRF_BASR	RIGHT SIDE SURFACE BASE CLASS TYPE	Roadlog	CHA(1)	129
SRF_TYPF	SUMMARY OF FHWA SURFACE TYPE	Roadlog	CHA(2)	130
SRF_TYPL	LEFT SIDE STANDARD SURFACE TYPE	Roadlog	CHA(1)	131
SRF_TYPR	RIGHT SIDE SURFACE CLASS TYPE	Roadlog	CHA(1)	132
SRFTYPLL	LEFT SIDE FHWA SURFACE TYPE	Roadlog	CHA(2)	133
SRFTYPLR	FHWA RIGHT SIDE SURFACE TYPE	Roadlog	CHA(2)	134
STAT_EQ	STATE EQUATION SORT	Point	CHA(1)	145
STAT_EQ	STATION EQUATION SORT FILED	Roadlog	NUM	134
STAT_EQU	STATION EQUATION SORT FIELD	Angle Point	NUM	168
STAT_EQU	STATION EQUATION SORT FIELD	Curves	NUM	154
STAT_EQU	STATION EQUATION SORT FIELD	Grades	NUM	161
STATE_EQ	STATION EQUATION SORT FIELD	Accident	NUM	51
STN_SUF	STREET NAME SUFFIX	Roadlog	CHA(4)	134
STR_PFX	STREET NAME DIRECTIONAL PREFIX	Roadlog	CHA(1)	135
STREET_1	STREET ON	Accident	CHA(10)	51
STREET_2	STREET AT/CROSS ROUTE	Accident	CHA(10)	52
STRIKING	STRIKING/STRUCK	Vehicle	NUM	81
STRT_DIR	STREET NAME DIRECTIONAL SUFFIX	Roadlog	CHA(1)	135
STRT_NAM	STREET NAME	Roadlog	CHA(22)	135
STRT_SUF	STREET SUFFIX	Point	CHA(2)	146
SURF_TYP	STANDARD SURFACE CLASSIFICATION	Roadlog	CHA(1)	136
SURF_WID	SURFACE WIDTH THRU LANES N/SHOULDERS	Roadlog	NUM	136

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
SURFWIDL	LEFT SIDE SURFACE WIDTH IN FEET	Roadlog	NUM	137
SURFWIDR	RIGHT SIDE SURFACE WIDTH IN FEET	Roadlog	NUM	138
SYS_CLAS	SYSTEM CLASS	Angle Point	CHA(1)	169
SYS_CLAS	SYSTEM CLASS	Curves	CHA(1)	155
SYS_CLAS	SYSTEM CLASS	Grades	CHA(1)	162
SYS_CLAS	SYSTEM CLASS	Roadlog	CHA(1)	138
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TOT_KILL	TYPE 1 TOTAL KILLED	Accident	NUM	52
TOT_NON	TYPE 5 NO INDICATED INJURY	Accident	NUM	52
TOT_UNK	TYPE 0 NO INDICATED INJURY	Accident	NUM	52
TOTAINJ	TYPE 2 SERIOUS VISIBLE INJURY	Accident	NUM	53
TOTBINJ	TYPE 3 MINOR VISIBLE INJURY	Accident	NUM	53
TOTCINJ	TYPE 4 NO VISIBLE INJURY	Accident	NUM	53
TOWED	TOWED FLAG	Vehicle	NUM	81
TRAFFICCONTROL 1	TRAFFIC CONTROL TYPE	Intersection	NUM(8)	178
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TRF_CNTL	TRAFFIC CONTROL OF VEHICLE	Vehicle	NUM	82
TRK_BODY	CARGO BODY TYPE	Vehicle	NUM	83
TRK_LOAD	TYPE OF TRUCK LOAD	Vehicle	NUM	83
TRKAXLES	NUMBER OF TRUCK AXLES	Vehicle	NUM	84
TRUE_LOG	STATE ROUTE TRUE LOG	Point	CHA(5)	146
TRVL_SPD	SPEED DETECTED	Vehicle	NUM	84
TURN_PROHIBITIONS_CD	LEG TURN RESTRICTIONS	Intersection	CHA(128)	182
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SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
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TYPED_DB	TYPE OF REFERENCE	Accident	CHA(1)	54
UNDEROVR	VEHICLE UNDERRIDE/OVERRIDE	Vehicle	NUM	84
UPDT_YR	UPDATE YEAR	Roadlog	CHA(4)	138
VEH_DISP	VEHICLE DISPOSITION	Vehicle	NUM	84
VEH_N_FROM	VEHICLE/NON-MOTORIST DIRECTION FROM	Vehicle	NUM	85
VEH_N_TO	VEHICLE/NON-MOTORIST DIRECTION TO	Vehicle	NUM	85
VEH_SPEED _POST_2000	SPEED OF VEHICLE	Vehicle	NUM	86
VEH_SPEED _PRE_2000	ESTIMATED SPEED OF VEHICLE	Vehicle	NUM	86
VEHCOND1	PRIMARY CONDITION 1	Vehicle	NUM	87
VEHCOND2	PRIMARY CONDITION 2	Vehicle	NUM	87
VEHNO	VEHICLE NUMBER	Occupants	NUM	103
VEHNO	VEHICLE NUMBER	Vehicle	NUM	87
VEHSTATE	VEHICLE STATE	Vehicle	CHA(2)	87
VEHTYPE	VEHICLE TYPE	Vehicle	NUM	87
VEHYR	VEHICLE MODEL YEAR	Vehicle	NUM	89
VIN	VIN NUMBER	Vehicle	CHA(17)	89
WEATHER	WEATHER CONDITION	Accident	NUM	55
WEEKDAY	DAY OF WEEK	Accident	CHA(1)	55
XCNTYRTE	CROSS ROAD COUNTY ROUTE	Point	CHA(1)	147
XLOG_SUF	CROSS ROUTE LOG SUFFIX	Point	CHA(1)	147
XMILEPST	CROSS ROUTE MILEPOST	Point	NUM	147
XRTE_NBR	CROSS ROUTE NUMBER	Point	CHA(4)	147
XRTE_SUF	CROSS ROUTE SUFFIX	Point	CHA(1)	148

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
XRTEPREF	CROSS ROUTE PREFIX	Point	CHA(1)	148

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ACCTYPE	TYPE OF CRASH(FIRST HARMFUL EVENT)	Accident	NUM	36
ACCYR	ACCIDENT YEAR	Accident	NUM	36
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ANIMAL	ANIMAL TYPE	Accident	NUM	37
CASENO	UNIQUE ACCIDENT CASE NUMBER	Accident	CHA(11)	37
CNTYRTE	COUNTY ROUTE	Accident	CHA(8)	38
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DIR_REF	DIRECTION FROM REFERENCE	Accident	CHA(1)	40
DIST_OFF	DISTANCE OFFSET	Accident	CHA(3)	41
DISTRICT	DISTRICT	Accident	NUM	41
DIV_CODE	ROAD IDENTIFICATION	Accident	CHA(1)	41
FAULT	VIOLATOR	Accident	NUM	41
FIPSMUNI	FIPS CODE	Accident	CHA(5)	41
FLIP_IND	INDICATES DUPLICATE RECORD GENERATION	Accident	CHA(1)	42
FRWY_IND	FREEWAY / NON-FREEWAY INDICATOR	Accident	CHA(1)	42
FUNCLS	FUNCTIONAL CLASSFICATION	Accident	NUM	43
HOUR	HOUR OF DAY	Accident	NUM	44
INTER_IND	INTERSTATE HIGHWAY INDICATOR	Accident	CHA(1)	44
JUR_TYPE	JURISDICTION	Accident	CHA(1)	45
LIGHT	LIGHT CONDITION	Accident	CHA(1)	45
LOC_CASE	LOCAL REPORT NUMBER	Accident	CHA(10)	45
LOC_TYPE	LOCATION	Accident	NUM	46

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
MILEPOST	MILEPOST	Accident	NUM	46
MUNICODE	MUNICIPALITY CODE	Accident	CHA(3)	46
MVMT	MILLION VEHICLE MILES OF TRAVEL	Accident	NUM	46
NHS	NATIONAL HIGHWAY SYSTEM INDICATOR	Accident	CHA(1)	47
NO_LANES	NUMBER OF LANES	Accident	CHA(1)	47
NUMPEDS	NUMBER OF PEDESTRIANS	Accident	NUM	48
NUMVEHS	NUMBER OF VEHICLES	Accident	NUM	48
PEDS_INJ	PEDESTRIANS INJURED	Accident	NUM	48
PEDS_KILLED	PEDESTRIANS KILLED	Accident	NUM	48
POP_GRP	POPULATION	Accident	CHA(1)	48
PUBDMG	PUBLIC PROPERTY DAMAGE	Accident	CHA(1)	49
RAMP	RAMP CODE	Accident	CHA(2)	49
REL_RD	RELATION TO ROADWAY	Vehicle	NUM	49
RD_CHAR1	CONTOUR OF ROADWAY	Accident	NUM	49
RDSURF	ROAD CONDITION	Accident	NUM	50
RODWYCLS	ROAD TYPE	Accident	CHA(2)	50
RTE_NBR	ROUTE NUMBER	Accident	CHA(5)	50
SAFTJUR	ORIGINAL JURISDICTION CODED BY HIGHWAY SAFETY	Accident	CHA(1)	51
SCH_WZON	SPECIAL AREA CODE	Accident	NUM	51
SEVERITY	CRASH SEVERITY (GENERATED)	Accident	CHA(1)	51
SEVERITY_OH	CRASH SEVERITY (ORIGINAL)	Accident	NUM	51
STATE_EQ	STATION EQUATION SORT FIELD	Accident	NUM	51
STREET_1	STREET ON	Accident	CHA(10)	51
STREET_2	STREET AT/CROSS ROUTE	Accident	CHA(10)	52

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
TOT_KILL	TYPE 1 TOTAL KILLED	Accident	NUM	52
TOT_NON	TYPE 5 NO INDICATED INJURY	Accident	NUM	52
TOT_UNK	TYPE 0 NO INDICATED INJURY	Accident	NUM	52
TOTAINJ	TYPE 2 SERIOUS VISIBLE INJURY	Accident	NUM	53
TOTBINJ	TYPE 3 MINOR VISIBLE INJURY	Accident	NUM	53
TOTCINJ	TYPE 4 NO VISIBLE INJURY	Accident	NUM	53
TWNSHIP	TOWNSHIP ABBREVIATION	Accident	NUM	53
TYPE_BD	TYPE OF REFERENCE	Accident	CHA(1)	54
TYPED_DB	TYPE OF REFERENCE	Accident	CHA(1)	54
WEATHER	WEATHER CONDITION	Accident	NUM	55
WEEKDAY	DAY OF WEEK	Accident	CHA(1)	55

NOTE: SAS variable names and longer explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Accident Date — SAS Name: ACC_DATE

Definition: Date when the accident occurred.

Additional Information: Year/Month/Date of accident (YYYYMMDD).

Access Control — SAS Name: ACCESS

Definition: Access control at the location of the crash.

'1'	'Full Access Control'
'2'	'Partial Access Control'
'3'	'No Access Control'
'N'	'No Control of Access'
'L'	'Limited Control of Access'
'F'	'Full Control of Access'
' '	'Not Coded'

Additional Information: Access control as defined by OH State. For example, 'F' Indicates that Ohio DOT owns the access control and can change it whenever deemed required. The use of this variable may result in some difficulties and we recommend the use of FED_ACES, available in the roadlog file to get information on the access control of segments.

Type of Crash (First Harmful Event) — SAS Name: ACCTYPE

Definition: First harmful even in the crash sequence.

00 'Not Stated'
01 'Head On'
02 'Rear End'
03 'Backing'
04 'Sideswipe-Meeting'
05 'Sideswipe-Passing'
06 'Angle'
07 'Parked Vehicle'
08 'Pedestrian'
09 'Animal'
10 'Train'
11 'Pedalcycles'
12 'Other Non-Vehicle'
13 'Fixed Object'
14 'Other Object'
15 'Falling From or In Vehicle'
16 'Overturning'
17 'Other Non-Collision'

Accident Year — SAS Name: ACCYR

Definition: Year accident occurred.

Additional Information: Year of Accident (YYYY).

Investigating Agency — SAS Name: AGENCY

Definition: Investigating Agency of the crash

'0' 'Source Not Stated'
'1' 'Police Source'
'2' 'Highway Patrol'
'3' 'City Police'
'4' 'Sherriff'
'5' 'Newspaper'
'6' 'Death Certificate'
'7' 'Township'
'8' 'Other Source'
' ' 'Not Coded'

Turn Crash Indicator (Generated) — SAS Name: ANGLE

Definition: Indicates whether the type of crash occurred is angle/turn or not

0 'No Turn, No Angle, Or Not Applicable'
1 'Angle Collision'
2 'One Or More Veh. Turning From Same Direction'
3 'One Or More Veh. Turning From Opposite Direct'

Animal Type — SAS Name: ANIMAL

Definition: Type of the animal involved in the crash

0 'Animal Not Stated'
1 'Deer-Hit'
2 'Farm-Animal-Hit'
3 'Other-Animal'

Unique Accident Case Number — SAS Name: CASENO

Definition: Case number of accident.

Additional Information: Accident Case Number. The first 4 digits show the accident year.

County Route

SAS Name: CNTYRTE

Definition: Crash location information used in linkage to other files.

Additional Information: Linkage variable consisting of COUNTY + RTE_NBR + RTE_SUFX + STATE_EQ. From year 2000, STATE_EQ is not required. Also RTE_SUFX became last digit of RTE_NBR.

County

SAS Name: COUNTY

Definition: County where the crash occurred

'Ada'	'Adams'
'All'	'Allen'
'Asd'	'Ashland'
'Atb'	'Ashtabula'
'Ath'	'Athens'
'Aug'	'Auglaize'
'Bel'	'Belmont'
'Bro'	'Brown'
'But'	'Butler'
'Car'	'Carroll'
'Chp'	'Champaign'
'Cla'	'Clark'
'Cle'	'Clermont'
'Cli'	'Clinton'
'Col'	'Columbiana'
'Cos'	'Coshocton'
'Cra'	'Crawford'
'Cuy'	'Cuyahoga'
'Dar'	'Darke'
'Def'	'Defiance'
'Del'	'Delaware'
'Eri'	'Erie'
'Fai'	'Fairfield'
'Fay'	'Fayette'
'Fra'	'Franklin'
'Ful'	'Fulton'

'Gal'	'Gallia'
'Gea'	'Geauga'
'Gre'	'Greene'
'Gue'	'Guernsey'
'Ham'	'Hamilton'
'Han'	'Hancock'
'Har'	'Hardin'
'Has'	'Harrison'
'Hen'	'Henry'
'Hig'	'Highland'
'Hoc'	'Hocking'
'Hol'	'Holmes'
'Hur'	'Huron'
'Jac'	'Jackson'
'Jef'	'Jefferson'
'Kno'	'Knox'
'Lak'	'Lake'
'Law'	'Lawrence'
'Lic'	'Licking'
'Log'	'Logan'
'Lor'	'Lorain'
'Luc'	'Lucas'
'Mad'	'Madison'
'Mah'	'Mahoning'
'Mar'	'Marion'
'Med'	'Medina'
'Meg'	'Meigs'
'Mer'	'Mercer'
'Mia'	'Miami'
'Moe'	'Monroe'
'Mot'	'Montgomery'
'Mrg'	'Morgan'
'Mrw'	'Morrow'
'Mus'	'Muskingum'
'Nob'	'Noble'
'Ott'	'Ottawa'

'Pau'	'Paulding'
'Per'	'Perry'
'Pic'	'Pickaway'
'Pik'	'Pike'
'Por'	'Portage'
'Pre'	'Preble'
'Put'	'Putnam'
'Ric'	'Richland'
'Ros'	'Ross'
'San'	'Sandusky'
'Sci'	'Scioto'
'Sen'	'Seneca'
'She'	'Shelby'
'Sta'	'Stark'
'Sum'	'Summit'
'Tru'	'Trumbull'
'Tus'	'Tuscarawas'
'Uni'	'Union'
'Van'	'Van Wert'
'Vin'	'Vinton'
'War'	'Warren'
'Was'	'Washington'
'Way'	'Wayne'
'Wil'	'Williams'
'Woo'	'Wood'
'Wya'	'Wyandot'

Direction from Reference

SAS Name: DIR_REF

Definition: Direction from reference road or feature to where crash occurred

' '	'Not Stated'
'E'	'East'
'N'	'North'
'S'	'South'
'W'	'West'

Distance Offset — SAS Name: DIST_OFF

Definition: Distance from reference road or feature to the crash location

District — SAS Name: DISTRICT

Definition: District where the crash occurred

Road Identification — SAS Name: DIV_CODE

Definition: Design of the roadway where the crash occurred.

'D'	'Divided'
'U'	'Undivided'
' '	'Not Coded'

Violator — SAS Name: FAULT

Definition: Indicates which vehicle was at fault

1	'Vehicle 1 At Fault'
2	'Vehicle 2 At Fault'
3	'Vehicle 3 At Fault'
4	'Vehicle 4 At Fault'
5	'Vehicle 5 At Fault'
6	'Vehicle 6 At Fault'
7	'Vehicle 7 At Fault'
8	'Vehicle 8 At Fault'
9 - 95	'Vehicles 9 To 95 At Fault'
96	'Invalid Unit'
97	'Pedestrian At Fault'
98	'No Fault Determined'
99	'Animal At Fault'

FIPS Code — SAS Name: FIPSMUNI

Definition: FIPS code of the location of the crash

Indicates Duplicate Record Generation — SAS Name: FLIP_IND

Definition: Type of duplicate record generated for the crash (Ohio DOT internal use only).

Additional Information: Categories 6 and 7 apply for data generated before 2000.

'0' 'None'
'2' 'Switched Original Street On/At'
'3' 'Muni-Jur Flip Original Street On/At'
'4' 'Offset/Offset-Direction Used With Assumptions For Logging'
'5' 'Cr/Tr-Jur Flip Original Street On/At'
'6' 'Original Record'
'7' 'Cross Route Duplicate'
'R' 'Route Changed To Priority Route'
'X' 'Known Street-On Replaced With Route Number'

Freeway / Non-Freeway Indicator — SAS Name: FRWY_IND

Definition: Indicates whether a crash occurred on a freeway or non-freeway

'F' 'Freeway'
'N' 'Non-Freeway'

Functional Classification — SAS Name: FUNCLS

Definition: Roadway functional classification where crash occurred

Additional Information: Urban crashes increased considerably from 2000 onwards due to OH DOT's better ability to locate the crashes in this area.

'01'	'Prin Art (Rural Int)'
'02'	'Prin Art (Rural Oth)'
'06'	'Min Art (Rur)'
'07'	'Mj Col (Rur)'
'08'	'Min Col (Rur)'
'09'	'Local (Rural)'
'11'	'Prin Art (Urb Int)'
'12'	'Prin Art (Urb-Frwy & Exwy'
'14'	'Prin Art (Urban-Other)'
'16'	'Min Art (Urban)'
'17'	'Collector (Urban)'
'19'	'Local (Urban)'
' '	'Not Coded'

Hour of Day

SAS Name: HOUR

Definition: Hour at which the crash has occurred.

00	'12:00 MIDNIGHT - 12:59 AM'
01	' 1:00 AM - 1:59 AM'
02	' 2:00 AM - 2:59 AM'
03	' 3:00 AM - 3:59 AM'
04	' 4:00 AM - 4:59 AM'
05	' 5:00 AM - 5:59 AM'
06	' 6:00 AM - 6:59 AM'
07	' 7:00 AM - 7:59 AM'
08	' 8:00 AM - 8:59 AM'
09	' 9:00 AM - 9:59 AM'
10	'10:00 AM - 10:59 AM'
11	'11:00 AM - 11:59 AM'
12	'12:00NOON- 12:59 PM'
13	' 1:00 PM - 1:59 PM'
14	' 2:00 PM - 2:59 PM'
15	' 3:00 PM - 3:59 PM'
16	' 4:00 PM - 4:59 PM'
17	' 5:00 PM - 5:59 PM'
18	' 6:00 PM - 6:59 PM'
19	' 7:00 PM - 7:59 PM'
20	' 8:00 PM - 8:59 PM'
21	' 9:00 PM - 9:59 PM'
22	'10:00 PM - 10:59 PM'
23	'11:00 PM - 11:59 PM'
99	'NOT CODED'

Interstate Highway Indicator

SAS Name: INTER_IND

Definition: Indicates whether crash occurred on interstate.

'Y'	'Yes'
'N'	'No'

Jurisdiction — SAS Name: JUR_TYPE

Definition: Jurisdiction type where crash occurred

'S'	'Rural State'
'M'	'Municipal Street'
'C'	'County Road'
'T'	'Township Road'
'H'	'Ohio Turnpike'
' '	'Not Coded'

Light Condition — SAS Name: LIGHT

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

0	'Light-Not-Stated'
1	'Daylight'
2	'Dawn'
3	'Dusk'
4	'Dark-No-Lights'
5	'Dark-Lighted'
6	'Other'

Local Report Number — SAS Name: LOC_CASE

Definition: Local report number of the crash

Location

SAS Name: LOC_TYPE

Definition: Location of the crash in relation to the intersection.

0 'Location-Not-Stated'
1 'Intersection'
2 'Intersection-Related'
3 'Driveway-Access'
4 'Railroad-Crossing'
5 'Bridge-Passing-Over'
6 'Bridge-Passing-Under'
7 'Non-Intersection'
8 'Private-Property'

Milepost

SAS Name: MILEPOST

Definition: Reference point where the crash occurred.

Additional Information: Milepost of crash in miles (XXX.XX).

Municipality Code

SAS Name: MUNICODE

Definition: The municipal section that accident has occurred.

Million Vehicle Miles of Travel

SAS Name: MVMT

Definition: Million vehicle miles of traveled on road segment.

National Highway System Indicator — SAS Name: NHS

Definition: Whether this roadway section is part of the National Highway System.

'N'	'Nhs(Regular)'
'H'	'Congressional Corridors'
'S'	'Strahnet'
'C'	'Strahnet Connectors'
'2'	'Major Airport'
'3'	'Major Port Facility'
'4'	'Major Amtrak Station'
'5'	'Major Rail/Truck Terminal'
'6'	'Major Intercity Bus Terminal'
'7'	'Mj Pub Tran / Mul-Mdl Pas Ter'
'8'	'Major Pipeline Terminal'
'9'	'Major Ferry Terminal'
' '	'Not Coded'

Number of Lanes — SAS Name: NO_LANES

Definition: Total number of lanes – total for both directions.

.	'Missing'
1	' 1 Lane'
2	' 2 Lanes'
3	' 3 Lanes'
4	' 4 Lanes'
5	' 5 Lanes'
6	' 6 Lanes'
7	' 7 Lanes'
8	' 8 Lanes'
9	' 9 Lanes'
10	'10 Lanes'
11	'11 Lanes'
12	'12 Lanes'

Number of Pedestrians — SAS Name: NUMPEDS

Definition: Number of pedestrians involved in the crash

Number of Vehicles — SAS Name: NUMVEHS

Definition: Number of vehicles involved in the crash.

Pedestrians Injured — SAS Name: PEDS_INJ

Definition: Number of pedestrians injured in the crash

Additional Information: Variable added in 2000.

Pedestrians Killed — SAS Name: PEDS_KILLED

Definition: Number of pedestrians killed in the crash

Additional Information: Variable added in 2000.

Population — SAS Name: POP_GRP

Definition: The code for the rural/urban population where the crash occurred.

1	'Rural Village Pop. : 1 - 999'
2	'Rural Village Pop. : 1,000 - 2,499'
3	'Urban City Pop.: 2,500 - 4,999'
4	'Urban City Pop.: 5,000 - 9,999'
5	'Urban City Pop.: 10,000 - 24,999'
6	'Urban City Pop.: 25,000 - 49,999'
7	'Urban City Pop.: 50,000 And Over'
8	'Rural County Or Township Roads'
9	'Rural State, Us, Ir, Turnpike Route'
.	'Not Coded'

Public Property Damage — SAS Name: PUBDMG

Definition: Whether or not public property was damaged where the crash occurred.

' ','N' 'No'
'Y' 'Yes'

Ramp Code — SAS Name: RAMP

Definition: Code of the ramp where crash occurred

Relation to Roadway — SAS Name: REL_RD

Definition: Indicates Relation to Roadway of the vehicles involved in the crash

0 'Occurrence Not Stated'
1 'On Roadway'
2 'Off Left Side'
3 'Off Right Side'
4 'On Opposite Lane-Div-Hwy'

Contour of Roadway — SAS Name: RD_CHAR1

Definition: The characteristics of the road where the crash occurred.

0 'Contour-Not-Stated'
1 'Straight-Level'
2 'Straight-Grade'
3 'Curve-Level'
4 'Curve-Grade'

Road Condition — SAS Name: RDSURF

Definition: The condition of the road surface where the crash occurred.

0 'Not Stated'
1 'Dry'
2 'Wet'
3 'Snow'
4 'Ice'
5 'Mud-Sand'
6 'Other Road Condition'

Road Type — SAS Name: RODWYCLS

Definition: The classification of the roadway where the crash occurred.

Additional Information: Urban crashes increased considerably from 2000 onwards due to OH DOT's better ability to locate the crashes in this area.

'01' 'Urban Freeways'
'02' 'Urban Freeways < 4 Ln'
'03' 'Urban 2 Lane Roads'
'04' 'Urban Multilane Divided Non Freeways'
'05' 'Urban Multilane Undivided Non Freeways'
'06' 'Rural Freeways'
'07' 'Rural Freeways < 4 Ln'
'08' 'Rural 2 Lane Roads'
'09' 'Rural Multilane Divided Non Freeways'
'10' 'Rural Multilane Undivided Non Freeways'
'99' 'Others'

Route Number — SAS Name: RTE_NBR

Definition: The number of the route where the crash occurred.

Additional Information: From year 2000, this variable became 5 characters with first digit being '0' and last digit as RTE_SUFX.

Original Jurisdiction Coded By Highway Safety — SAS Name: SAFTJUR

Definition: Original jurisdiction code of the crash (Ohio DOT internal use only).

Special Area Code — SAS Name: SCH_WZON

Definition: Special area code where crash occurred

0 'Sp-Area Not Stated'
1 'Road-Construction/Maintenance-Area'
2 'School Zone'

Crash Severity (Generated) — SAS Name: SEVERITY

Definition: The most severe injury in the crash.

'1' 'Fatal'
'2' 'A Injury'
'3' 'B Injury'
'4' 'C Injury'
'5' 'Property Damage'

Crash Severity (Original) — SAS Name: SEVERITY_OH

Definition: The most severe injury in the crash

1 'Fatal'
2 'Injury'
3 'Property Damage'

Station Equation Sort Field — SAS Name: STATE_EQ

Definition: Station equation sort field where crash occurred (Ohio DOT internal use only.)

Additional Information: Not required from year 2000.

Street on — SAS Name: STREET_1

Definition: Street/route name where crash occurred

Street At/Cross Route

SAS Name: STREET_2

Definition: Crossing route or street where crash occurred

Type 1 Total Killed

SAS Name: TOT_KILL

Definition: Total number of persons killed in the crash.

00 - 04	'0 TO 4'
05 - 10	'5 TO 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'51 OR MORE

Type 5 No Indicated Injury

SAS Name: TOT_NON

Definition: Total number of non-injured persons in the crash

00 - 04	'0 TO 4'
05 - 10	'5 TO 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'51 OR MORE

Type 0 No Indicated Injury

SAS Name: TOT_UNK

Definition: Total unknown injuries in the crash

00 - 04	'0 TO 4'
05 - 10	'5 TO 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'51 OR MORE

Type 2 Serious Visible Injury

SAS Name: TOTAINJ

Definition: Total A injuries in the accident.

00 - 04	'0 TO 4'
05 - 10	'5 TO 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'51 OR MORE

Type 3 Minor Visible Injury

SAS Name: TOTBINJ

Definition: Total B injuries in the accident.

00 - 04	'0 TO 4'
05 - 10	'5 TO 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'51 OR MORE

Type 4 No Visible Injury

SAS Name: TOTCINJ

Definition: Total C injuries in the accident.

00 - 04	'0 TO 4'
05 - 10	'5 TO 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'51 OR MORE

Township Abbreviation

SAS Name: TWNSHIP

Definition: Number of the township where the crash occurred.

Type of Reference — SAS Name: TYPE_BD

Definition: Type of reference feature used to locate the crash.

Additional Information: Name of the variable changed from type_bd to typed_db in 2007.

'B' 'County, Township Boundaries'
'C' 'Corp Boundary'
'D' 'Driveway'
'H' 'House Number'
'I' 'Intersection (Within .10 Miles)'
'M' 'Milepost'
'P' 'Place With Reference (Such As Bridge Or Rr)'
'R' 'Intersection Reference (Greater Than .10 Miles)'
'X' 'Unknown'

Type of Reference — SAS Name: TYPED_DB

Definition: Type of reference where crash occurred

Additional Information: Name of the variable changed from type_bd to typed_db in 2007.

'B' 'County, Township Boundaries'
'C' 'Corp Boundary'
'D' 'Driveway'
'H' 'House Number'
'I' 'Intersection (Within .10 Miles)'
'M' 'Milepost'
'P' 'Place With Reference (Such As Bridge Or Rr)'
'R' 'Intersection Reference (Greater Than .10 Miles)'
'X' 'Unknown'

Weather Condition

SAS Name: WEATHER

Definition: Weather conditions when the crash occurred.

0 'Weather-Not-Stated'
1 'No-Adverse-Weather-Cond'
2 'Rain'
3 'Snow'
4 'Fog'
5 'Heavy-Wind'
6 'Other-Weather-Condition'

Day of Week

SAS Name: WEEKDAY

Definition: Day of week when the accident occurred.

'0' 'Unknown'
'1' 'Sunday'
'2' 'Monday'
'3' 'Tuesday'
'4' 'Wednesday'
'5' 'Thursday'
'6' 'Friday'
'7' 'Saturday'
'8' 'Not Coded'

List of Elements for the OH Vehicle Subfile

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List of Elements for the OH Vehicle Subfile

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VIN	VIN NUMBER	Vehicle	CHA(17)	89

NOTE: SAS variable names and longer explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Accident Year

SAS Name: ACCYR

Definition: Year accident occurred.

Body Type

SAS Name: BODY

Definition: The body type of vehicle involved in the crash

Additional Information: (1) This variable shows 48 percent of the values to be missing. Also there are no formats available for the convectional 4-door automobile. Any analysis performed using this variable should take this in account. (2) Variable discontinued in 2000.

'2s'	'Two-Door'
'4s'	'Four-Door, Limo'
'2h'	'Two-Door Hardtop'
'Sw'	'Station Wagon'
'Cp'	'Club Coupe'
'Cn'	'Miscellaneous Vehicles, Convertible, Retractable Hardtop, Roadster'
'Db'	'Dune Buggy'
'Am'	'Ambulance, Hearse'
'Hb'	'Hatchback'
'Jp'	'Jeep'
'Mc'	'Motorcycle'
'Ms'	'Motorscooter'
'Mb'	'Motorbike'
'Mp'	'Moped'
'Bs'	'Buses, Commercial Bus'
'Tk'	'Commercial Vehicles Truck, Non-Commercial Vehicles Truck'
'Ft'	'Farm Truck'
'Tr'	'Tractor'
'Tl'	'Trailers, Commercial Trailer, Non-Commercial Trailer'
'Tt'	'Travel Trailer'
'Mh'	'Motor Home'
'Ht'	'House Trailer'
'Hv'	'House Vehicle'
'Hc'	'House Car'
'Ra'	'Recreational Vehicles Recreational All-Purpose'
'Rb'	'Recreational Mini-Bike And Trail Bike'
'Rs'	'Recreational Snowmobile'

Unique Accident Case Number — SAS Name: CASENO

Definition: Case number of accident.

Additional Information: Accident Case Number. The first 4 digits show the accident year.

Truck / Bus CDL Class — SAS Name: CDL_CLASS

Definition: Truck/Bus CDL class the driver of this vehicle.

'1' 'Class A'
'2' 'Class B'
'3' 'Class C'
'4' 'Class M'
'5' 'Class D'

Contributing Factor of Vehicle — SAS Name: CONTRIB1

Definition: Violation or factor contributing to the crash.

Additional Information: Categories 34-37 and 40-48 apply to data generated before 2000.

Motorist
01 'None'
02 'Failure To Yield'
03 'Ran Red Light, Or Stop Sign'
04 'Exceeded Speed Limit'
05 'Unsafe Speed'
06 'Improper Turn'
07 'Left Of Center'
08 'Followed Too Closely/Acda'
09 'Improper Lane Change/Drove Off Road/Improper Passing'
10 'Improper Backing'
11 'Improper Start From Parked Position'
12 'Stopped Or Parked Illegally'
13 'Operating Vehicle In Erratic, Reckless, Careless, Gligent Or Aggressive Manner'
14 'Swerving To Avoid (Due To Wind, Slippery Surface, Vehicle, Object, In Roadway, Etc)'

Non-Motorist

15 'Failure To Control'
16 'Vision Obstruction'
17 'Driver Inattention'
18 'Fatigue/Asleep'
19 'Operating Defective Equipment'
20 'Load Shifting/Falling/Spilling'
21 'Other Improper Action'
22 'Unknown'

Non-Motorist

23 'None'
24 'Improper Crossing'
25 'Darting'
26 'Lying And/Or Illegally In Roadway'
27 'Failure To Yield Right Of Way'
28 'Not Visible (Dark Clothing)'
29 'Inattentive'
30 'Failure To Obey Traffic Signs, Signals, Or Officer'
31 'Wrong Side Of The Road'
32 'Other'
33 'Unknown'
34 'Ran Red Light'
35 'Ran Stop Or Yeild Sign'
36 'Improper Passing'
37 'Improper Lane Change'
40 'Drove Off Road Reason Unknown'
41 'Other Driver Error'
42 'Vehicle Defect'
43 'Pavement Defect'
44 'Shoulder Defect'
45 'Debris On Road'
46 'Downed Traffic Sign Device'
47 'Animal Action'
48 'Pedestrian Action'

Vehicle Damage Severity (VDS) — SAS Name: DAMAGE

Definition: The location of the damage to this vehicle.
Additional Information: Variable added in 2000.

01 'None'
02 'Center Front'
03 'Right Front'
04 'Right Side'
05 'Right Rear'
06 'Rear Center'
07 'Left Rear'
08 'Left Side'
09 'Left Front'
10 'Top And Windows'
11 'Under Carriage'
12 'Load/Trailer'
13 'Total (All Areas)'
14 'Other'
15 'Unknown'

Vehicle Damage Scale — SAS Name: DAMSEV

Definition: The severity of the damage to this vehicle. .

1 'None'
2 'Non-Functional Damage'
3 'Functional Damage'
4 'Disabling Damage'
5 'Severe'
6 'Unknown'

Vehicle Damage Scale

SAS Name: DAMSEV2

Definition: The severity of the damage to this vehicle.

Additional Information: Variable discontinued in 2000.

0 'Scale-Not-Stated'
1 'No-Damage'
2 'Light-Damage'
3 'Moderate-Damage'
4 'Heavy-Damage';

Direction of Vehicle

SAS Name: DIR_TRVL

Definition: The direction of travel for this vehicle.

Additional Information: Variable discontinued in 2000.

11 'North To North'
12 'North To Northeast'
13 'North To East'
14 'North To Southeast'
15 'North To South'
16 'North To Southwest'
17 'North To West'
18 'North To Northwest'
19 'North To Unknown'
21 'Northeast To North'
22 'Northeast To Northeast'
23 'Northeast To East'
24 'Northeast To Southeast'
25 'Northeast To South'
26 'Northeast To Southwest'
27 'Northeast To West'
28 'Northeast To Northwest'
29 'Northeast To Unknown'
31 'East To North'

32 'East To Northeast'
33 'East To East'
34 'East To Southeast'
35 'East To South'
36 'East To Southwest'
37 'East To West'
38 'East To Northwest'
39 'East To Unknown'
41 'Southeast To North'
42 'Southeast To Northeast'
43 'Southeast To East'
44 'Southeast To Southeast'
45 'Southeast To South'
46 'Southeast To Southwest'
47 'Southeast To West'
48 'Southeast To Northwest'
49 'Southeast To Unknown'
51 'South To North'
52 'South To Northeast'
53 'South To East'
54 'South To Southeast'
55 'South To South'
56 'South To Southwest'
57 'South To West'
58 'South To Northwest'
59 'South To Unknown'
61 'Southwest To North'
62 'Southwest To Northeast'
63 'Southwest To East'
64 'Southwest To Southeast'
65 'Southwest To South'
66 'Southwest To Southwest'
67 'Southwest To West'
68 'Southwest To Northwest'
69 'Southwest To Unknown'

71 'West To North'
72 'West To Northeast'
73 'West To East'
74 'West To Southeast'
75 'West To South'
76 'West To Southwest'
77 'West To West'
78 'West To Northwest'
79 'West To Unknown'
81 'Northwest To North'
82 'Northwest To Northeast'
83 'Northwest To East'
84 'Northwest To Southeast'
85 'Northwest To South'
86 'Northwest To Southwest'
87 'Northwest To West'
88 'Northwest To Northwest'
89 'Northwest To Unknown'
91 'Unknown To North'
92 'Unknown To Northeast'
93 'Unknown To East'
94 'Unknown To Southeast'
95 'Unknown To South'
96 'Unknown To Southwest'
97 'Unknown To West'
98 'Unknown To Northwest'
99 'Unknown To Unknown'
. 'Uncoded'

Driver License Class — SAS Name: DL_CLASS

Definition: The class of the driver license for the driver of this vehicle.

Additional Information: Variable discontinued in 2000.

''	'Not Coded'
'A '	'Combination'
'B '	'Heavy Straight'
'C '	'Small Vehicle'
'D '	'Operator'
'F '	'Chauffeur'
'M1'	'Motorcycle Only'
'M2'	'Moped Only'
'M3'	'Three-Wheel Motorcycle Only'

Driver License State — SAS Name: DL_STATE

Definition: State of the driver license for the driver of this vehicle.

Driver License County — SAS Name: DLCOUNTY

Definition: The county of the driver license for the driver of this vehicle.

Additional Information: See listing under "County" in the Accident section of the guidebook.

Driver Age — SAS Name: DRV_AGE

Definition: The age of the driver of this vehicle..

00	'Not Stated'
01	'Infant - 1 Yr'
02-04	'02-04 Yrs'
05-10	'05-10 Yrs'
11-14	'11-14 Yrs'
15	'15 Yrs'
16	'16 Yrs'
17	'17 YRS'
18	'18 Yrs'
19	'19 Yrs'
20	'20 Yrs'
21-25	'21-25 Yrs'
26-30	'26-30 Yrs'
31-35	'31-35 Yrs'
36-45	'36-45 Yrs'
46-55	'46-55 Yrs'
56-65	'56-65 Yrs'
66-89	'66-89 Yrs'
90-99	'90+ Yrs'
100-High	'Error Codes'

Driver Presence — SAS Name: DRV_FLAG

Definition: Whether a driver was present in this vehicle at the time of the crash.

Additional Information: Variable discontinued in 2000.

'1'	'Operating Vehicle'
'2'	'Parked'
'3'	'Driverless'
'4'	'Hit-And-Run'
'5'	'Non-Contact'
'P'	'Pedestrian'

Driver Injury — SAS Name: DRV_INJ

Definition: Extent of injury to the driver of the vehicle involved in crash.

1 'No Injury'
2 'Possible Injury'
3 'Non- Incapacitating Injury'
4 'Incapacitating Injury'
5 'Fatal Injury'
6 'Unknown'

Driver Safety Equipment — SAS Name: DRV_REST

Definition: Type of safety restraint used by the driver.

Motorist
01 'Non Used (Motorist)'
02 'Shoulder Belt Only (Motorist)'
03 'Lap Belt Only (Motorist)'
04 'Shoulder/Lap Belt (Motorist)'
05 'Child Safety Seat (Motorist)'
06 'Mc Helmet Used (Motorist)'
07 'Use Unknown (Motorist)'

Non-Motorist
08 'None Used (Non-Motorist)'
09 'Helmet Used (Non-Motorist)'
10 'Protective Pads (Non-Motorist)'
11 'Reflective Clothing (Non-Motorist)'
12 'Lighting (Non-Motorist)'
13 'Other (Non-Motorist)'
14 'Unknown (Non-Motorist)'

Drive Sex — SAS Name: DRV_SEX

Definition: Sex of the driver of the vehicle involved in crash.

'U' 'Unknown'
'M' 'Male'
'F' 'Female'

In Emergency Response — SAS Name: EMER_USE

Definition: Whether emergency response was required for the occupants of this vehicle.

Additional Information: Variable added in 2000.

1 'No'
2 'Yes'
3 'Unknown'

Sequence of Events 1 — SAS Name: EVENT 1
Sequence of Events 2 — SAS Name: EVENT 2
Sequence of Events 3 — SAS Name: EVENT 3
Sequence of Events 4 — SAS Name: EVENT 4

Definition: First, second, third, and fourth event in the crash sequence of this vehicle.

Additional Information: Variables added in 2000.

Non-Collision
01 'Overturn/Rollover'
02 'Fire/Explosion'
03 'Immersion'
04 'Jackknife'
05 'Cargo/Equipment Loss/Shift'
06 'Equipment Failure'
07 'Separation Of Units'
08 'Ran Off Road Right'

09 'Ran Off Road Left'
10 'Cross Median/Centerline'
11 'Downhill Runaway'
12 'Other Non-Collision'
13 'Unknown Non-Collision'

Collision W/Person, Vehicle, Or Object Not Fixed
14 'Pedestrian'
15 'Pedalcycle'
16 'Railway Vehicle'
17 'Animal - Farm'
18 'Animal - Deer'
19 'Animal - Other'
20 'Motor Vehicle In Transport'
21 'Parked Motor Vehicle'
22 'Work Zone Maintenance Equipment'
23 'Other Movable Object'
24 'Unknown Movable Object'

Collision With Fixed Object
25 'Impact Attenuator/Crash Cushion'
26 'Bridge Overhead Structure'
27 'Bridge Pier Or Abutment'
28 'Bridge Parapet'
29 'Bridge Rail'
30 'Guardrail Face'
31 'Guardrail End'
32 'Median Barrier'
33 'Highway Traffic Sign Post'
34 'Overhead Sign Post'
35 'Light/Luminaries Support'
36 'Utility Pole'
37 'Other Post, Pole Or Support'
38 'Culvert'
39 'Curb'

40 'Ditch'
41 'Embankment'
42 'Fence'
43 'Mailbox'
44 'Tree'
45 'Other Fixed Object'
46 'Work Zone Maintenance Equipment'
47 'Unknown Fixed Object'
48 'Other'
49 'Unknown'

First Harmful Event — SAS Name: F_HARM

Definition: The first harmful event for this vehicle.

1 'Event 1'
2 'Event 2'
3 'Event 3'
4 'Event 4'
5 'Unknown'

Fire — SAS Name: FIRE

Definition: Whether or not the crash resulted in a fire in this vehicle.

Additional Information: Variable discontinued in 2000.

0 'Not Coded'
1 'No Fire'
2 'Fire Due To Crash'
3 'Other Fire'

Truck/Bus Weight — SAS Name: GVWR

Definition: The registered Gross Vehicle Weight of the Truck/Bus involved in the crash

1 '< 10000 LBS'
2 '10001-26000 LBS'
3 'MORE THAN 26000 LBS'

Hazardous Material Released — SAS Name: HAZMATRL

Definition: Whether or not hazardous material was released from this vehicle when the crash occurred.

Additional Information: Variable added in 2000.

1 'No'
2 'Yes'
3 'Not Applicable'
4 'Unknown'

Hazardous Material Placard — SAS Name: HAZPLACD

Definition: Whether the vehicle had a hazardous material placard.

Additional Information: Variable added in 2000.

1 'No'
2 'Yes'
3 'Unknown'

Vehicle Insured — SAS Name: INSURFLG

Definition: Whether this vehicle was insured.

1 'Vehicle Insured'
2 'Vehicle Not Insured'
3 'Not Coded'

Make Of Vehicle — SAS Name: MAKE

Definition: Make of this vehicle.

Pre-Crash Actions — SAS Name: MISCACT1

Definition: Pre-crash action of the vehicle or non-motorist.

Additional Information: Variable added in 2000.

MOTORIST

01 'Movements Essentially Straight Head'
02 'Backing'
03 'Changing Lanes'
04 'Overtaking/Passing'
05 'Turning Right'
06 'Turning Left'
07 'Making U-Turn'
08 'Entering Traffic Lane'
09 'Leaving Traffic Lane'
10 'Parked'
11 'Slowing/Stopped In Traffic'
12 'Driverless'
13 'Other'
14 'Unknown'

Non-Motorist

15 'Entering/Crossing In Specified Location'
16 'Walking, Running, Jogging, Playing, Cycling'
17 'Working'
18 'Pushing Vehicle'
19 'Approaching/Leaving Vehicle'
20 'Playing/Working On Vehicle'
21 'Standing'
22 'Other'
23 'Unknown'

Model of Vehicle

SAS Name: MODEL

Definition: Model of this motor vehicle.

Most Harmful Event

SAS Name: MOSTHARM

Definition: Most harmful even in the crash sequence for this vehicle.

1 'Event 1'
2 'Event 2'
3 'Event 3'
4 'Event 4'
5 'Unknown'

Movement of Vehicle — SAS Name: MOVMNT

Definition: The movement of the vehicle or non-motorist involved in the crash

Additional Information: Codes 1-17 are for driver actions and 18 onwards are for pedestrian actions.

00	'Not Stated'
01	'Going Straight'
02	'Turning Right'
03	'Turning Left'
04	'Turning On Red Light'
05	'Making U-Turn'
06	'Stopped To Turn'
07	'Stopped In Traffic'
08	'Parking / Unparking'
09	'Parked'
10	'Backing'
11	'Passing'
12	'Changing Lanes'
13	'Merging / Exiting Ramp'
14	'Out Of Control'
15	'Swerving'
16	'Driverless Vehicle'
17	'Other Driver Action'
18	'Crossing At Intersection'
19	'Crossing - Not At Intersection'
20	'Walking With Traffic'
21	'Walking Against Traffic'
22	'Playing In Roadway'
23	'Working On Roadway'
24	'Entering / Leaving Vehicle'
25	'Pushing / Working On Vehicle In Roadway'
26	'Other - In Roadway'
27	'On Shoulder Or Sidewalk'

Number of Occupants

SAS Name: NUM_OCCS

Definition: Number of occupants in this vehicle.

1 - 4	'01 - 04'
5 - 10	'05 - 10'
11 - 20	'11 - 20'
21 - 50	'21 - 50'
51 - HIGH	'> 50'

Number of Vehicles

SAS Name: NUMVEH

Definition: Number of vehicles involved in the crash

Object Struck By Vehicle

SAS Name: OBJECT1

Definition: Type of object struck by this vehicle.

Additional Information: Variable discontinued in 2000.

00	'Object-Not-Stated'
01	'Nothing-Struck'
02	'Utility-Pole'
03	'Traffic-Sign'
04	'Bridge-Or-Culvert'
05	'Guardrail'
06	'Fence'
07	'Tree'
08	'Shrubbery'
09	'Curb'
10	'Ditch'
11	'Embankment'
12	'Building'
13	'Mailbox'
14	'Construction-Barricade'
15	'Fire-Hydrant'
16	'Other-Fixed Object'

ODOT -At-Fault-Flag **SAS Name: ODT_ATFAULT**

Definition: Fault flag of this vehicle.

ODOT-People-Found-Count **SAS Name: ODT_PERSON_CNT**

Definition: People found in this vehicle (Ohio DOT internal use only).

Vehicle Ownership **SAS Name: OWNERID**

Definition: The ownership of this vehicle.

0 'Owner-Not-Stated'
1 'City-Owned'
2 'County-Owned'
3 'State-Owned'
4 'Federal-Owned'
5 'Privately-Owned'
6 'Military-Owned'
7 'Other-Public-Owned'
8 'State-Highway-Patrol'

Non-Motorist Location Prior To Impact — SAS Name: PED_LOC

Definition: Location of the non-motorist prior to the crash.

01 'Marked Crosswalk At Intersection'
02 'At Intersection But No Crosswalk'
03 'Non-Intersection Crosswalk'
04 'Driveway Access Crosswalk'
05 'In Roadway'
06 'Not In Roadway'
07 'Median (But No On Shoulder)'
08 'Island'
09 'Shoulder'
10 'Sidewalk'
11 'Within 10 Feet Of Roadway (But Not Shoulder, Median, Sidewalk Or Island)'
12 'Beyond 10 Feet Of Roadway (Within Trafficway)'
13 'Outside Trafficway'
14 'Shared Use Paths Or Trails'
15 'Unknown'

Point of impact — SAS Name: POC1

Definition: Point of impact for this vehicle.

01 'None'
02 'Center Front'
03 'Right Front'
04 'Right Side'
05 'Right Rear'
06 'Rear Center'
07 'Left Rear'
08 'Left Side'
09 'Left Front'
10 'Top And Windows'
11 'Undercarriage'
12 'Load/Trailer'
13 'Total (All Areas)'
14 'Other'
15 'Unknown'

Public Property Damage — SAS Name: PUB_PROP

Definition: Public property damage performed by the vehicle involved in the crash

Additional Information: Variable discontinued in 2000.

'N' 'No Public Property Damage'
'Y' 'Public Property Damaged'

Speed Limit of Road — SAS Name: SPD_LIMT

Definition: Speed limit of the road traveled by this vehicle.

Additional Information: 5-20 Contains all speeds less than or equal to 20 recorded from 1997 to 1999. 56-65 Contains all speeds greater than or equal to 56 recorded from 1997 to 1999.

0 'Posted-Speed-Not-Stated'
5 - 20 'Posted-Under-Twenty'
25 'Posted-Twenty-Five'
30 'Posted-Thirty'
35 'Posted-Thirty-Five'
40 'Posted-Fourty'
45 'Posted-Fourty-Five'
50 'Posted-Fifty'
55 'Posted-Fifty-Five'
56 - 65 'Posted Over Fifty-Five'
Other 'Error/Other Codes';

Striking/Struck — SAS Name: STRIKING

Definition: Whether this vehicle was the striking or struck vehicle.

Additional Information: Variable added in 2000.

1 'Non-Contact'
2 'Non-Collision'
3 'Striking'
4 'Struck'
5 'Both Striking And Struck'
6 'Unknown'

Towed Flag — SAS Name: TOWED

Definition: Indicates whether this vehicle was towed or not

1 'Yes'
2 'No'

Traffic Control of Vehicle — SAS Name: TRF_CNTL

Definition: Traffic control devices for the roadway being traveled by this vehicle.

Additional Information: Categories 20 and 21 apply to data generated before 2000.

00	'Traffic Control Not Stated'
01	'No Controls'
02	'Stop Sign'
03	'Yield Sign'
04	'Traffic Signal'
05	'Traffic Flashers'
06	'School Zone'
07	'Railroad Crossbucks'
08	'Railroad Flashers'
09	'Railroad Adgates'
10	'Construction Barricades'
11	'Police Officer'
12	'Pavement Markings'
13	'Crosswalk Lines'
14	'Walk/Dont Walk Signal'
15	'Traffic Control Device Inoperative, Missing, Obscured'
16	'Other'
17	'Not Reported'
20	'No Traffic Control-Driver'
21	'No Traffic Control-Pedestrian'

Cargo Body Type

SAS Name: TRK_BODY

Definition: The type of the cargo body for this vehicle.

Additional Information: Variable added in 2000.

01 'Not Applicable'
02 'Bus (9-15 Including Driver)'
03 'Van/Enclosed Box'
04 'Grain/Chips/Gravel'
05 'Pole'
06 'Cargo Tank'
07 'Flatbed'
08 'Dump'
09 'Concrete Mixer'
10 'Auto Transporter'
11 'Garbage/Refuse'
12 'Other'
13 'Unknown'

Type of Truck Load

SAS Name: TRK_LOAD

Definition: The type of load carried by this commercial vehicle.

Additional Information: Variable discontinued in 2000.

0 'Truck-Load-Not-Stated'
1 'Empty'
2 'Perishable-Goods'
3 'General-Freight'
4 'Metal-Or-Heavy-Machinery'
5 'Hazardous-Gas'
6 'Hazardous-Liquid'
7 'Hazardous-Solid'
8 'Radioactive-Material'

Number of Truck Axles — SAS Name: TRKAXLES

Definition: Number of axles of this commercial vehicle.

Speed Detected — SAS Name: TRVL_SPD

Definition: The method used for estimating vehicle travel speed.

1 'Stated'
2 'Estimated'

Vehicle Underride/Override — SAS Name: UNDEROVR

Definition: Whether this vehicle underrides (e.g., goes under) or overrides (e.g., runs over) another vehicle in this crash.

1 'No Underride Or Override'
2 'Underride, Compartment Intrusion'
3 'Underride, No Compartment Inrrusion'
4 'Underride, Compartment Untrusion Unknown'
5 'Override, Motorvehicle In Transport'
6 'Override, Other Vehicle'
7 'Unknown'

Vehicle Disposition — SAS Name: VEH_DISP

Definition: The disposition of this vehicle.

0 'Not Stated'
1 'Driven From Scene'
2 'Remained At Scene'
3 'Towed'

Vehicle/Non-Motorist Direction — SAS Name: VEH_N_FROM

Definition: The direction from which the vehicle of non-motorist was traveling.

1 'North'
2 'South'
3 'East'
4 'West'
5 'NE'
6 'NW'
7 'SE'
8 'SW'
9 'Unknown'

Vehicle/Non-Motorist Direction To — SAS Name: VEH_N_TO

Definition: The direction to which this vehicle or non-motorist was traveling.

1 'North'
2 'South'
3 'East'
4 'West'
5 'NE'
6 'NW'
7 'SE'
8 'SW'
9 'Unknown'

Speed of Vehicle

SAS Name: VEH_SPEED_POST_2000

Definition: Estimated speed of this vehicle.

Additional Information: Variable added in 2000.

0	'Veh-Speed-Not-Stated'
1 - 20	'Under 20'
21 - 25	'Speed 21-25'
26 - 35	'Speed 26-35'
36 - 45	'Speed 36-45'
46 - 55	'Speed 46-55'
56 - 65	'Speed 56-65'
66 - 75	'Speed 66-75'
76 -High	'Over 75'

Estimated Speed of Vehicle

SAS Name: VEH_SPEED_PRE_2000

Definition: Estimated speed of this vehicle.

Additional Information: Variable discontinued in 2000.

0	'Posted-Speed-Not-Stated'
1	'Posted-Under-Twenty'
2	'Posted-Twenty-Five'
3	'Posted-Thirty'
4	'Posted-Thirty-Five'
5	'Posted-Fourty'
6	'Posted-Fourty-Five'
7	'Posted-Fifty'
8	'Posted-Fifty-Five'
9	'Posted Over Fifty-Five (65)'

Primary Condition 1 — SAS Name: VEHCOND1

Primary Condition 2 — SAS Name: VEHCOND2

Definition: Vehicle components that may have contributed to the crash.

00 'Not Stated'
01 'Turn Signals'
02 'Head Lamps'
03 'Tail Lamps'
04 'Brakes'
05 'Steering'
06 'Tire Blowout'
07 'Worn Or Slick Tires'
08 'Trailer Equipment'
09 'Motor'
10 'Disabled From Prior Crash'
11 'Other Defects'

Vehicle Number — SAS Name: VEHNO

Definition: Relative vehicle number.

Vehicle State — SAS Name: VEHSTATE

Definition: State of registration for this vehicle.

Additional Information: Linkage Variable.

Vehicle Type — SAS Name: VEHTYPE

Definition: Type of vehicle involved in the crash.

Additional Information: Categories 50-55 apply to data generated before 2000.

00 'Vehicle-Not-Stated'
01 'Sub-Compact'
02 'Compact'

03 'Mid-Size'
04 'Full-Size 2000+'
05 'Minivan'
06 'Sports Utility Vehicle'
07 'Pickup-Truck'
08 'Panel/Van'
09 'Single Unit Truck 2 Axles, 6 Tires'
10 'Single Unit Truck > 3 Axles'
11 'Truck-Trailer'
12 'Truck-Tractor Bobtail'
13 'Tractor-Semi-Trailer'
14 'Tractor-Double-Short'
15 'Tractor-Double-Long'
16 'Fifth-Wheel Or Convert Dolly'
17 'Tractor Triples'
18 'Motorcycle'
19 'Motorized-Bicycle'
20 'School-Bus'
21 'Church-Bus'
22 'Public-Bus'
23 'Other Bus'
24 'Police-Vehicle'
25 'Fire-Truck'
26 'Ambulance-Rescue'
27 'Taxi'
28 'Motor-Home'
29 'Train'
30 'Farm-Vehicle'
31 'Farm-Equipment'
32 'Snowmobile'
33 'Construction-Equipment'
34 'All Others'
35 'Animal-With-Rider'
36 'Animal-With-Buggy'
37 'Bicycle'

38 'Pedestrian'
39 'Pedalcyclist'
40 'Skater'
41 'Other Non-Motorist'
42 'Unknown'
50 'Straight-Truck'
51 'Tractor Double Trailer'
52 'Mc-Up-To-350cc'
53 'Mc-351cc-750cc'
54 'Mc-Over-750cc'
55 'Full Size Pre 2000'

Vehicle Model Year — SAS Name: VEHYR

Definition: Model year of this vehicle.

Additional Information: Model Year of the Vehicle (YYYY).

VIN Number — SAS Name: VIN

Definition: VIN number of this vehicle.

Additional Information: Vehicle Identification Number.

List of Elements for the OH Injured Occupants Subfile

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
AGE	OCCUPANT AGE	Occupants	NUM	92
AIRBAG	AIRBAG	Occupants	NUM	93
AIRBAG_SW	AIRBAG SWITCH	Occupants	NUM	93
AIRBAG_SAW	AIRBAG SWITCH	Occupants	NUM	93
ALCOHOL_TEST_STATUS	ALCOHOL TEST STATUS	Occupants	NUM	94
ALTSTTYP	ALCOHOL TEST TYPE	Occupants	NUM	94
ALSTTYP	ALCOHOL TEST TYPE	Occupants	NUM	94
BAC	BLOOD ALCOHOL CONTENT IN %	Occupants	CHA(3)	95
CASENO	UNIQUE ACCIDENT CASE NUMBER	Occupants	CHA(11)	95
CIT_LOC_CDE	CITATION LOCAL CODE	Occupants	NUM	95
CITATION	CITATION GIVEN	Occupants	CHA(11)	95
DL_CLASS	DL CLASS	Occupants	CHA(2)	96
DL_STATE	DL STATE	Occupants	CHA(2)	96
DLCOUNTY	DL COUNTY	Occupants	CHA(3)	96
DRG_RES1	DRUG TEST 1 RESULT	Occupants	NUM	96
DRG_RES2	DRUG TEST 2 RESULT	Occupants	NUM	97
DRUG_INV	DRUGS INVOLVED	Occupants	NUM	97
DRUG_TEST_STATUS	DRUGS TEST STATUS	Occupants	NUM	97
DRUG_TEST_TYPE	DRUG TEST TYPE	Occupants	NUM	98
EJECT	EJECTED FROM VEHICLE	Occupants	NUM	98
HELMET	HELMET USE	Occupants	CHA(1)	98
INJ	OCCUPANT INJURY	Occupants	NUM	99
P_TYPE	OCCUPANT TYPE	Occupants	CHA(1)	99
PHYSCOND	PEDESTRIAN PHYSICAL CONDITION	Occupants	NUM	99

List of Elements for the OH Injured Occupants Subfile

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
REST1	SAFETY EQUIPMENT	Occupants	NUM	100
SEATPOS	SEATING POSITION	Occupants	NUM	101
SEX	OCCUPANT GENDER	Occupants	CHA(1)	102
SOB_TST	ALCOHOL INVOLVED	Occupants	NUM	102
TAKEN_BY	INJURED TAKEN BY	Occupants	NUM	102
TRAPPED	TRAPPED	Occupants	NUM	103
VEHNO	VEHICLE NUMBER	Occupants	NUM	103

NOTE: SAS variable names and longer explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Occupant Age — SAS Name: AGE

Definition: Age of the injured/killed occupant.

00	'Not Stated'
01	'Infant - 1 Yr'
02-04	'02-04 Yrs'
05-10	'05-10 Yrs'
11-14	'11-14 Yrs'
15	' 15 Yrs'
16	' 16 Yrs'
17	' 17 Yrs'
18	' 18 Yrs'
19	' 19 Yrs'
20	' 20 Yrs'
21-25	'21-25 Yrs'
26-30	'26-30 Yrs'
31-35	'31-35 Yrs'
36-45	'36-45 Yrs'
46-55	'46-55 Yrs'
56-65	'56-65 Yrs'
66-89	'66-89 Yrs'
90-99	'90+Yrs'
100-999	'Error Codes'

Airbag — SAS Name: AIRBAG

Definition: Whether or not the airbag for this occupant deployed in the crash.

Additional Information: Variable added in 2000.

1 'Not-Deployed'
2 'Deployed-Front'
3 'Deployed-Side'
4 'Deployed Both Front/Side'
5 'Not Applicable'
6 'Unknown'

Airbag Switch — SAS Name: AIRBAG_SW

Definition: Airbag switch position for this occupant.

Additional Information: Name of the variable changed from AIRBAG_SW to AIRBAG_SAW in 2007.

1 'Not Present'
2 'In On Position'
3 'In Off Position'
4 'Unknown'

Airbag Switch — SAS Name: AIRBAG_SAW

Definition: Airbag switch position for this occupant.

Additional Information: Name of the variable changed from AIRBAG_SW to AIRBAG_SAW in 2007.

1 'Not Present'
2 'In On Position'
3 'In Off Position'
4 'Unknown'

Alcohol Test Status — SAS Name: ALCOHOL_TEST_STATUS

Definition: Alcohol test status for this driver.

Additional Information: Categories 7 and 8 apply for data generated before 2000.

1 'None'
2 'Test Refused'
3 'Test Given, Contaminated Sample/Unusable'
4 'Test Given, Results Known'
5 'Test Given, Results Unknown'
6 'Unknown'
7 'No'
8 'Yes'

Alcohol Test Type — SAS Name: ALTSTTYP

Definition: Alcohol test type performed on this driver.

Additional Information: Name of the variable changed from ALTSTTYP to ALSTTYP in 2007.

1 'None'
2 'Blood'
3 'Urine'
4 'Breath'
5 'Other'

Alcohol Test Type — SAS Name: ALSTTYP

Definition: Alcohol test type performed on the driver of this vehicle.

Additional Information: Name of the variable changed from ALTSTTYP to ALSTTYP in 2007.

1 'None'
2 'Blood'
3 'Urine'
4 'Breath'
5 'Other'

Blood alcohol content in % **SAS Name: BAC**

Definition: Percentage of blood alcohol present for this driver

Unique Accident Case Number **SAS Name: CASENO**

Definition: Accident case number

Additional Information: Accident Case Number. The first 4 digits show the accident year.

Citation Local Code **SAS Name: CIT_LOC_CDE**

Definition: Citation local code

Additional Information: Variable added in 2000.

1	'No'
2	'Yes'

Citation Given **SAS Name: CITATION**

Definition: Citation given to this driver.

Additional Information: Variable discontinued in 2000.

'Y'	'Yes'
'N'	'No'
' '	'Unknown'

Driver License Class — SAS Name: DL_CLASS

Definition: Class of driver license for this driver.

Additional Information: Variable discontinued in 2000.

'A'	'Combination'
'B'	'Heavy Straight'
'C'	'Small Vehicle'
'D'	'Operator'
'F'	'Chauffeur'
'M1'	'Motorcycle Only'
'M2'	'Moped Only'
'M3'	'Three-Wheel Motorcycle Only'
' '	'Not Coded'

Driver License State — SAS Name: DL_STATE

Definition: State of the drier license for this driver.

Driver License COUNTY — SAS Name: DLCOUNTY

Definition: County of the driving license for this driver.

Additional Information: See formats in the accident section of the guidebook.

Drug Test 1 Result — SAS Name: DRG_RES1

Definition: Drug test results for this driver.

1	'None'
2	'Marijuana'
3	'Cocaine'
4	'Opiates'
5	'Amphetamnes'
6	'Pcp'
7	'Other'
8	'Unknown At Time Of Reporting'

Drug Test 2 Result — SAS Name: DRG_RES2

Definition: Drug test results for this driver.

1 'None'
2 'Marijuana'
3 'Cocaine'
4 'Opiates'
5 'Amphetamnes'
6 'Pcp'
7 'Other'
8 'Unknown At Time Of Reporting'

Drugs Involved — SAS Name: DRUG_INV

Definition: Drugs used by this driver.

Additional Information: Variable discontinued in 2000.

0 'Drugs-Not-Stated'
1 'No-Drugs-Detected'
2 'Using-Prescribed-Drug'
3 'Using-Illicit-Drug'

Drugs Test Status — SAS Name: DRUG_TEST_STATUS

Definition: Drugs test status for this driver.

Additional Information: Categories 7 and 8 apply for data generated before 2000.

1 'None'
2 'Test Refused'
3 'Test Given, Contaminated Sample/Unusable'
4 'Test Given, Results Known'
5 'Test Given, Results Unknown'
6 'Unknown'
7 'No'
8 'Yes'

Drug Test Type — SAS Name: DRUG_TEST_TYPE

Definition: Drug test type used for this driver.

1 'None'
2 'Blood'
3 'Urine'
4 'Other'

Ejected From Vehicle — SAS Name: EJECT

Definition: Whether or not the occupant was ejected when the crash occurred.

Additional Information: Category 6 applies for data generated before 2000.

. 'Not Coded'
1 'Not Ejected'
2 'Totally Ejected'
3 'Partially Ejected'
4 'Not Applicable'
5 'Unknown'
6 'Trapped'

Helmet Use — SAS Name: HELMET

Definition: Helmet use for this driver.

Additional Information: Variable discontinued in 2000.

0 'Not Stated'
1 'No Helmet'
2 'Full Coverage Helmet'
3 'Partial Coverage Helmet'
4 'Other Type Helmet'

Occupant Injury — SAS Name: INJ

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

1 'No Injury'
2 'Possible Injury'
3 'Non-Incapacitating Injury'
4 'Incapacitating Injury'
5 'Fatal Injury'
6 'Unknown'

Occupant Type — SAS Name: P_TYPE

Definition: Occupant type for this occupant.

'D' 'Driver'
'O' 'Occupant'
'P' 'Pedestrian'
' ' 'Unknown'

Pedestrian Physical Condition — SAS Name: PHYSCOND

Definition: Physical condition of occupant.

1 = 'APPARENTLY NORMAL'
2 = 'PHYSICAL IMPAIRMENT'
3 = 'EMOTIONAL'
4 = 'ILLNESS'
5 = 'FELL ASLEEP, FAINTED, FATIGUED, ETC'
6 = 'UNDER THE INFLUENCE OF MEDICATIONS/DRUGS/ALCOHOL'
7 = 'OTHER'
8 = 'UNKNOWN'
9 = 'FATIGUED' (Pre 2000 format)
10 = 'ASLEEP' (Pre 2000 format)

Safety Equipment — SAS Name: REST1

Definition: Safety equipment used by occupant.

Additional Information: Categories 15-17 apply for data generated before 2000.

MOTORIST

01 'Non Used (Motorist)'
02 'Shoulder Belt Only (Motorist)'
03 'Lap Belt Only (Motorist)'
04 'Shoulder/Lap Belt (Motorist)'
05 'Child Safety Seat (Motorist)'
06 'Mc Helmet Used (Motorist)'
07 'Use Unknown (Motorist)'

NON-MOTORIST

08 'None Used (Non-Motorist)'
09 'Helmet Used (Non-Motorist)'
10 'Protective Pads (Non-Motorist)'
11 'Reflective Clothing (Non-Motorist)'
12 'Lighting (Non-Motorist)'
13 'Other (Non-Motorist)'
14 'Unknown (Non-Motorist)'
15 'Not Stated'
16 'Air Bag'
17 'None Installed'

Seating Position — SAS Name: SEATPOS

Definition: Occupant position in vehicle when the crash occurred.

Additional Information: Categories 20-26 apply for data generated before 2000.

. 'Not Coded'
01 'Front - Left (Mc Driver)'
02 'Front - Middle'
03 'Front - Right'
04 'Second - Left (Mc Pass)'
05 'Second - Middle'
06 'Second - Right'
07 'Third - Left (Mc Passenger/Side Car)'

08 'Third - Middle'
09 'Third - Right'
10 'Sleeper Section Of Cab'
11 'Enclosed Cargo Area'
12 'Unenclosed Cargo Area'
13 'Trailing Unit'
14 'Exterior'
15 'Other'
16 'Non-Motorist'
17 'Unknown'
20 'Rear Left'
21 'Rear Center'
22 'Rear Right'
23 'Hood / Trunk / Rear Of Vehicle'
24 'Motorcycle Front'
25 'Motorcylce Rear'
26 'Pedestrian'

Occupant Gender — SAS Name: SEX

Definition: Sex of injured/killed occupant.

'M' 'Male'
'F' 'Female'
'U' 'Unknown'

Alcohol Involved — SAS Name: SOB_TST

Definition: Alcohol present in this driver.

Additional Information: Categories 0 and 7 apply for data generated before 2000.

. 'Not Coded'
1 'None'
2 'Yes-Alcohol Suspected'
3 'Yes-HBD Not Impaired'
4 'Yes-Drugs Suspected'

5 'Yes-Alcohol/Drugs Suspected'
6 'Unknown'
7 'HBD Ability Impaired'
0 'Alcohol Not Stated'

Injured Taken By — SAS Name: TAKEN_BY

Definition: Who transported this injured occupant to a medical facility.

Additional Information: Variable added in 2000.

1 'None'
2 'EMS'
3 'Police'
4 'Other'
5 'Unknown'

Trapped — SAS Name: TRAPPED

Definition: Whether this occupant was trapped in the vehicle as a result of the crash.

Additional Information: Variable added in 2000.

1 'Not Trapped'
2 'Extricated By Mechanical Means'
3 'Freed By Non-Meshanical Means'
4 'Unknown'

Vehicle Number — SAS Name: VEHNO

Definition: Vehicle number for occupant's vehicle.

Additional Information: Linkage Variable.

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
AADT	WEIGHTED AVERAGE TOTAL ADT	Roadlog	NUM	108
AADT_BC	ADT FOR TYPE B AND C TRUCKS	Roadlog	NUM	109
AADT_PT	ADT FOR PASSENGER CARS AND A TYPE TRUCKS	Roadlog	NUM	109
AADT_YR	YEAR OF ADT COUNTS	Roadlog	CHA(2)	110
ACCESS	ACCESS CONTROL	Roadlog	CHA(1)	110
AREA_CDE	AREA CODE	Roadlog	NUM	110
BEGMP	BEGINNING MILE POST	Roadlog	NUM	110
CNT_TLOG	COUNTY TRUE LOG	Roadlog	NUM	110
CNTY_RTE	COUNTY ROUTE	Roadlog	CHA(8)	111
COUNTY	COUNTY	Roadlog	CHA(3)	111
DISTRICT	DISTRICT	Roadlog	NUM	111
DIVIDED	ROAD IDENTIFICATION	Roadlog	CHA(1)	111
ENDMP	END MILE POST	Roadlog	NUM	111
FED_ACES	FEDERAL ACCESS CONTROL	Roadlog	CHA(1)	112
FED_FACI	FHWA TYPE OF FACILITY	Roadlog	CHA(1)	112
FED_MEDW	FHWA MEDIAN WIDTH	Roadlog	CHA(3)	112
FED_SPSY	FHWA SPECIAL SYSTEMS	Roadlog	CHA(2)	113
FIPS_CDE	FIPS CODE	Roadlog	CHA(5)	113
FUNC_CLS	FUNCTIONAL CLASS	Roadlog	CHA(2)	114
HOV	FHWA HOV VEHICLES	Roadlog	NUM	114
HPMS	HPMS CODES	Roadlog	CHA(1)	115
ID_CNTRL	ID CONTROL CODE	Roadlog	CHA(1)	115
INV_DTE	INVENTORY DATE	Roadlog	CHA(4)	115
JUR_TYPE	JURISDICTION	Roadlog	CHA(1)	115
LRS_BGPT	LRS BEGINNING MILE POST	Roadlog	CHA(7)	116

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
LRS_BNDE	LRS B NODE	Roadlog	CHA(4)	116
LRS_EDPT	LRS ENDING MILE POINT	Roadlog	CHA(7)	116
LRS_ENDE	LRS END NODE	Roadlog	CHA(4)	117
LRS_ID	LRS INVENTORY ROUTE NUMBER(10	Roadlog	CHA(12)	117
LRS_INRT	LRS INVENTORY ROUTE NUMBER	Roadlog	CHA(10)	117
LRS_NDCN	LRS NODE CODE (COUNTY/STATE)	Roadlog	CHA(2)	118
LRS_NDNM	LRS NODE NAME	Roadlog	CHA(10)	118
LRS_NDSQ	LRS NODE SEQUENCE NUMBER	Roadlog	CHA(3)	118
LRS_NRDE	LRS NODE RTE DESIGNATION	Roadlog	CHA(5)	118
LRS_SBRT	LRS SUBROUTE NUMBER	Roadlog	CHA(2)	118
MED_TYPE	FHWA MEDIAN TYPE	Roadlog	CHA(1)	119
MED_WID	MEDIAN WIDTH	Roadlog	NUM	119
MI_CLASS	MILE CLASS (INCORPORATED/UNINCORPORATED)	Roadlog	CHA(1)	120
MUN_NAM	MUNICIPALITY NAME	Roadlog	CHA(16)	120
MVMT	MILLION VEHICLE MILES OF TRAVEL	Roadlog	NUM	120
NHS_CDE	NATIONAL HIGHWAY SYSTEM CODE	Roadlog	CHA(1)	120
NHS_INTR	NHS INTERMODAL NUMBER	Roadlog	CHA(2)	121
NO_LANES	NUMBER OF LANES	Roadlog	NUM	121
PAS_NHS	PAS/NHS INTERSECTION MARKER	Roadlog	CHA(1)	121
PAV_ROUG	PAVEMENT ROUGHNESS	Roadlog	CHA(3)	121
PAVECOND	PAVEMENT CONDITION	Roadlog	CHA(2)	122
PK_LANES	PEAK LOAD LANES	Roadlog	CHA(3)	122
POP_GRP	POPULATION	Roadlog	CHA(4)	122
RD_WIDTH	ROADWAY WIDTH THRU LANES N/MEDIANS	Roadlog	NUM	123
RODWYCLS	ROADWAY TYPES	Roadlog	CHA(2)	123

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
RTE_NBR	STATE ROUTE NUMBER	Roadlog	CHA(5)	124
RTE_SUFX	STATE ROUTE NUMBER SUFFIX	Roadlog	CHA(1)	124
RTE_TYPE	ROUTE TYPE	Roadlog	NUM	124
RURUID	POPULATION (OVE/UNDER 5000)	Roadlog	CHA(1)	125
SCENIC	SCENIC BYWAYS	Roadlog	CHA(1)	125
SEG_LNG	SEGMENT LENGTH	Roadlog	NUM	125
SEQ_NBR	SEQUENCE NUMBER	Roadlog	CHA(1)	125
SHWD_LEFT_INSIDE	SHOULDER LEFT INSIDE	Roadlog	NUM	126
SHWD_LEFT_OUTSIDE	SHOULDER LEFT OUTSIDE	Roadlog	NUM	126
SHWD_RIGHT_INSIDE	SHOULDER RIGHT INSIDE	Roadlog	NUM	126
SHWD_RIGHT _OUTSIDE	SHOULDER RIGHT OUTSIDE	Roadlog	NUM	127
SPDLIMT	SPEED LIMIT	Roadlog	NUM	127
SRF_BAS	STANDARD BASE CLASSIFICATION	Roadlog	CHA(1)	128
SRF_BASL	LEFT SIDE SURFACE BASE TYPE	Roadlog	CHA(1)	128
SRF_BASR	RIGHT SIDE SURFACE BASE CLASS TYPE	Roadlog	CHA(1)	129
SRF_TYPF	SUMMARY OF FHWA SURFACE TYPE	Roadlog	CHA(2)	130
SRF_TYPL	LEFT SIDE STANDARD SURFACE TYPE	Roadlog	CHA(1)	131
SRF_TYPR	RIGHT SIDE SURFACE CLASS TYPE	Roadlog	CHA(1)	132
SRFTYPLL	LEFT SIDE FHWA SURFACE TYPE	Roadlog	CHA(2)	133
SRFTYPLR	FHWA RIGHT SIDE SURFACE TYPE	Roadlog	CHA(2)	134
STAT_EQ	STATION EQUATION SORT FILED	Roadlog	NUM	134
STN_SUF	STREET NAME SUFFIX	Roadlog	CHA(4)	134
STR_PFX	STREET NAME DIRECTIONAL PREFIX	Roadlog	CHA(1)	135
STRT_DIR	STREET NAME DIRECTIONAL SUFFIX	Roadlog	CHA(1)	135
STRT_NAM	STREET NAME	Roadlog	CHA(22)	135

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
SURF_TYP	STANDARD SURFACE CLASSIFICATION	Roadlog	CHA(1)	136
SURF_WID	SURFACE WIDTH THRU LANES N/SHOULDERS	Roadlog	NUM	136
SURFWIDL	LEFT SIDE SURFACE WIDTH IN FEET	Roadlog	NUM	137
SURFWIDR	RIGHT SIDE SURFACE WIDTH IN FEET	Roadlog	NUM	138
SYS_CLAS	SYSTEM CLASS	Roadlog	CHA(1)	138
UPDT_YR	UPDATE YEAR	Roadlog	CHA(4)	138

NOTE: SAS variable names and explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Weighted Average total ADT — SAS Name: AADT

Definition: Calculated average AADT.

Additional Information: This variable gives the total AADT.

.	'Missing'
00000-000100	'0-100'
000101-000500	'101-500'
000501-001000	'501-1,000'
001001-002000	'1,001-2,000'
002001-005000	'2,001-5,000'
005001-010000	'5,001-10,000'
010001-015000	'10,000-15,000'
015001-020000	'15,001-20,000'
020001-040000	'20,001-40,000'
040001 - HIGH	'40,000 +'

ADT for Type B and C Trucks — SAS Name: AADT_BC

Definition: ADT information for type B and C trucks on the roadway segment

Additional Information: This variable gives the AADT for medium and large trucks. This includes tractor or truck with semi-trailers and trucks with trailers; single unit trucks most generally with dual rear tires (may be greater than 2-axle units).

.	'Missing'
00000-000100	'0-100'
000101-000500	'101-500'
000501-001000	'501-1,000'
001001-002000	'1,001-2,000'
002001-005000	'2,001-5,000'
005001-010000	'5,001-10,000'
010001-015000	'10,000-15,000'
015001-020000	'15,001-20,000'
020001-040000	'20,001-40,000'
040001 - HIGH	'40,000 +'

ADT for Passenger Cars and A Type Trucks — SAS Name: AADT_PT

Definition: ADT information for passenger cars and type A trucks on the roadway segment

Additional Information: This variable gives the AADT for passenger cars and small trucks. This includes panel and pick-up trucks, motorized recreational vehicles and school buses.

.	'Missing'
00000-000100	'0-100'
000101-000500	'101-500'
000501-001000	'501-1,000'
001001-002000	'1,001-2,000'
002001-005000	'2,001-5,000'
005001-010000	'5,001-10,000'
010001-015000	'10,000-15,000'
015001-020000	'15,001-20,000'
040001 - HIGH	'40,000 +'

Years of ADT Counts — SAS Name: AADT_YR

Definition: Year of ADT.

Access Control — SAS Name: ACCESS

Definition: Control of access.

Additional Information: Access control as defined by OH State. For example, 'F' indicates that Ohio DOT owns the access control and can change it whenever deemed required. The use of this variable may result in some difficulties and we recommend the use of FED_ACES to get information on the access control of segments.

'1' 'Full Access Control'
'2' 'Partial Access Control'
'3' 'No Access Control'
'N' 'No Control of Access'
'L' 'Limited Control of Access'
'F' 'Full Control of Access'
' ' 'Not Coded'

Area Code — SAS Name: AREA_CDE

Definition: Area code of the roadway segment

Beginning Mile Post — SAS Name: BEGMP

Definition: Calculated begin milepost.

County True Log — SAS Name: CNT_TLOG

Definition: County true log mileage of the roadway segment

Additional Information: This field is the true log mileage for the route within the county.

County Route — SAS Name: CNTY_RTE

Definition: County/route of the roadway segment

Additional Information: From year 2000, STATE_EQ is not required. Also RTE_SUFX became last digit of RTE_NBR.

County — SAS Name: COUNTY

Definition: County of the roadway segment.

Additional Information: See listings under Accident section of the guidebook.

District — SAS Name: DISTRICT

Definition: District of roadway segment.

Divided/Undivided — SAS Name: DIVIDED

Definition: Whether the road segment is divided or not.

' '	'Not Coded'
'D'	'Divided'
'U'	'Undivided'

End Mile Post — SAS Name: ENDMP

Definition: Calculated ending milepost.

Additional Information: Ending milepost in miles (XXX.XX).

Federal Access Control — SAS Name: FED_ACES

Definition: Federal access control of the roadway segment

Additional Information: Data is accurate for segments falling under category "1" beginning from 1998. 1997 data appears to have some errors. It should be noted that category "1" represents all interstates or interstates look alike segments with no at grade intersections. The accuracy of segments falling under other access control categories (2, 3 or 4), is still being reviewed.

'1' 'Multi-Lane; Median; Access Interchange; No Direct Private Access Control'
'2' 'Access At Interchange Or Public Street No Direct Private Access Allowed Unless Property Retains Deeded Rights And Then Only For Right Turn. (Left Turn May Be Allowed In Certain Circumstances)'
'3' 'No Direct Private Access If Property Has Another Reasonable Alternative Access Or Opportunity To Obtain Such Access; When Allowed, Generally For Right Turn'

FHWA Type of Facility — SAS Name: FED_FACI

Definition: FHWA type of facility of the roadway segment

Additional Information: FHWA HPMS required item.

'1' 'One Way Roadway'
'2' 'Two Way Roadway'
'3' 'One Way Structure (Bridge, Tunnel Etc.)'
'4' 'Two Way St (Bridge, Tunnel Etc.)'
'' 'Not Coded'

FHWA Median Width — SAS Name: FED_MEDW

Definition: FHWA median width of the roadway segment

NOTE: FHWA required Median width. OH collects this variable for FHWA purpose. We are not sure about the data quality of this variable and recommend the use of MED_WID for all purposes.

FHWA Special Systems — SAS Name: FED_SPSY

Definition: FHWA special systems information of the roadway segment

Additional Information: FHWA HPMS required item.

'00'	'Not On A Special System'
'01'	'Add To Interstate System (139 (C))'
'02'	'Add To Interstate System (Pre 03/09/84)'
'03'	'Add To Interstate System (Post 03/09/84)'
'04'	'Future Addition To The Interstate System'
'05'	'Section 332'
'06'	'Future Section 332'
'08'	'STRAHNET'
'11'	'Appalachian Dev Net'
'13'	'Indian Reserve Roads And Bridges'
'15'	'National Forest Highway System'
'16'	'National Forrest Development Roads And Trails'
'18'	'National Park Service Parkway'
'19'	'National Park Roads And Trails'
' '	'Not Coded'

FIPS Code (Generated For Muni Sections Only) — SAS Name: FIPS_CDE

Definition: FIPS code of the roadway segment

Functional Class — SAS Name: FUNC_CLS

Definition: Functional class.

'01'	'Principal Arterial (Rural Interstate)'
'02'	'Principal Arterial (Rural Others)'
'06'	'Minor Arterial (Rural)'
'07'	'Major Collector (Rural)'
'08'	'Minor Collector (Rural)'
'09'	'Local (Rural)'
'11'	'Principal Arterial (Urban Interstate)'
'12'	'Principal Arterial (Urban-Freeway & Expressway'
'14'	'Principal Arterial (Urban-Other)'
'16'	'Minor Arterial (Urban)'
'17'	'Collector (Urban)'
'19'	'Local (Urban)'
' '	'Not Coded'

FHWA HOV Vehicles — SAS Name: HOV

Definition: FHWA HOV lanes on the roadway segment

Additional Information: FHWA HPMS required item.

0	'No HOV Lanes'
1	'Exclusive HOV Lanes'
2	'Normal Through Lanes As HOV (Specific Times)'
3	'Shoulder/Parking Lanes As HOV (Specific Times)'
.	'Not Coded'

HPMS Codes

SAS Name: HPMS

Definition: HPMS codes of the roadway segment

Additional Information: An HPMS code indicates a section that was selected at random to be monitored periodically for changes, as defined in the FHWA HPMS field manual (HPMS Highway Performance Monitoring System).

'D' 'Donut Area HPMS'
'' 'Not Coded'
'*' 'HPMS -- Regular'

ID Control Code

SAS Name: ID_CNTRL

Definition: ID control code of the roadway segment

'0' 'Equation'
'1' 'State Line'
'2' 'County Line'
'3' 'Interchange Roadways'
'4' 'Junction'
'5' 'Overlap'
'9' 'Unusual Point'
'Z' 'Abandonment'
' ' 'Not Coded'

Inventory Date

SAS Name: INV_DTE

Definition: Inventory Date.

Jurisdiction

SAS Name: JUR_TYPE

Definition: Jurisdiction type of the roadway segment

'S' 'State'
'H' 'Turnpike'
' ' 'Not Coded'

LRS Beginning Mile Post — SAS Name: LRS_BGPT

Definition: LRS beginning milepost information of the roadway segment

LRS B Node — SAS Name: LRS_BNDE

Definition: LRS B node information of the roadway segment

Additional Information: It is used to build the node/link files for the LRS (Linear Referencing System). Up to four attributes (in any sequence) may be coded for the node. This field indicates the beginning of a node or the continuation of a node.

'0' 'Equation'
'1' 'State Line'
'2' 'County Line'
'3' 'Urbanized/Urban Area'
'4' 'Intersection/Junction'
'5' 'Overlap'
'6' 'Interchange'
'7' 'Overpass'
'8' 'Not An INT, Change In FUNC_CLS'
'9' 'Leave/Reenter'
'A' 'The True Beg Or End Of A Rte'
'C' 'NHS INTMDL ND (NO INT)'
'' 'Not Coded';

LRS Ending Mile Post — SAS Name: LRS_EDPT

Definition: LRS ending milepost information of the roadway segment

LRS End Node — SAS Name: LRS_ENDE

Definition: LRS end node information of the roadway segment

Additional Information: It is used to build the node/link files for the LRS (Linear Referencing System). Up to four attributes (in any sequence) may be coded for the node. This field indicates the ending of a node or the continuation of a node. The formats of these attributes are available with HSIS staff and will be provided upon request.

'0'	'Equation'
'1'	'State Line'
'2'	'County Line'
'3'	'Urbanized/Urban Area'
'4'	'Intersection/Junction'
'5'	'Overlap'
'6'	'Interchange'
'7'	'Overpass'
'8'	'Not An INT, Change In FUNC_CLS'
'9'	'Leave/Reenter'
'A'	'The True Beg Or End Of A Rte'
'C'	'NHS INTMDL ND (No INT)'
''	'Not Coded'

LRS Inventory Route Number (10 CHARAC) + LRS Sub-route Number — SAS Name: LRS_ID

Definition: LRS inventory route number and sub-route number information of the roadway segment

Additional Information: This field is used for HPMS Item 7B in the conversion. It is used as part of the LRS location identifier. If coded – record must be PAS (Principal Arterial System) or NHS (National Highway System) or Rural Minor Arterial (functional class is 06).

LRS Inventory Route Number — SAS Name: LRS_INRT

Definition: LRS inventory route number

Additional Information: This is a number used to uniquely identify a route within a county or perhaps throughout the state.

LRS Node Code (County) **SAS Name: LRS_NDCN**

Definition: LRS node code county information for the roadway segment

''	'Not Coded'
'IN'	'Indiana'
'KY'	'Kentucky'
'MI'	'Michigan'
'PA'	'Pennsylvania'
'WV'	'West Virginia'

LRS Node Name **SAS Name: LRS_NDNM**

Definition: LRS node name information of the roadway segment

Additional Information: It is used to build the node/link files for the LRS (Linear Referencing System). It is comprised of a node code, node route, and a node sequence number. It is used to identify a node. An '*' after the column numbers indicates that this field will be broken down into some individual fields immediately following this field. A '+' after the column numbers indicates that this is a sub-field.

LRS Node Sequence Number **SAS Name: LRS_NDSQ**

Definition: LRS node sequence number information of the roadway segment

LRS Node RTE Designation **SAS Name: LRS_NRDE**

Definition: LRS node RTE designation information of the roadway segment

LRS Subroute Number **SAS Name: LRS_SBRT**

Definition: LRS subroute number of information of the roadway segment

Additional Information: This is a number that uniquely identifies the AHEAD and BACK portions of an inventory route section where duplicate log points occur.

FHWA Median Type — SAS Name: MED_TYPE

Definition: Type of median on the roadway segment.

Additional Information: This variable has usable data only for 2001. We checked the total mileage for divided segments and segments having valid median types and found that they were consistent for only 2001 data. The use of this variable for years before 2001 is not recommended.

'1'	' None - No median or unprotected area less than 4 feet wide'
'2'	' Unprotected - Median exists with a width of 4 feet or more'
'3'	' Curbed - Barrier or mountable curbs with a minimum height of 4 inches'
'4'	' Positive Barrier- unspecified - Prevents vehicles from crossing median'
'5'	' Positive Barrier – flexible - Considerable deflection upon impact'
'6'	' Positive Barrier – semi-rigid - Some deflection upon impact'
'7'	' Positive Barrier – rigid - No deflection upon impact'
'8'	' Positive Barrier- unspecified – Pre 2012

Median Width — SAS Name: MED_WID

Definition: Median width of the roadway segment

Additional Information: This field is coded for divided highways and is blank for undivided highways. For 1997 – 2000 data, 99 indicates 99 or higher. For future years median widths greater than 99 is available. This variable is to be used to get information on Median widths for all analysis.

0	'No Width'
1-5	'1 - 5'
6-10	'6 - 10'
11-30	'11 -30'
31-50	'31 -50'
51-100	'51-100'
101 - HIGH	'100 +'

Mile Class (Incorporated /Unincorporated) — SAS Name: MI_CLASS

Definition: Mile class information of the roadway segment

'1'	'Rural'
'2'	'Municipal (Incorporated)'
'4'	'Rural And Municipal (Split)'
' '	'Not Coded'

Municipality Name — SAS Name: MUN_NAM

Definition: Municipality name of the roadway segment

Million Vehicle Miles of Travel (Created) — SAS Name: MVMT

Definition: Million vehicle miles traveled on road segment.

National Highway System Code — SAS Name: NHS_CDE

Definition: National highway system code information of the roadway segment

Additional Information: NHS replaces the old Federal-Aid system. All interstate routes are coded 'N'. Codes 2-9 (intermodal connectors) are new for June 1997 FHWA HPMS submittal.

'N'	'NHS (Regular)'
'H'	'Congressional Corridors'
'S'	'STRAHNET'
'C'	'STRAHNET Connectors'
'2'	'Major Airport'
'3'	'Major Port Facility'
'4'	'Major Amtrak Station'
'5'	'Major Rail/Truck Terminal'
'6'	'Major Intercity Bus Terminal'
'7'	'Major Public Transit / Multi-Modal Pas Terminal'
'8'	'Major Pipeline Terminal'
'9'	'Major Ferry Terminal'
' '	'Not Coded'

NHS Intermodal Number — SAS Number: NHS_INTR

Definition: NHS intermodal number information of the roadway segment

Additional Information: This field will be used to uniquely identify each NHS intermodal route.

Number of Lanes — SAS Number: NO_LANES

Definition: Number of lanes – total for both directions.

1	' 1 Lane'
2	' 2 Lanes'
3	' 3 Lanes'
4	' 4 Lanes'
5	' 5 Lanes'
6	' 6 Lanes'
7	' 7 Lanes'
8	' 8 Lanes'
9	' 9 Lanes'
10	'10 Lanes'
11	'11 Lanes'
12	'12 Lanes'

PAS/NHS Intersection Marker — SAS Name: PAS_NHS

Definition: PAS/NHS intersection marker information of the roadway segment

Additional Information: This field in needed for the Linear Referencing System (LRS) reporting required by HPMS.

'#'	'PAS-NHS Intersection'
' '	'Not A PAS NHS Intersection'

Pavement Roughness — SAS Name: PAV_ROUG

Definition: Pavement Roughness information of the roadway segment

Pavement Condition — SAS Name: PAVECOND

Definition: Pavement condition information of the roadway segment.

'00'-'10'	'PCR 0-1'
'11'-'20'	'PCR 1-2'
'21'-'30'	'PCR 2-3'
'31'-'40'	'PCR 3-4'
'41'-'50'	'PCR 4-5'

Peak Load Lanes — SAS Name: PK_LANES

Definition: Peak load lanes information for the roadway segment

Additional Information: Peak lanes are the prevailing number of thru lanes carrying traffic during peak hours of use.

Population — SAS Name: POP_GRP

Definition: Population group.

Additional Information: Population figure is in hundreds. This variable is populated only when MI_CLASS 2 (Municipal).

' '	'Not Applicable'
'0000' - '0009'	'0 - 900'
'0010' - '0025'	'1,000 - 2,500'
'0026' - '0050'	'2,600 - 5,000'
'0051' - '0100'	'5,100 - 10,000'
'0101' - '0250'	'10,100 - 25,000'
'0251' - '0500'	'25,100 - 50,000'
'0501' - '1000'	'50,100 - 100,000'
'1001' - '2500'	'10,100 - 250,000'
'2500' - '9999'	'250,000 - 999,900'

Roadway Width THRU Lanes N/Medians — SAS Number: RD_WIDTH

Definition: Roadway width thru lanes without median width for the roadway segment

Additional Information: Highway surface width plus shoulders (in feet). Median width is not included. For 1997 – 1999 data category 99 indicates 99 or higher. For future years observations on roadway widths greater than 99 is available.

00	'00'
01-15	'01 - 15'
16-18	'16 - 18'
19-22	'19 - 22'
23-25	'23 - 25'
26-30	'26 - 30'
31-40	'31 - 40'
41-50	'41 - 50'
51-60	'51 - 60'
61-80	'61 - 80'
81-99	'81 - 99'
99 - HIGH	'99 & Higher'

Roadway Types (Created) — SAS Name: RODWYCLS

Definition: Roadway classification.

Additional Information: Created variable added to accident and roadway inventory files. See Discussion.

'01'	'Urban Freeways'
'02'	'Urban Freeways < 4 LN'
'03'	'Urban 2 Lane Roads'
'04'	'Urban Multilane Divided Non Freeways'
'05'	'Urban Multilane Undivided Non Freeways'
'06'	'Rural Freeways'
'07'	'Rural Freeways < 4 LN'
'08'	'Rural 2 Lane Roads'
'09'	'Rural Multilane Divided Non Freeways'
'10'	'Rural Multilane Undivided Non Freeways'
'99'	'Others'

State Route Number — SAS Name: RTE_NBR

Definition: Route number of the roadway segment.

Additional Information: From year 2000, this variable became 5 characters with first digit being '0' and last digit as RTE_SUFX.

State Route Number Suffix — SAS Name: RTE_SUFX

Definition: State route number suffix information of the roadway segment

Additional Information: Code 'I' is for a route within an interchange used to connect ramps.

'A'	'Alternate'
'B'	'Bypass'
'C'	'Spur Or Connector'
'D'	'DIR ALT (1st Within CNTY)'
'E'	'East'
'F'	'DIR ALT (2nd Within CNTY)'
'G'	'DIR ALT (3rd Within CNTY)'
'I'	'Interchange Roadway'
'J'	'Awaiting Final Disposition'
'K'	'Turnpike'
'N'	'North'
'P'	'Proposed (Not Built)'
'R'	'Regular'
'S'	'South'
'T'	'Temporary'
'W'	'West'

Route Type (Generated) — SAS Name: RTE_TYPE

Definition: Route type information of the roadway segment

1	'Interstate'
2	'U.S. Route'
3	'State Route'

Population (Over/Under 5000) Generated — SAS Name: RURUID

Definition: Population information of the roadway segment

Additional Information: This variable is populated only when MI_CLASS 2(Municipal).

' ' 'Not Coded'
'O' 'Over (POP > 5000)'
'U' 'Under (POP < 5000)'

Scenic Byways — SAS Name: SCENIC

Definition: Scenic byways information of the roadway segment

'S' 'State Scenic Byway'
'N' 'National Scenic Byway'
'A' 'All American Road'
' ' 'Not Coded'

Segment Length — SAS Name: SEG_LNG

Definition: Section length in miles.

Sequence Number — SAS Name: SEQ_NBR

Definition: Sequence number of the roadway segment

Additional Information: Variable added in 2005.

Shoulder Left Inside — SAS Name: SHWD_LEFT_INSIDE

Definition: Inside left shoulder width for the roadway segment

0	'Zero'
1-3	'1-3 Ft'
4-6	'4-6 Ft'
7-9	'7-9 Ft'
10-13	'10-13 Ft'
14-99	'14+ Ft'
.	'Not Stated';

Shoulder Left Outside — SAS Name: SHWD_LEFT_OUTSIDE

Definition: Outside left shoulder outside width for the roadway segment

0	'Zero'
1-3	'1-3 Ft'
4-6	'4-6 Ft'
7-9	'7-9 Ft'
10-13	'10-13 Ft'
14-99	'14+ Ft'
.	'Not Stated';

Shoulder Right Inside — SAS Name: SHWD_RIGHT_INSIDE

Definition: Inside right shoulder width for the roadway segment

0	'Zero'
1-3	'1-3 Ft'
4-6	'4-6 Ft'
7-9	'7-9 Ft'
10-13	'10-13 Ft'
14-99	'14+ Ft'
.	'Not Stated';

Shoulder Right Outside — SAS Name: SHWD_RIGHT_OUTSIDE

Definition: Outside right shoulder width for the roadway segment

0	'Zero'
1-3	'1-3 Ft'
4-6	'4-6 Ft'
7-9	'7-9 Ft'
10-13	'10-13 Ft'
14-99	'14+ Ft'
.	'Not Stated';

Speed Limit — SAS Name: SPDLIMT

Definition: Speed limit on the roadway segment

Additional Information: Quality of data is questionable for 1997 to 1999. Approximately 80 percent of the mileage in our system doesn't have speed limit information for 1997 and 1998. For 1999, about 50 percent of mileage doesn't have this information. For 2000 and 2001 data, this field covers about 99 percent of the mileage.

00	'Speed Limit UNK'
01 - 05	'01-05'
06 - 10	'06-10'
11 - 15	'11-15'
16 - 20	'16-20'
21 - 25	'21-25'
26 - 30	'26-30'
31 - 35	'31-35'
36 - 40	'36-40'
41 - 45	'41-45'
46 - 50	'46-50'
51 - 55	'51-55'
56 - 60	'56-60'
61 - 65	'61-65'
66 - 70	'66-70'
71 - 75	'71-75'
76 - 80	'76-80'

81 - 85 '81-85'

Standard Base Classification SAS Name: SRF_BAS

Definition: Standard base classification information of the roadway segment

'Z' 'Combination Rigid'
'X' 'Combination Rigid And Flexible'
'T' 'Brick (Rigid)'
'R' 'Brick (Flexible)'
'P' 'Reinforced Concrete'
'N' 'Plain Concrete'
'L' 'Plant Mix Bituminous Concrete Or Penetration Macadam'
'K' 'Water Bound Macadam'
'H' 'Rubblize And Roll Concrete'
'I' 'Stabilized (Aggregate Base Or Traffic Compacted)'
'E' 'Combination (Flexible)'
'F' 'Crack And Seat'
' ' 'Not Coded'

Left Side Surface Base Type SAS Name: SRF_BASL

Definition: Left side surface base type information of the roadway segment

'Z' 'Combination Rigid'
'X' 'Combination Rigid And Flexible'
'T' 'Brick (Rigid)'
'R' 'Brick (Flexible)'
'P' 'Reinforced Concrete'
'N' 'Plain Concrete'
'L' 'Plant Mix Bituminous Concrete Or Penetration Macadam'
'K' 'Water Bound Macadam'
'H' 'Rubblize And Roll Concrete'
'I' 'Stabilized (Aggregate Base Or Traffic Compacted)'
'E' 'Combination (Flexible)'
'F' 'Crack And Seat'
' ' 'Not Coded'

Right Side Surface Base Class Type SAS Name: SRF_BASR

Definition: Right side surface base type information of the roadway segment

'Z'	'Combination Rigid'
'X'	'Combination Rigid And Flexible'
'T'	'Brick (Rigid)'
'R'	'Brick (Flexible)'
'P'	'Reinforced Concrete'
'N'	'Plain Concrete'
'L'	'Plant Mix Bituminous Concrete Or Penetration Macadam'
'K'	'Water Bound Macadam'
'H'	'Rubblize And Roll Concrete'
'I'	'Stabilized (Aggregate Base Or Traffic Compacted)'
'E'	'Combination (Flexible)'
'F'	'Crack And Seat'
' '	'Not Coded'

Summary of FHWA Surface Type — SAS Name: SRF_TYPF

Definition: FHWA surface type information of the roadway segment

Additional Information: This variable is collected for FHWA purposes. Though the codes are generally similar to SURF_TYP variable they do not match exactly. We recommend using SURF_TYP variable for all analysis.

'A'	'Primitive Road'
'B'	'Unimproved Road'
'C'	'Graded And Drained Earth Road'
'E2'	'Gravel Road'
'F'	'Bituminous (Surface Treated)'
'G1'	'Mix Bituminous Road (Base + Surface < 7 Inches)'
'G2'	'Mix Bituminous Road (Base + Surface > 7 Inches)'
'H1'	'Bituminous Penetration (Base + Surface < 7 Inches)'
'H2'	'Bituminous Penetration (Base + Surface > 7 Inches)'
'I'	'Bituminous Concrete, Asphalt, Or Rock Asphalt Road'
'J'	'PCC Road'
'K'	'Brick Road'
'L'	'Block Road'
' '	'Not Coded'

Left Side Standard Surface Type — SAS Name: SRF_TYPL

Definition: Left side standard surface class information of the roadway segment

Additional Information: Categories are same as standard surface type (SURF_TYP). It is populated only for divided segments or for those segments that have a combination base. Categories E, X or Z of SRF_BAS variable denote combination bases.

'A' 'Combination Surface'
'B' 'Brick'
'D' 'Reinforced Concrete'
'E' 'Plain Concrete'
'G' 'Dense Graded Asphaltic Concrete'
'I' 'Penetration Macadam'
'K' 'Open Graded Road Mix Or Pugmill Mix'
'L' 'Surface Seal With Cover'
'S' 'Wood (Bridge Deck)'
'T' 'Steel Plate (Bridge Deck)'
' ' 'Not Coded'

Right Side Surface Class Type — SAS Name: SRF_TYPR

Definition: Right side surface class information of the roadway segment

Additional Information: This variable is populated only for divided segments or for segments having a combination base. Combination bases are denoted by categories E, X or Z of standard Base classification variable (SRF_BAS). The codes of this SRF_TYPL and SRF_TYPR vary only when SURF_TYP is combined denoted by category A.

'A' 'Combination Surface'
'B' 'Brick'
'D' 'Reinforced Concrete'
'E' 'Plain Concrete'
'G' 'Dense Graded Asphaltic Concrete'
'I' 'Penetration Macadam'
'K' 'Open Graded Road Mix Or Pugmill Mix'
'L' 'Surface Seal With Cover'
'S' 'Wood (Bridge Deck)'
'T' 'Steel Plate (Bridge Deck)'
' ' 'Not Coded'

Left Side FHWA Surface Type — SAS Name: SRFTYPLL

Definition: Left side surface type information of the roadway segment

Additional Information: This variable is collected for FHWA purposes. Though the codes are generally similar to SRF_TYPL, they don't match exactly. We suggest that SRF_TYPL be used for all analysis.

'A '	'Primitive Road'
'B '	'Unimproved Road'
'C '	'Graded And Drained Earth Road'
'E2'	'Gravel Road'
'F '	'Bituminous (Surface Treated)'
'G1'	'Mix Bit Rd (Base + Sur < 7 In)'
'G2'	'Mix Bit Rd (Base + Surf > 7 In)'
'H1'	'Bit Pen (Base + Surf < 7 In)'
'H2'	'Bit Pen (Base + Surf > 7 In)'
'I '	'BC, A, Or RA Road'
'J '	'PCC Road'
'K '	'Brick Road'
'L '	'Block Road'
''	'Not Coded'

FHWA Right Side Surface Type — SAS Name: SRFTYPLR

Definition: Right side surface type information of the roadway segment

Additional Information: The variable is collected for FHWA purposes. Though the codes are generally similar to SRF_TYPR, they don't match exactly. We recommend that SRF_TYPR be used for all purposes.

'A ' 'Primitive Road'
'B ' 'Unimproved Road'
'C ' 'Graded And Drained Earth Road'
'E2' 'Gravel Road'
'F ' 'Bituminous (Surface Treated)'
'G1' 'Mix Bit Rd (Base + Sur < 7 In)'
'G2' 'Mix Bit Rd (Base + Surf > 7 In)'
'H1' 'Bit Pen (Base + Surf < 7 In)'
'H2' 'Bit Pen (Base + Surf > 7 In)'
'I ' 'BC, A, Or RA Road'
'J ' 'PCC Road'
'K ' 'Brick Road'
'L ' 'Block Road'
'' 'Not Coded'

Station Equation Sort Field — SAS Name: STAT_EQ

Definition: Station equation sort field

Additional Information: (1) This sort code enables the records for a route to be sorted in the correct order (as the route would be driven). (2) Variable discontinued in 2002.

Street Name Suffix — SAS Name: STN_SUF

Definition: Street name suffix of the roadway

Additional Information: Based on US Postal Service suffix abbreviations. The street name field must be coded for this field to coded, except for suffix RAMP. For suffix RAMP, the street name field may be blank.

Street Name Directional Prefix — SAS Name: STR_PFX

Definition: Street name directional prefix information of the roadway segment

Additional Information: This field is a directional prefix associated with the street name. The street name field must be coded for this field to be coded.

'N'	'North'
'S'	'South'
'E'	'East'
'W'	'West'
' '	'Not Coded'

Street Name Directional Suffix — SAS Name: STRT_DIR

Definition: Street name directional suffix information of the roadway segment

Additional Information: The street name field must be coded for this field to be coded.

'N'	'North'
'S'	'South'
'E'	'East'
'W'	'West'
' '	'Not Coded'

Street Name — SAS Name: STRT_NAM

Definition: Street name of the roadway segment

Additional Information: This name should correspond with maps and street signs.

Standard Surface Classification — SAS Name: SURF_TYP

Definition: Surface type.

Additional Information: This is the variable to be used to capture information on surface types for all analysis.

'A'	'Combination Surface'
'B'	'Brick'
'D'	'Reinforced Concrete'
'E'	'Plain Concrete'
'G'	'Dense Graded Asphaltic Concrete'
'I'	'Penetration Macadam'
'K'	'Open Graded Road Mix Or Pugmill Mix'
'L'	'Surface Seal With Cover'
'S'	'Wood (Bridge Deck)'
'T'	'Steel Plate (Bridge Deck)'
' '	'Not Coded'

Surface Width THRU Lanes N/Shoulders — SAS Name: SURF_WID

Definition: Surface width (in feet).

Additional Information: Units are in feet. For 1997–1999, 99 indicates 99 or higher. For future years median widths greater than 100 feet are captured.

00	'00'
01-15	'01 - 15'
16-18	'16 - 18'
19-22	'19 - 22'
23-25	'23 - 25'
26-30	'26 - 30'
31-40	'31 - 40'
41-50	'41 - 50'
51-60	'51 - 60'
61-80	'61 - 80'
81-99	'81 - 99'
99 – HIGH	'99 & Higher'

Left Side Surface Width in Feet — SAS Name: SURFWIDL

Definition: Left side surface width in feet.

Additional Information: This variable is populated for divided segments and segments with combination bases. For combination bases, this variable provides the width of one unit of combined base. Categories E, X and Z of variable SRF_BAS denote combination bases.

00	'00'
01-15	'01 - 15'
16-18	'16 - 18'
19-22	'19 - 22'
23-25	'23 - 25'
26-30	'26 - 30'
31-40	'31 - 40'
41-50	'41 - 50'
51-60	'51 - 60'
61-80	'61 - 80'
81-99	'81 - 99'
99 - HIGH	'99 & Higher'

Right Side Surface Width in Feet — SAS Name: SURFWIDR

Definition: Right side surface width in feet.

Additional Information: This variable is populated for divided segments and segments with combination bases. For combination bases, this variable provides the width of base other than that provided by SURFWIDL. For all segments having valid observations, summation of SURFWIDL and SURFWIDR always equals to SURF_WID.

00	'00'
01-15	'01 - 15'
16-18	'16 - 18'
19-22	'19 - 22'
23-25	'23 - 25'
26-30	'26 - 30'
31-40	'31 - 40'
41-50	'41 - 50'
51-60	'51 - 60'
61-80	'61 - 80'
81-99	'81 - 99'
99 - HIGH	'99 & Higher'

System Class — SAS Name: SYS_CLAS

Definition: System class information of the roadway segment

'I'	'Interstate'
'M'	'Major Thoroughfare'
'A'	'Auxiliary, State'
'L'	'Local, State'
' '	'Not Coded'

Update Year — SAS Name: UPDT_YR

Definition: Update year information of the roadway segment

Additional Information: This code is the two digit year of update or change.

List of Elements for the OH Point File

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DESC	LOCATION DESCRIPTION	Point	CHA(32)	140
DISTRICT	DISTRICT	Point	NUM	140
LOG_SUFX	LOG POINT SUFFIX	Point	CHA(1)	141
MILEPOST	LOG POINT	Point	NUM	141
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NOTE: SAS variable names and explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Record Change Year **SAS Name: CHNG_YR**

Definition: Year when change of the record occurred

Additional Information: This is a four-digit year (yyyy).

County Route **SAS Name: CNTY_RTE**

Definition: County route information of the roadway

Additional Information: Linkage variable consisting of COUNTY + RTE_NBR + RTE_SUFX + STAT_EQ. From year 2000, STATE_EQ is not required. Also RTE_SUFX became last digit of RTE_NBR.

County True Log **SAS Name: CNTYLOG**

Definition: County true log information of the roadway

County **SAS Name: COUNTY**

Definition: County information of the roadway location..

Additional Information: See listings under accident section of the guidebook.

Location Description **SAS Name: DESC**

Definition: Description of the roadway location.

Additional Information: Refer to "Notes" for REC_TYPE variable for more information.

District **SAS Name: DISTRICT**

Definition: District where the crash occurred.

Log Point Suffix — SAS Name: LOG_SUFX

Definition: Log point suffix information

Log Point — SAS Name: MILEPOST

Definition: Reference point information of the roadway

Additional Information: Milepost of the point in miles (XXX.XX).

Municipal Code — SAS Name: MUNI_CDE

Definition: Municipality code information of the roadway

Additional Information: This field is for the three digit municipality code (political jurisdiction).

Overlap Log Direction — SAS Name: OVRLDIR

Definition: Overlap log direction information of the roadway

'+' 'Ascending Order'
'-' 'Descending Order'

Record Type — SAS Name: REC_TYPE

Definition: Record type description of the roadway

Additional Information: Categories F and W added in 1999. The record types noted above define the types of records (e.g., beginning or route, beginning or gap) or facility (e.g., overpass, RR grade crossing) present at the given location. Details of the coding for these types area are available from the HSIS staff upon request. However, since "at grade intersections" (Record type "I") are of most interest to HSIS users, the following describes these intersection records. The location of the intersection on the mainline is specified by CNTY_RTE. The DESC variable contains the following information on the cross route and cross route log point.

'A' 'Route Beginning'
'B' 'Split Jurisdiction'
'C' 'Corporation Limit'
'E' 'Station Equation'
'F' 'Miscellaneous'
'G' 'Bridge'
'I' 'Intersection (At Grade)'
'J' 'Begin Gap'
'K' 'End Gap'
'M' 'Milepost'
'N' 'Railroad Underpass'
'O' 'Overpass'
'R' 'Railroad At Grade'
'U' 'Underpass'
'V' 'Railroad Overpass'
'W' 'Weigh Station/Rest Area Ramp'
'X' 'End Overlap'
'Y' 'Begin Overlap'
'Z' 'End Of Route'

Example: C0042Aclaremont
Position 1 – Prefix of the cross route.
Position 2-5 – Numeric route number of the cross route.
Position 6 – Route suffix of the cross route.
Position 7-32 – Alphabetic name of the cross route/street.

Route Direction — SAS Name: RTE_DIR

Definition: Route direction information of the roadway

Additional Information: This is a two character field representing the general direction of the route. The first position always reflects the legal logged (inventoried) direction of the route. The second position is used as a tendency direction. The first position cannot be changed during the course of the route.

'N '	'North'
'S '	'South'
'E '	'East'
'W '	'West'
'NE'	'Northeast'
'NW'	'Northwest'
'SE'	'Southeast'
'SW'	'Southwest'

State Route Number — SAS Name: RTE_NBR

Definition: The number of the route of the roadway.

Additional Information: From year 2000, this variable became 5 characters with first digit being '0' and last digit as RTE_SUFX.

State Route Prefix — SAS Name: RTE_PREF

Definition: State route prefix information of the roadway element

Additional Information: An alphabetic character designating the type of route.

'I'	'Interstate'
'U'	'U.S. Route'
'S'	'State Route'

State Route Suffix — SAS Name: RTE_SUFX

Definition: State route suffix information of the roadway element

Additional Information: Code 'I' is for a route within an interchange used to connect ramps

'A'	'Alternate'
'B'	'Bypass'
'C'	'Spur Or Connector'
'D'	'DIR ALT (1st Within CNTY)'
'E'	'East'
'F'	'Directional Alternate (2nd Within County)'
'G'	'Directional Alternate (3rd Within County)'
'I'	'Interchange Roadway'
'J'	'Awaiting Final Disposition'
'K'	'Turnpike'
'N'	'North'
'P'	'Proposed (Not Built)'
'R'	'Regular'
'S'	'South'
'T'	'Temporary'
'W'	'West'

Sequence Number — SAS Name: SEQ_NBR

Definition: Sequence number of the roadway element

Additional Information: This field allows more than one record with the same record type, at the same log point.

Special Description — SAS Name: SPECDESC

Definition: Special description of the roadway section.

Additional Information: If this field is coded 'I', then the record type must be code 'O' or 'U'.

'R' 'Right'
'L' 'Left'
'I' 'Interchange'

State Equation Sort — SAS Name: STAT_EQ

Definition: State equation sort information

Additional Information: This sort code enables the records for a route to be sorted in the correct order (as the route would be driven).

Street Suffix — SAS Name: STRT_SUF

Definition: Street suffix information of the roadway element

'AL'	'Alley'
'AV'	'Avenue'
'BO'	'Boulevard'
'CE'	'Center'
'CI'	'Circle'
'CO'	'Court'
'DR'	'Drive'
'EX'	'Expressway'
'HI'	'Highway'
'LA'	'Lane'
'PA'	'Parkway'
'PI'	'Pike'
'Pl'	'Place'
'RO'	'Road'
'SQ'	'Square'
'ST'	'Street'
'TE'	'Terrance'
'TR'	'Trail'
'TU'	'Turnpike'
'VI'	'Viaduct'
'WA'	'Way'
'EB'	'East Bound'
'WB'	'West Bound'
'NB'	'North Bound'
'SB'	'South Bound'
'PK'	'Unknown'

State Route True Log — SAS Name: TRUE_LOG

Definition: State route true log information of the roadway element

Additional Information: This is a state based log point giving the physical mileage from a route's entry into the State or its beginning within the State. The mileage does not re-start at county boundaries and equations are eliminated.

Cross Road County Route — SAS Name: XCNTYRTE

Definition: Cross road county route information of the roadway element

Additional Information: Linkage variable consisting of COUNTY + RTE_NBR + RTE_SUFX + STATE_EQ.

Cross Route Log Suffix — SAS Name: XLOG_SUF

Definition: Cross route log suffix information of the roadway element\

Additional Information: "B" is for back station, which indicates that the log point is within a station equation. It is used for an add equation.

' ' 'Other'
'B' 'Back Station'

Cross Route Milepost — SAS Name: XMILEPST

Definition: Cross route milepost information of the roadway element

Additional Information: Milepost of the crossing route in miles (XXX.XX).

Cross Route Number — SAS Name: XRTE_NBR

Definition: Cross route number information of the roadway element

Additional Information: If this field is coded, then the cross route prefix must be coded.

Cross Route Suffix — SAS Name: XRTE_SUF

Definition: Cross route suffix information of the roadway element

Additional Information: Code 'I' is for a route within an interchange used to connect ramps.

'A' 'Alternate'
'B' 'Bypass'
'C' 'Spur Or Connector'
'D' 'DIR ALT (1st Within CNTY)'
'E' 'East'
'F' 'Directional Alternate (2nd Within CNTY)'
'G' 'Directional Alternate (3rd Within CNTY)'
'I' 'Interchange Roadway'
'J' 'Awaiting Final Disposition'
'K' 'Turnpike'
'N' 'North'
'P' 'Proposed (Not Built)'
'R' 'Regular'
'S' 'South'
'T' 'Temporary'
'W' 'West'

Cross Route Prefix — SAS Name: XRTEPREF

Definition: Cross route prefix information of the roadway element

Additional Information: An alphabetic character designating the type of cross route. If this field is coded, then the cross route number must be coded. If this field is coded: 'I' or 'U' or 'S', then the cross route suffix and cross route log must be coded.

'I' 'Interstate'
'U' 'U.S. Route'
'S' 'State Route'
'C' 'County Route'
'T' 'Township Route'
'N' 'Natural Resources

List of Elements for the OH Curves File

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
ACCESS	ACCESS CONTROL	Curves	CHA(1)	150
AREACODE	AREA CODE	Curves	NUM	150
BEGMP	BEGIN LOG POINT OF CURVE	Curves	NUM	150
CNTY_RTE	COUNTY ROUTE	Curves	CHA(8)	151
COUNTY	COUNTY	Curves	CHA(3)	151
DEG_CURV	DEGREE OF CURVE	Curves	NUM	151
DESC	DESCRIPTION	Curves	CHA(18)	151
DIR_CURV	DIRECTION OF CURVE	Curves	CHA(18)	151
DISTRICT	DISTRICT	Curves	NUM	151
DIVIDED	DIVIDED HIGHWAY INDICATOR	Curves	CHA(1)	152
ENDMP	END LOG POINT OF CURVE	Curves	NUM	152
FUNC_CLS	FUNCTIONAL CLASS	Curves	CHA(2)	152
INV_DATE	YEAR OF CODING CHANGE	Curves	NUM	152
MILE_CLS	MILE CLASS	Curves	CHA(1)	152
NO_LANES	NUMBER OF LANES	Curves	NUM	153
RTE_NBR	STATE ROUTE NUMBER	Curves	CHA(5)	153
RTE_SUFX	STATE ROUTE SUFFIX	Curves	CHA(1)	154
SEG_LNG	SEGMENT LENGTH	Curves	NUM	154
SEQ_NBR	SEQUENCE NUMBER	Curves	NUM	154
STAT_EQU	STATION EQUATION SORT FIELD	Curves	NUM	154
SYS_CLAS	SYSTEM CLASS	Curves	CHA(1)	155

NOTE: SAS variable names and explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Additional Information: Updating for this file ended in or around 2009. See Discussion for further information.

Access Control — SAS Name: ACCESS

Definition: Access control at the roadway location.

Additional Information: Access control as defined by OH State. For example, 'F' indicates that Ohio DOT owns the access control and can change it whenever deemed required. The use of this variable may result in some difficulties and we recommend the use of FED_ACES to get information on the access control of segments.

'1'	'Full Access Control'
'2'	'Partial Access Control'
'3'	'No Access Control'
'N'	'No Control of Access'
'L'	'Limited Control of Access'
'F'	'Full Control of Access'
' '	'Not Coded'

Area Code — SAS Name: AREACODE

Definition: Area code information of the roadway curve.

Begin Log Point of Curve — SAS Name: BEGMP

Definition: Calculated begin milepost.

Additional Information: Beginning milepost of the curve in miles (XXX.XX).

County Route

SAS Name: CNTY_RTE

Definition: County route information of the roadway curve.

Additional Information: Linkage variable consisting of COUNTY + RTE_NBR + RTE_SUFX + STAT_EQ. From year 2000, STATE_EQ is not required. Also RTE_SUFX became last digit of RTE_NBR.

County

SAS Name: COUNTY

Definition: County information of the roadway curve.

Additional Information: See listings under accident section of the guidebook.

Degree of Curve

SAS Name: DEG_CURV

Definition: Degree of the roadway curve information

1 - 5	'1 To 5'
6 - 10	'6 To 10'
11 - 20	'11 To 20'
21 - 30	'21 To 30'
31 - HIGH	'> 30'

Description

SAS Name: DESC

Definition: Description of the roadway curve location.

Direction of Curve

SAS Name: DIR_CURV

Definition: Direction of roadway curve information

'LT'	'Left'
'RT'	'Right'

District

SAS Name: DISTRICT

Definition: District information of the roadway curve.

Divided Highway Indicator — SAS Name: DIVIDED

Definition: Divided highway indicator information of the roadway curve

' '	'Undivided'
'*'	'Divided'

End Log Point of Curve — SAS Name: ENDMP

Definition: Calculated ending milepost.

Additional Information: Ending milepost of the curve in miles (XXX.XX).

Functional Class — SAS Name: FUNC_CLS

Definition: Functional Class.

'01'	'Principal Arterial (Rural Interstate)'
'02'	'Principal Arterial (Rural Others)'
'06'	'Minor Arterial (Rural)'
'07'	'Major Collector (Rural)'
'08'	'Minor Collector (Rural)'
'09'	'Local (Rural)'
'11'	'Principal Arterial (Urban Interchange)'
'12'	'Principal Arterial (Urban-Freeway & Expressway'
'14'	'Principal Arterial (Urban-Other)'
'16'	'Minor Arterial (Urban)'
'17'	'Collector (Urban)'
'19'	'Local (Urban)'
''	'Not Coded'

Year of Coding Change — SAS Name: INV_DATE

Definition: Inventory date represents change of the coding.

Mile Class — SAS Name: MILE_CLS

Definition: Mile classs information of the roadway curve

Number of Lanes — SAS Name: NO_LANES

Definition: Number of lanes – total for both directions.

.	'Missing'
1	' 1 Lane'
2	' 2 Lanes'
3	' 3 Lanes'
4	' 4 Lanes'
5	' 5 Lanes'
6	' 6 Lanes'
7	' 7 Lanes'
8	' 8 Lanes'
9	' 9 Lanes'
10	'10 Lanes'
11	'11 Lanes'
12	'12 Lanes'

State Route Number — SAS Name: RTE_NBR

Definition: Route number of the roadway curve.

Additional Information: From year 2000, this variable became 5 characters with first digit being '0' and last digit as RTE_SUFX.

State Route Suffix — SAS Name: RTE_SUFX

Definition: State route suffix information of the roadway curve

Additional Information: Code 'I' is for a route within an interchange used to connect ramps.

'A'	'Alternate'
'B'	'Bypass'
'C'	'Spur Or Connector'
'D'	'Directional Alternate (1st Within County)'
'E'	'East'
'F'	'Directional Alternate (2nd Within County)'
'G'	'Directional Alternate (3rd Within County)'
'I'	'Interchange Roadway'
'J'	'Awaiting Final Disposition'
'K'	'Turnpike'
'N'	'North'
'P'	'Proposed (Not Built)'
'R'	'Regular'
'S'	'South'
'T'	'Temporary'
'W'	'West'

Segment Length — SAS Name: SEG_LNG

Definition: Segment length in miles.

Additional Information: Length of curve in miles (XXX.XX).

Sequence Number — SAS Name: SEQ_NBR

Definition: Sequence number

Station Equation Sort Field — SAS Name: STAT_EQU

Definition: Station equation sort field

System Class

SAS Name: SYS_CLAS

Definition: System class information of the roadway curve

'I'	'Interstate'
'M'	'Major Thoroughfare'
'A'	'Auxiliary, State'
'L'	'Local, State'
' '	'Not Coded'

List of Elements for the OH Grades File

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
ACCESS	ACCESS CONTROL	Grades	CHA(1)	157
AREACODE	AREA CODE	Grades	NUM	157
BEGMP	BEGIN LOG POINT OF CURVE	Grades	NUM	157
CNTY_RTE	COUNTY ROUTE	Grades	CHA(8)	158
COUNTY	COUNTY	Grades	CHA(3)	158
DESC	DESCRIPTION	Grades	CHA(18)	158
DIR_GRAD	DIRECTION OF GRADE	Grades	CHA(1)	158
DISTRICT	DISTRICT	Grades	NUM	158
DIVIDED	DIVIDED HIGHWAY INDICATOR	Grades	CHA(1)	158
ENDMP	END LOG POINT OF CURVE	Grades	NUM	159
FUNC_CLS	FUNCTIONAL CLASS	Grades	CHA(2)	159
INV_DATE	YEAR OF CODING CHANGE	Grades	NUM	159
MILE_CLS	MILE CLASS	Grades	CHA(1)	159
NO_LANES	NUMBER OF LANES	Grades	NUM	160
PCT_GRAD	PERCENT OF GRADE	Grades	NUM	160
RTE_NBR	STATE ROUTE NUMBER	Grades	NUM	160
RTE_SUFX	STATE ROUTE SUFFIX	Grades	CHA(1)	161
SEG_LNG	SEGMENT LENGTH	Grades	NUM	161
SEQ_NBR	SEQUENCE NUMBER	Grades	NUM	161
STAT_EQU	STATION EQUATION SORT FIELD	Grades	NUM	161
SYS_CLAS	SYSTEM CLASS	Grades	CHA(1)	162

NOTE: SAS variable names and explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

NOTE: Updating for this file ended in or around 2009. See Discussion for further information.

Access Control — SAS Name: ACCESS

Definition: Control of access.

Additional Information: Access control as defined by OH state. For example, 'F' indicates that Ohio DOT owns the access control and can change it whenever deemed required. The use of this variable may result in some difficulties and we recommend the use of FED_ACES to get information on the access control of segments.

'1' 'Full Access Control'
'2' 'Partial Access Control'
'3' 'No Access Control'
'N' 'No Control of Access'
'L' 'Limited Control of Access'
'F' 'Full Control of Access'
' ' 'Not Coded'

Area Code — SAS Name: AREACODE

Definition: Area code information of the roadway segment

Begin Log Point of Curve — SAS Name: BEGMP

Definition: Calculated begin milepost.

Additional Information: Beginning milepost of the grade in miles (XXX.XX).

County Rout County + RTE_NBR + RTR_SUFX + STAT_EQ **SAS Name: CNTY_RTE**

Definition: County route information of the roadway segment

Additional Information: Linkage variable consisting of COUNTY + RTE_NBR + RTE_SUFX + STAT_EQ. From year 2000, STATE_EQ is not required. Also RTE_SUFX became last digit of RTE_NBR.

County **SAS Name: COUNTY**

Definition: County of the roadway segment.

Additional Information: See listings under accident section of the guidebook.

Description **SAS Name: DESC**

Definition: Description of the roadway segment location.

Direction of Grade **SAS Name: DIR_GRAD**

Definition: Direction of the grade

'+' 'Upgrade'
'-' 'Downgrade'

District **SAS Name: DISTRICT**

Definition: District of the roadway segment.

Divided Highway Indicator **SAS Name: DIVIDED**

Definition: Highway indicator indicates divided or undivided

' ' 'Undivided'
'*' 'Divided'

End Log Point of Curve

SAS Name: ENDMP

Definition: Calculated ending milepost.

Additional Information: Ending milepost in miles (XXX.XX).

Functional Class

SAS Name: FUNC_CLS

Definition: Functional Class of the roadway segment.

'01'	'Principal Arterial (Rural Interstate)'
'02'	'Principal Arterial (Rural Others)'
'06'	'Minor Arterial (Rural)'
'07'	'Major Collector (Rural)'
'08'	'Minor Collector (Rural)'
'09'	'Local (Rural)'
'11'	'Principal Arterial (Urban Interchange)'
'12'	'Principal Arterial (Urban-Freeway & Expressway'
'14'	'Principal Arterial (Urban-Other)'
'16'	'Minor Arterial (Urban)'
'17'	'Collector (Urban)'
'19'	'Local (Urban)'
''	'Not Coded'

Year of Coding Change

SAS Name: INV_DATE

Definition: Inventory date .

Mile Class

SAS Name: MILE_CLS

Definition: Mile class of the roadway segment

Number of Lanes

SAS Name: NO_LANES

Definition: Number of lanes – total for both directions.

.	'Missing'
1	' 1 Lane'
2	' 2 Lanes'
3	' 3 Lanes'
4	' 4 Lanes'
5	' 5 Lanes'
6	' 6 Lanes'
7	' 7 Lanes'
8	' 8 Lanes'
9	' 9 Lanes'
10	'10 Lanes'
11	'11 Lanes'
12	'12 Lanes'

Percent of Grade

SAS Name: PCT_GRAD

Definition: Percent of grade of the roadway segment

1 - 3	'1% To 3%'
4 - 5	'4% To 5%'
6 - 8	'6% To 8%'
9 - 10	'9% To 10%'
11 - 15	'11% To 15%'
16 - 99	'> 15%'

State Route Number

SAS Name: RTE_NBR

Definition: Route number of the roadway segment.

Additional Information: From year 2000, this variable became 5 characters with first digit being '0' and last digit as RTE_SUFX.

State Route Suffix — SAS Name: RTE_SUFX

Definition: state rote suffix of the roadway segment

Additional Information: Code 'I' is for a route within an interchange used to connect ramps

'A'	'Alternate'
'B'	'Bypass'
'C'	'Spur Or Connector'
'D'	'DIR ALT (1st Within CNTY)'
'E'	'East'
'F'	'Directional Alternate (2nd Within County)'
'G'	'Directional Alternate (3rd Within County)'
'I'	'Interchange Roadway'
'J'	'Awaiting Final Disposition'
'K'	'Turnpike'
'N'	'North'
'P'	'Proposed (Not Built)'
'R'	'Regular'
'S'	'South'
'T'	'Temporary'
'W'	'West'

Segment Length — SAS Name: SEG_LNG

Definition: Segment length in miles.

Additional Information: Length of grade in feet (XXX.XX).

Sequence Number — SAS Name: SE_NBR

Definition: sequence number of the roadway segment

Station Equation Sort Field — SAS Name: STAT_EQU

Definition: Station equation sort field

System Class

SAS Name: SYS_CLAS

Definition: System class of the roadway segment

'I'	'Interstate'
'M'	'Major Thoroughfare'
'A'	'Auxiliary, State'
'L'	'Local, State'
' '	'Not Coded'

List of Elements for the OH Angle Point File

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
ACCESS	ACCESS CONTROL	Angle Point	CHA(1)	164
AREACODE	AREA CODE	Angle Point	NUM	164
BEGMP	BEGIN LOG POINT OF CURVE	Angle Point	NUM	164
CNTY_RTE	COUNTY ROUTE	Angle Point	CHA(8)	165
COUNTY	COUNTY	Angle Point	CHA(3)	165
DEG_CURV	DEGREE OF CURVE	Angle Point	NUM	165
DESC	DESCRIPTION	Angle Point	CHA(18)	165
DIR_CURV	DIRECTION OF CURVE	Angle Point	CHA(18)	165
DISTRICT	DISTRICT	Angle Point	NUM	165
DIVIDED	DIVIDED HIGHWAY INDICATOR	Angle Point	CHA(1)	166
ENDMP	END LOG POINT OF CURVE	Angle Point	NUM	166
FUNC_CLS	FUNCTIONAL CLASS	Angle Point	CHA(2)	166
INV_DATE	YEAR OF CODING CHANGE	Angle Point	NUM	166
MILE_CLS	MILE CLASS	Angle Point	CHA(1)	166
NO_LANES	NUMBER OF LANES	Angle Point	NUM	167
RTE_NBR	STATE ROUTE NUMBER	Angle Point	CHA(5)	167
RTE_SUFX	STATE ROUTE SUFFIX	Angle Point	CHA(1)	168
SEG_LNG	SEGMENT LENGTH	Angle Point	NUM	168
SEQ_NBR	SEQUENCE NUMBER	Angle Point	NUM	168
STAT_EQU	STATION EQUATION SORT FIELD	Angle Point	NUM	168
SYS_CLAS	SYSTEM CLASS	Angle Point	CHA(1)	169

NOTE: SAS variable names and explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Access Control — SAS Name: ACCESS

Definition: Access control at the location of the roadway segment.

Additional Information: Access control as defined by OH state. For example, 'F' indicates that Ohio DOT owns the access control and can change it whenever deemed required. The use of this variable may result in some difficulties and we recommend the use of FED_ACES to get information on the access control of segments.

'1'	'Full Access Control'
'2'	'Partial Access Control'
'3'	'No Access Control'
'N'	'No Control of Access'
'L'	'Limited Control of Access'
'F'	'Full Control of Access'
' '	'Not Coded'

Area Name — SAS Name: AREACODE

Definition: Area name of the roadway segment

Begin Log Point of Curve — SAS Name: BEGMP

Definition: Calculated begin milepost.

Additional Information: Beginning milepost of the angle point in miles (XXX.XX). The value is same as ending milepost.

County Route **SAS Name: CNTY_RTE**

Definition: County route of the roadway segment

Additional Information: Linkage variable consisting of COUNTY + RTE_NBR + RTE_SUFX + STAT_EQ. From year 2000, STATE_EQ is not required. Also RTE_SUFX became last digit of RTE_NBR.

County **SAS Name: COUNTY**

Definition: County of the roadway segment.

Additional Information: See listings under accident section of the guidebook.

Degree of Curve **SAS Name: DEG_CURV**

Definition: Degree of the curve of the roadway segment

1 - 5	'1 To 5'
6 - 10	'6 To 10'
11 - 20	'11 To 20'
21 - 30	'21 To 30'
31 - HIGH	'> 30'

Description **SAS Name: DESC**

Definition: Description of the roadway segment location.

Direction of Curve **SAS Name: DIR_CURV**

Definition: Direction of curve

'LT'	'left'
'RT'	'Right'

District **SAS Name: DISTRICT**

Definition: District of the roadway segment.

Divided Highway Indicator — SAS Name: DIVIDED

Definition: Highway indicator indicates divided/undivided

' '	'Undivided'
'*'	'Divided'

End Log Point of Curve — SAS Name: ENDMP

Definition: Calculated ending milepost.

Additional Information: Ending milepost of the angle point in miles (XXX.XX). The value is same as beginning milepost.

Functional Class — SAS Name: FUNC_CLS

Definition: Functional Class of the roadway segment.

'01'	'Principal Arterial (Rural Interstate)'
'02'	'Principal Arterial (Rural Others)'
'06'	'Minor Arterial (Rural)'
'07'	'Major Collector (Rural)'
'08'	'Minor Collector (Rural)'
'09'	'Local (Rural)'
'11'	'Principal Arterial (Urban Interchange)'
'12'	'Principal Arterial (Urban-Freeway & Expressway'
'14'	'Principal Arterial (Urban-Other)'
'16'	'Minor Arterial (Urban)'
'17'	'Collector (Urban)'
'19'	'Local (Urban)'
''	'Not Coded'

Year of Coding Change — SAS Name: INV_DATE

Definition: Year when coding change occurred

Mile Class — SAS Name: MILE_CLS

Definition: Mile class of the roadway segment

Number of Lanes — SAS Name: NO_LANES

Definition: Number of lanes – total for both directions.

.	'Missing'
1	' 1 Lane'
2	' 2 Lanes'
3	' 3 Lanes'
4	' 4 Lanes'
5	' 5 Lanes'
6	' 6 Lanes'
7	' 7 Lanes'
8	' 8 Lanes'
9	' 9 Lanes'
10	'10 Lanes'
11	'11 Lanes'
12	'12 Lanes'

State Route Number — SAS Name: RTE_NBR

Definition: The number of the route of the roadway segment.

Additional Information: From year 2000, this variable became 5 characters with first digit being '0' and last digit as RTE_SUFX.

State Route Suffix — SAS Name: RTE_SUFX

Definition: State route suffix of the roadway segment

Additional Information: Code 'I' is for a route within an interchange used to connect ramps.

'A'	'Alternate'
'B'	'Bypass'
'C'	'Spur Or Connector'
'D'	'Directional Alternate (1st Within County)'
'E'	'East'
'F'	'Directional Alternate (2nd Within County)'
'G'	'Directional Alternate (3rd Within County)'
'I'	'Interchange Roadway'
'J'	'Awaiting Final Disposition'
'K'	'Turnpike'
'N'	'North'
'P'	'Proposed (Not Built)'
'R'	'Regular'
'S'	'South'
'T'	'Temporary'
'W'	'West'

Segment Length — SAS Name: SEG_LNG

Definition: Segment length in miles.

Additional Information: All the segment lengths are zero since it describes only a point.

Sequence Number — SAS Name: SEQ_NBR

Definition: Sequence number of the roadway segment

Station Equation Sort Field — SAS Name: STAT_EQU

Definition: Station equation sort field of the roadway segment

System Class

SAS Name: SYS_CLAS

Definition: System class of the roadway segment

'I'	'Interstate'
'M'	'Major Thoroughfare'
'A'	'Auxiliary, State'
'L'	'Local, State'
' '	'Not Coded'

SAS VARIABLE NAME	DESCRIPTION	SAS VARIABLE FILE	FORMAT TYPE	PAGE NO.
General Intersection Variables				
AGENCYID	Intersection ID	Intersection	CHA(18)	172
AGENCYSITESUBTYPE	SITE SUBTYPE	Intersection	CHA(3)	172
ALTROUTENAMES	COINCIDING ROUTE NAME MAJRD	Intersection	CHA(1)	172
AREATYPE	AREA TYPE	Intersection	CHA(1)	172
CITY	FIPS CODE	Intersection	CHAR(5)	172
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NOTE: SAS variable names and explanatory names are shown above each listing. (See Discussion for information on SAS formats.)

Intersection ID **SAS Name: AGENCYID**

Definition: ID of the intersection

Additional Information: This will be the Intersection ID that will be used to link to the leg variables.

Site Subtype **SAS Name: AGENCYSITESUBTYPE**

Definition: Site subtype of the intersection

Coinciding Route Name Maj RD **SAS Name: ALTROUTENAMES**

Definition: Coinciding route name of the major approach of the intersection

Additional Information: This item represents the other route number(s) for a section of roadway where overlapping routes share the same physical section of roadway.

Area Type **SAS Name: AREATYPE**

Definition: Area type of the intersection

Additional Information: This item characterizes the area in which the site is located.

'U' 'Urban - Urban Area TypeR - Rural - Rural Area Type'
'X' 'Unknown - Unknown Area Type'

FIPS Code **SAS Name: CITY**

Definition: FIPS code of the intersection

Comment **SAS Name: COMMENT**

Definition: Comment on the intersection

Additional Information: An optional comment for the intersection

Corridor **SAS Name: CORRIDOR**

Definition: Corridor of the intersection

County **SAS Name: COUNTY**

Definition: County of the intersection

Additional Information: The value of this item identifies the county in which the site is located.

Maintenance District **SAS Name: DISTRICT**

Definition: Maintenance district of the intersection

Additional Information: The designation of the subdivision of the highway agency responsible for maintenance of the site.

GIS ID **SAS Name: GISID**

Definition: GIS ID of the intersection

AADT Growth Factor **SAS Name: GROWTHFACTOR**

Definition: AADT growth factor of the intersection

Additional Information: The fixed annual rate of increase at which traffic volume is expected to grow (i.e., represents exponential growth).

Intersection Type — SAS Name: INTERSECTIONTYPE1

Definition: Type of the intersection

Additional Information: The type of intersection at which two or more roadways intersect at grade.

'0' 'Other'
'1' 'Tee Intersection'
'2' 'Y Intersection'
'3' 'Four-leg Intersection'
'4' 'Traffic Circular Roundabout'
'5' 'Multi-leg Intersection'
'99' 'Unknown'

Jurisdiction — SAS Name: JURISDICTION

Definition: Jurisdiction of the intersection

Additional Information: The primary agency responsible for the site.

'1' 'Federal Maintained - Primary Agency Responsible For Maintaining Is Federal'
'2' 'State Maintained - Primary Agency Responsible For Maintaining Is State'
'3' 'County Maintained - Primary Agency Responsible For Maintaining Is County'
'4' 'Municipal Maintained - Primary Agency Responsible For Maintaining Is County'
'5' 'Other Maintained - Primary Agency Responsible For Maintaining Is Other'
'6' 'Township Maintained - Primary Agency Responsible For Maintaining Is Township'
'99' 'Unknown - Primary Agency Responsible For Maintaining Is Unknown'

Influence Zone Beg Maj RD — SAS Name: MAJBEGININFLUENCEZONE

Definition: Influence zone begin on the major approach of the intersection

Influence Zone End Maj RD — SAS Name: MAJENDINFLUENCEZONE

Definition: Influence zone end on the major approach of the intersection

Major road AADT **SAS Name: MAJOR_AADT_11**

Definition: AADT of major approach of the intersection

Direction Major Road **SAS Name: MAJORROADDIRECTION**

Definition: Direction of major approach of the intersection

Additional Information: The designated direction of the major roadway. This is not necessarily a compass direction. For example, the direction of a state designated north-south highway must be either northbound or southbound even though a short segment of the highway or the approach to the intersection may have an east-west orientation.

Location System Major Road **SAS Name: MAJOROADLOCSYSTEM**

Definition: Location system of major approach of the intersection

Name Major Road **SAS Name: MAJOROADNAME**

Definition: Name of major approach of the intersection

Milepost Major Road **SAS Name: MAJORROADOFFSET**

Definition: Milepost of major approach of the intersection

Section Major Road **SAS Name: MAJORROADSECTION**

Definition: Section of major approach of the intersection

Influence Zone Beg Min Rd **SAS Name: MINBEGININFLUENCEZONE**

Definition: Influence zone begin on the minor approach of the intersection

Influence Zone End Min Rd **SAS Name: MINENDININFLUENCEZONE**

Definition: Influence zone end on the minor approach of the intersection

Minor road AADT **SAS Name: MINOR_AADT_11**

Definition: AADT of the minor approach of the intersection

Location System Minor Road **SAS Name: MINORROADLOCSYSTEM**

Definition: Location system of minor approach of the intersection

Name Minor Road **SAS Name: MINORROADNAME**

Definition: Name of minor approach of the intersection

Additional Information: The name of the minor road(s) at the intersection.

Milepost Minor Road **SAS Name: MINORROADOFFSET**

Definition: Milepost of minor approach of the intersection

Route Name Minor Road **SAS Name: MINORROADROUTENAME**

Definition: Name of minor approach of the intersection

Route Type Minor Road **SAS Name: MINORROADTYPE**

Definition: Route type of minor approach of the intersection

Section Minor Road **SAS Name: MINORROADSECTION**

Definition: Section of minor approach of the intersection

Minor Road Offset Distance **SAS Name: OFFSETDISTANCE**

Definition: Offset distance of minor approach of the intersection

Additional Information: Indicates the offset distance between the centerlines of the intersection legs (minor road) at the intersection. When the intersection legs are not offset, the value of this data item should be null.

Minor Road Offset Flag **SAS Name: OFFSETINTERSECTION**

Definition: Offset flag of minor approach of the intersection

Additional Information: Indicates whether the cross streets intersect the major road at the same location or whether there is some separation or distance between the centerlines of the cross streets.

Date Opened to Public **SAS Name: OPENEDTOTRAFFIC**

Definition: Date opened to public

Route Number Major Road **SAS Name: ROUTENAME**

Definition: Route number of major approach of the intersection

Additional Information: The number or name of the route where the site is located.

Route Type Major Road **SAS Name: ROUTETYPE**

Definition: Route type of major approach of the intersection

Additional Information: The category of the route where the site is located.

'IR' 'Interstate Route'
'US' 'United States Route'
'SR' 'State Route'
'CR' 'County Route'
'TR' 'Township Route'
'RA' 'Ramp'
'MR' 'Municipal Route'
'DD' 'Defense Route'
'NR' 'ODOT Natural Resources Routes'
'FR' 'Forest Route'
'RE' 'Rest areas'
'WS' 'Weigh station'
'BK' 'Bike Route'
'O' 'Other'
'X' 'Unknown'

Traffic Control Type — SAS Name: TRAFFICCONTROL1

Definition: Traffic control type

Additional Information: The type of traffic control device at the intersection. This category may be used for purposes of an advanced search, and categories listed in Traffic Control Type at Intersection Level 2 may be derived from this data item.

'1'	'No control'
'2'	'Stop signs on cross street only'
'3'	'Stop signs on mainline only'
'4'	'All-way stop signs'
'5'	'Two-way flasher (red on cross street)'
'6'	Two-way flasher (red on mainline)
'7'	All-way flasher (red on all)'
'8'	Yield signs on cross street only
'9'	Other non-signalized
'10'	Signals pre timed (2 phase)
'11'	Signals pre timed (2 phase)'
'12'	Signals pre timed (multi-phase)
'13'	Signals semi-actuated (2 phase)
'14'	Signals semi-actuated (multi-phase)
'15'	Signals fully actuated (2 phase)
'16'	Signals fully actuated (multi-phase)'
'17'	Other signalized
'18'	Roundabout
'99'	Unknown

Leg Comment — SAS Name: COMMENT_TXT

Definition: Leg comment

Additional Information: An optional comment for the intersection leg.

Leg Influence Zone length — SAS Name: INFLUENCE_ZONE_NBR

Definition: Length of leg influence zone

Additional Information: The zone that extends from the center of the intersection along the leg in which accidents that occur on the leg can be assigned to (i.e., are influenced by) the intersection. The unit of measure associated with this item is "feet".

Leg Left-turn Phasing — SAS Name: LEFT_TURN_PHASING_CD

Definition: Leg left-turn phasing

Additional Information: Characterizes the type of left-turn phasing provided on the approach. For an unsignalized intersection, the left-turn phasing code should be not applicable.

'1' 'Protected Left-Turn - Protected Left-Turn Phasing Provided on the Approach'
'2' 'Protected/Permitted Left-Turn - Protected/Permitted Left-Turn Phasing Provided on the Approach'
'3' 'Permitted Left-Turn - Permitted Left-Turn Phasing Provided on the Approach'
'4' 'No Left-Turn Phase - No Left-Turn Phasing Provided on the Approach'
'98' 'Not Applicable - Left-Turn Phasing Is Not Applicable on the Approach'
'99' 'Unknown - Unknown Left-Turn Phasing Provided on the Approach'

Direction of Leg **SAS Name: LEG_DIRECTION**

Definition: Direction of leg

Additional Information: Indicates the directional approach of the intersecting leg.

'NB' 'NB Approach - Directional Approach of the Intersecting Leg is Northbound'
'SB' 'SB Approach - Directional Approach of the Intersecting Leg is Southbound'
'WB' 'WB Approach - Directional Approach of the Intersecting Leg is Westbound'
'EB' 'EB Approach - Directional Approach of the Intersecting Leg is Eastbound'
'X' 'Unknown - Directional Approach of the Intersecting Leg is Unknown'

Leg ID **SAS Name: LEG_ID**

Definition: Leg ID

Additional Information: This item is a unique identifier for the intersection leg.

No. of Left Turn Lanes on Leg **SAS Name: LEG_LEFT_TURN_LANES_NBR**

Definition: Number of exclusive left turn lanes on the approach

Leg Median Type **SAS Name: LEG_MEDIAN_TYPE_CD**

Definition: Leg median type

Additional Information: The characterization of the area separating opposing traffic lanes.

'1' 'Raised Median with Curb - Intersection Median Type is a Raised Median with Curb'
'2' 'Depressed Median - Intersection Median Type is a Depressed Median'
'3' 'Flush Paved Median [At Least 4 Ft in Width] - Intersection Median Type is a Flush Paved Median, At Least 4 Ft in Width'
'4' 'Other Divided - Intersection Median Type is Classified as Other Divided'
'5' 'Undivided - Intersection Median Type is Undivided'
'0' 'Other - Intersection Median Type is Classified as Other'
'99' 'Unknown - Intersection Median Type is Unknown'

No. of Right Turn Lanes on Leg **SAS Name: LEG_RIGHT_TURN_LANES_NBR**

Definition: Number of exclusive right turn lanes on this approach.

No. of Leg Thru Approach Lanes **SAS Name: LEG_THRU_LANES_NBR**

Definition: Number of leg thru approach lanes

Additional Information: Number of through lanes on the approach to the intersection. This count includes all lanes with through movement (including through and left-turn lanes; through and right-turn lanes; through, left-turn, and right-turn lanes; and left-turn and right-turn lanes at three leg intersections) but not exclusive turn lanes.

Leg Type Code **SAS Name: LEG_TYPE_CD**

Definition: Leg type code

Additional Information: The value of this item specifies the major/minor road classification of this leg relative to the other legs at the intersection, and it also specifies the approach direction of the leg in terms of the travel direction of the route to which the leg belongs.

'1' 'Major Road, Increasing Milepost Direction - Major Road, Approach in the Direction of Increasing Mileposts along the Road'
'2' 'Major Road, Decreasing Milepost Direction - Major Road, Approach in the Direction of Decreasing Mileposts along the Road'
'3' 'Minor Road, Increasing Milepost Direction - Minor Road, Approach in the Direction of Increasing Mileposts along the Road'
'4' 'Minor Road, Decreasing Milepost Direction - Minor Road, Approach in the Direction of Decreasing Mileposts along the Road'
'98' 'Not Valid - Not Valid, E.G., 4th (Unused) Leg of a Three-Legged Intersection'
'99' 'Unknown - Unknown'

Leg One Way/Two Way **SAS Name: OPERATION_WAY_CD**

Definition: One way or two way operation of the leg

Additional Information: Indicates whether or not the intersection approach serves one-way or two-way traffic.

'1' 'One-Way Street or Road - Intersection Approach Serves One-Way Street or Road'
'2' 'Two-Way Street or Road - Intersection Approach Serves Two-Way Street or Road'
'99' 'Unknown - Intersection Approach Serves Unknown Street or Road'

Leg Speed Limit — SAS Name: SPEED_LIMIT_NBR

Definition: Speed limit of leg

Additional Information: The value of this item is the authorized posted speed limit. If differing speed limits exist for passenger cars and trucks, this field will contain the passenger car speed limit. If no speed limit is posted, the speed limit that applies as a matter of law will be used. For intersection legs, this is the posted speed limit on the approach to the intersection. The unit of measure associated with this item is "miles per hour".

Leg Turn Restrictions — SAS Name: TURN_PROHIBITIONS_CD

Definition: Leg turn restrictions

Additional Information: Characterizes the turn restrictions for vehicles leaving the approach.

'1' 'No Left Turns Any Time - Left Turns are Prohibited at All Times for Vehicles Leaving the Approach'
'2' 'No Left Turns During Specific Times - Left Turns are Prohibited During Specific Times for Vehicles Leaving the Approach'
'3' 'No Right Turns Any Time - Right Turns are Prohibited at All Times for Vehicles Leaving the Approach'
'4' 'No Right Turns During Specific Times - Right Turns are Prohibited During Specific Times for Vehicles Leaving the Approach'
'5' 'No U Turns - U Turns are Prohibited for Vehicles Leaving the Approach'
'6' 'Other - Other Prohibitions Apply for Vehicles Leaving the Approach'
'98' 'No Turn Prohibitions - No Turn Prohibitions for Vehicles Leaving the Approach'
'99' 'Unknown - Unknown Prohibitions for Vehicles Leaving the Approach'