HIGHWAY SAFETY INFORMATION SYSTEM GUIDEBOOK FOR THE

CALIFORNIA STATE DATA FILES

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Introduction to the California HSIS Guidebook

The Highway Safety Information System (HSIS), established in 1987, is a foundational highway research data system. The State of California has participated in the HSIS program since 1991, providing quality data to HSIS for use by researchers through a request system. In 2021, HSIS began a modernization effort with the goal of expanding the technological and analytic capabilities of the data system. This modernization provides an increased emphasis on spatial analysis and cloud-based data management.

What Has Changed

This guidebook is intended to support the use of California HSIS data for the years 2018 and beyond. Data and documentation prior to 2018 (1991-2017) are available upon request to the HSIS Virtual Laboratory. Prior to 2018, the California datasets included variables for the following files:

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

Beginning in 2018, the vehicle occupants file is no longer available, and <u>Appendix A</u> summarizes revisions the <u>HSIS Laboratory</u> made to the variables. There are several key differences between the California HSIS data prior to 2018:

Changes in File Names

Previously, HSIS data included accident, vehicle, and occupant files to describe crashes, the vehicles involved in those crashes, and the occupants of those vehicles. Due to changes in reported data, HSIS now uses the nomenclature of Crash and Unit files to represent these characteristics. Figure 1 illustrates the connection between the previous file naming convention (1991-2017) and the current file naming convention (2018-2020).

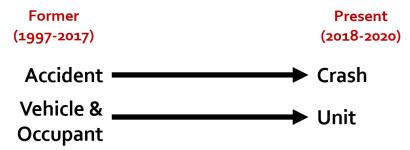


Figure 1. Changes to California HSIS Data File Naming Convention.

Changes in Variable Names

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

Changes in Available Variables

This guidebook reflects the latest high-quality data available to HSIS and the research community. This guidebook represents data that are available to requestors for the years 2018 to 2020. Variables that were available in previous years and documented in past guidebooks may no longer be available or otherwise discontinued. Please consult past guidebooks or the HSIS Virtual Laboratory for information regarding previously available data.

Changes in Variable Linkages

HSIS data are stored in a geographic information systems (GIS) compatible format. Researchers can request data from HSIS in various additional formats such as SAS, Microsoft Excel® and Access®, dBase, ASCII, etc. to meet their analytical and resource capabilities. Figure 2 provides an overview of the structure and relationships linking the 5 files. The following sections provide a brief summary of each file.

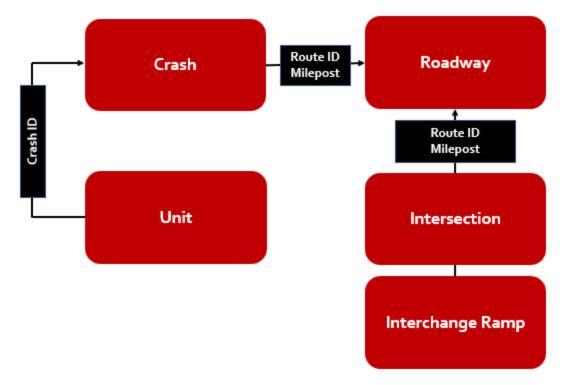


Figure 2. California HSIS Data Files and Linking Variables.

Roadway File (2018 - 2020)

This file contains information about the physical layout of California's roads and the traffic characteristics associated with "on-system" roads in the State (i.e., State maintained). The file includes variables that describe the surface width, lane width and type, shoulder width and type, median information, and other variables. This file also contains information on traffic volumes represented as annual average daily traffic (AADT).

The Route ID is the key linking variable between the base roadway inventory and the associated datasets, (e.g., Crash, Intersection, and Intersection Ramps). California uses a county route system as part of the State's linear referencing system (LRS); in other words, the mileposts associated with a single route (e.g., State Route 84) reset to 'o' when the route enters a county. The end milepost value will vary by county depending on the length of the route within a given county. Figure 3 provides an example of the Route ID naming convention for State Route 1 in Orange County. It is a concatenation of the District, Route Number, Route Suffix¹, County, Postmile Prefix¹, and Postmile Suffix¹.

¹ (If present for the segment)

	† †	District		Route Number		Route Suffix (if present)			County		Postmile Prefix (if present)		Postmile Suffix (if present)
Route ID	1	2	o	o	1		_	0	R	Α	R	_	
Position	1	2	3	4	5	6	7	8	9	10	11	12	13

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

Intersection (2018 – 2020)

This file provides the location of two or more public roads that intersect when at least one of the roadways is a State highway in California. This includes the location of the intersection on the State highway (i.e., milepost), as well as approach information for both the mainline (i.e., the State highway), as well as the cross-street. Route and location information only applies to the mainline, however.

Interchange Ramp (2018 – 2020)

This file provides information associated with interchange ramps on State highways in California. The milepost associated with each ramp represents the location where the ramp enters the freeway (i.e., the "gore" location). Although there is no common identifier to link ramps to a single interchange, the route and milepost associated with each ramp can be used to inform relationships between individual ramps.

Crash File (2018 - 2020)

Crash data are contained in two separate files. The Crash file contains basic information on the crash. Related information on the vehicles, pedestrians, and bicyclists involved in each crash are contained in the corresponding Unit file. Specifically, the Crash file contains information relating to crash-level characteristics and conditions at the time of the crash. The Crash file can be linked to the Unit file using the Crash ID. The Crash file can be linked to the Roadway Inventory file using the *Route ID* and *Milepost* variables. These two variables are provided in the original data from the California Department of Transportation (Caltrans). The prescribed accident-reporting threshold is currently death, personal injury, or \$1,000 in property damage.

Unit File (2018 – 2020)

This file provides information on the individual parties (i.e., vehicles, pedestrians, or bicyclists) involved in crashes on California roads. The Unit file can be linked to the Crash file through the *Crash ID* variable.

Using the Files Together

Figure 1 highlighted the linkages between each of the 5 California files. Researchers can use these files together to understand the circumstances, location, and vehicles and individuals involved in a crash. The California HSIS data can be linked and aggregated using tabular relationships. HSIS data follow four different formats; each variable in this guidebook notes the specific format of that variable.

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

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

Text: Free-form, plain text values that are not represented by coded abbreviations or other shorthand values (e.g., US 17 BUS (ROAD ST.) & CHURCH ST).

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

When using the files together, researchers should note that there are variables of the same name in two different files in some cases. For some of these variables, this is by design so that the files can be linked together. Examples of this include *Crash ID* and *Route ID*. *Crash ID* is used

to link the Crash and Unit files. For other variables, duplicated variable names across files are because the same information has been aggregated twice. For example, *Highway Group* is recorded in both the Intersection and Interchange Ramp files. In these cases, the HSIS Laboratory has compared across these variables and harmonized them to provide consistent information.

Requesting HSIS Data

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

A graduate student is interested in exploring intersection-related crashes in California. Specifically, they are interested in injury severity at different types of intersections, and they want to control for traffic volumes on all approaches.

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

Roadway Variables

- Route ID (linkable to the Route ID variable in the Crash file).
- Roadway Class.
- AADT.
- Median Type.
- Median Width.
- Average Lane Width.
- Right and Left Shoulder Widths.
- Design Speed (as an approximation of posted speed limit).
- Number of Lanes Total.

Intersection Variables

- Mainline Route ID (linkable to the Route ID variable in the Roadway file).
- Milepost (this is the major or mainline route).
- Traffic Control Type.
- Intersection Type.
- Intersection Light Type.
- Mainline AADT.
- Mainline Traffic Flow.

- Mainline Left/Right Turn Channelization.
- Cross Street AADT.
- Cross Street Traffic Flow.
- Cross Street Left/Right Turn Channelization.

Crash Variables

- Route ID (linkable to the Route ID variable in the Roadway file).
- Milepost (necessary for linking crashes to the Roadway file).
- Crash ID (linkable to the Crash ID variable in the Unit file).
- Crash Date.
- Time of Crash.
- Crash Severity.
- Crash Type.
- Traffic Control Operating.
- · Light Condition.
- Truck Involvement.
- Alcohol Involved.
- Bicycle Involved.
- Pedestrian Involved.

Unit Variables

- Crash ID (linkable to the Crash ID variable in the Crash file).
- Unit Number.
- Movement Type.

The analyst does not request any information from the Interchange Ramp file. When merging the files, the student should note that the Crash, Unit, Intersection, and Roadway files contain different numbers of observations or rows. The Crash file contains one observation per crash (e.g., a unique case number on each row), while the Unit file contains an observation for each vehicle, pedestrian, or bicyclist involved in the crash. If more than one vehicle is involved in a crash, there will be more than one row associated with the same *Crash ID*. Additionally, the Roadway file contains an observation or row for each road segment. Some segments may have multiple crashes associated with it while others may not have any.

Available Data

Table 1 provides a summary of all variables currently available in HSIS for the 5 files. Attributes and fields have evolved since the introduction of California into the HSIS data system, and users should carefully consider these changes during the data collection research process.

Table 1. Summary of California HSIS Variables by Data File.

VARIABLE NAME	VARIABLE DESCRIPTION	DATA FILE
AADT	AADT	ROADWAY
ACCESS	ACCESS CONTROL	ROADWAY
LANEWID	AVERAGE LANE WIDTH	ROADWAY
BEGMP	BEGIN MILEPOST	ROADWAY
CITY	CITY	ROADWAY
COUNTY	COUNTY	ROADWAY
DESG_SPD	DESIGN SPEED	ROADWAY
DISTRICT	DISTRICT	ROADWAY
DIVIDED	DIVIDED HIGHWAY	ROADWAY
ENDMP	END MILEPOST	ROADWAY
HWY_GRP	HIGHWAY ALIGNMENT	ROADWAY
LSHLDWID	LEF SHOULDER WIDTH (INSIDE)	ROADWAY
LSHL_WD2	LEFT SHOULDER WIDTH (OUTSIDE)	ROADWAY
MEDBARTY	MEDIAN BARRIER TYPE	ROADWAY
MED_TYPE	MEDIAN TYPE	ROADWAY
MED_VAR	MEDIAN VARIANCE	ROADWAY
MEDWID	MEDIAN WIDTH	ROADWAY
NO_LANE1	NUMBER OF LANES (RIGHT/INCREASING)	ROADWAY
NO_LANE2	NUMBER OF LANES (LEFT/DECREASING)	ROADWAY
PSMILPRF	POSTMILE PREFIX	ROADWAY
PSMILSUF	POSTMILE SUFFIX	ROADWAY
RODWYCLS	ROADWAY CLASS	ROADWAY
RTE_NBR	ROADWAY ROUTE NUMBER	ROADWAY
RTE_SUF	ROUTE SUFFIX	ROADWAY
RSHLDWID	RIGHT SHOULDER WIDTH (OUTSIDE)	ROADWAY
RSHL_WD2	RIGHT SHOULDER WIDTH (INSIDE)	ROADWAY
CNTYRTE	ROUTE ID	ROADWAY
ROUTE_ID	ROUTE ID (GIS)	ROADWAY
RURURB	RURAL/URBAN	ROADWAY
SEG_LNG	SECTION LENGTH	ROADWAY
SURF_TYP	SURFACE TYPE (LEFT/DECREASING)	ROADWAY
SURF_TY2	SURFACE TYPE (RIGHT/INCREASING)	ROADWAY
TERRAIN	TERRAIN	ROADWAY
NO_LANES	TOTAL NUMBER OF LANES	ROADWAY
SURF_WID	TRAVEL WAY WIDTH (LEFT/DECREASING)	ROADWAY

SURF_WD2	TRAVEL WAY WIDTH (RIGHT/INCREASING)	ROADWAY
CITY_CODE	CITY CODE	INTERSECTION
COUNTY	COUNTY	INTERSECTION
DISTRICT	DISTRICT	INTERSECTION
HWY_GRP	HIGHWAY ALIGNMENT	INTERSECTION
INT_RTE	INTERSECTING ROUTE NUMBER	INTERSECTION
INT_RSUF	INTERSECTION ROUTE SUFFIX	INTERSECTION
INT_DESC	INTERSECTION NAME	INTERSECTION
INT_DTE	INTERSECTION EFFECTIVE NAME	INTERSECTION
LGHT_TYP	INTERSECTION LIGHT TYPE	INTERSECTION
INTMP	INTERSECTION MILEPOST	INTERSECTION
TYPEDESC	INTERSECTION TYPE	INTERSECTION
ML_AADT	MAINLINE AADT	INTERSECTION
ML_LEFT	MAINLINE LEFT TURN CHANNELIZATION	INTERSECTION
ML_LANES	MAINLINE NUMBER OF LANES	INTERSECTION
ML_RIGHT	MAINLINE RIGHT TURN CHANNELIZATION	INTERSECTION
CNTYRTE	MAINLINE ROUTE ID	INTERSECTION
ML_MAST	MAINLINE SIGNAL MAST ARM	INTERSECTION
ML_TRFLO	MAINLINE TRAFFIC FLOW	INTERSECTION
MILEPOST	MILEPOST	INTERSECTION
PSMILPRF	POSTMILE PREFIX	INTERSECTION
PSMILSUF	POSTMILE SUFFIX	INTERSECTION
RTE_NBR	ROADWAY ROUTE NUMBER	INTERSECTION
RTE_SUF	ROADWAY ROUTE SUFFIX	INTERSECTION
ROUTE_ID	ROUTE ID (GIS)	INTERSECTION
INT_POPGRP	RURAL/URBAN	INTERSECTION
TRF_CNTL	TRAFFIC CONTROL TYPE	INTERSECTION
XSTAADT	X-STREET AADT	INTERSECTION
INTY_RTE	X-STREET COUNTY ROUTE	INTERSECTION
XSTRTLFT	X-STREET LEFT TURN CHANNELIZATION	INTERSECTION
XSTLANES	X-STREET NUMBER OF LANES	INTERSECTION
XSTRTRGH	X-STREET RIGHT TURN CHANNELIZATION	INTERSECTION
XST_RSUF	X-STREET ROUTE SUFFIX	INTERSECTION
XSTRTMST	X-STREET SIGNAL MAST ARM	INTERSECTION
XSTSTRT	X-STREET STATE ROUTE	INTERSECTION
XSTTRFLO	X-STREET TRAFFIC FLOW	INTERSECTION
CITY_CODE	CITY CODE	INTERCHANGE RAMP
COUNTY	COUNTY	INTERCHANGE RAMP
DISTRICT	DISTRICT	INTERCHANGE RAMP

HWY_GRP	HIGHWAY ALIGNMENT	INTERCHANGE RAMP
ON_OFFRP	ON/OFF RAMP INDICATOR	INTERCHANGE RAMP
PSMILPRF	POSTMILE PREFIX	INTERCHANGE RAMP
PSMILSUF	POSTMILE SUFFIX	INTERCHANGE RAMP
RMP_AADT	RAMP AADT	INTERCHANGE RAMP
	RAMP AREA4 INDICATOR	INTERCHANGE RAMP
AREA4 MILEPOST	RAMP MILEPOST	INTERCHANGE RAMP
CNTYRTE	ROUTE ID	INTERCHANGE RAMP
ROUTE_ID	ROUTE ID (GIS)	INTERCHANGE RAMP
RTE_NBR	ROUTE NUMBER	INTERCHANGE RAMP
RTE_SUF	ROUTE SUFFIX	INTERCHANGE RAMP
RMP_POPGRP	RURAL/URBAN	INTERCHANGE RAMP
ALCH_FLG	ALCOHOL INVOLVED	CRASH
BIKE_FLG	BICYCLE INVOLVED IN THE CRASH	CRASH
COUNTY	COUNTY	CRASH
ACC_DATE	CRASH DATE	CRASH
ACC_ID	CRASHID	CRASH
RPT_LEV	CRASH REPORT LEVEL	CRASH
SEVERITY	CRASH SEVERITY	CRASH
ACCYR	CRASH YEAR	CRASH
WEEKDAY	DAY OF WEEK	CRASH
DISTRICT	DISTRICT	CRASH
FILETYP	FILE TYPE	CRASH
INTER	INTERSECTION CRASH	CRASH
INT_RMP	INTERSECTION/RAMP CRASH LOCATION	CRASH
LIGHT	LIGHT CONDITION	CRASH
LOC_TYP	LOCATION TYPE	CRASH
MILEPOST	MILEPOST	CRASH
MTCY_FLG	MOTORCYCLE INVOLVED	CRASH
PED_FLG	PEDESTRIAN FLAG	CRASH
TOT_INJ	PERSONS INJURED	CRASH
TOT_KILL	PERSONS KILLED	CRASH
PSMILPRF	POSTMILE PREFIX	CRASH
PSMILSUF	POSTMILE SUFFIX	CRASH
CAUSE1	PRIMARY COLLISION FACTOR	CRASH
RDSURF	ROAD SURFACE	CRASH
RODWYCLS	ROADWAY CLASS	CRASH
RD_DEF1	ROADWAY CONDITION	CRASH
RTE_NBR	ROADWAY ROUTE NUMBER	CRASH
		1

CNTYRTE	ROUTEID	CRASH
ROUTE_ID	ROUTE ID (GIS)	CRASH
RTE_SUF	ROUTE SUFFIX	CRASH
HOUR	TIME OF CRASH	CRASH
TOT_BIKE_INJ	TOTAL BICYCLISTS INJURED	CRASH
TOT_BIKEKIL	TOTAL BICYCLISTS KILLED	CRASH
TOT_MTCYLINJ	TOTAL MOTORCYCLISTS INJURED	CRASH
TOT_MTCYLKIL	TOTAL MOTORCYCLISTS KILLED	CRASH
TOT_PEDINJ	TOTAL PEDESTRIANS INJURED	CRASH
TOT_PEDKILL	TOTAL PEDESTRIANS KILLED	CRASH
NUMVEHS	TOTAL NUMBER OF VEHICLES	CRASH
TRF_OPER	TRAFFIC CONTROL OPERATING	CRASH
TRK_FLG	TRUCK INVOLVEMENT	CRASH
ACCTYPE	TYPE OF CRASH	CRASH
WEATHER	WEATHER PRIMARY	CRASH
WEATHER1	WEATHER SECONDARY	CRASH
ACC_ID	CRASH ID	UNIT
POSN_1	CRASH LOCATION 1	UNIT
POSN_2	CRASH LOCATION 2	UNIT
POSN_3	CRASH LOCATION 3	UNIT
POSN_4	CRASH LOCATION 4	UNIT
HWY_IND_TYPE	HIGHWAY INDICATOR TYPE	UNIT
MOVEMENT_TYPE	MOVEMENT TYPE	UNIT
OBJECT_1	OBJECT STRUCK 1	UNIT
OBJECT_2	OBJECT STRUCK 2	UNIT
OBJECT_3	OBJECT STRUCK 3	UNIT
OBJECT_4	OBJECT STRUCK 4	UNIT
IMPAIRMENT_CODE_2	PARTY DRUG OR PHYSICAL IMPAIRMENT	UNIT
IMPAIRMENT_CODE_1	PARTY SOBRIETY	UNIT
PED_ACTN	PEDESTRIAN ACTION	UNIT
PED_INJ_CODE	PEDESTRIAN INJURY CODE	UNIT
SPECIAL_FACTOR_CODE	SPECIAL INFORMATION	UNIT
MAJOR_INJURY	TOTAL SUSPECTED SERIOUS INJURIES	UNIT
MINOR_INJURY	TOTAL SUSPECTED MINOR INJURIES	UNIT
POSSIBLE_INJURY	TOTAL POSSIBLE INJURIES	UNIT
UNIT_VEC	UNIT NUMBER	UNIT
VEH_DIR	UNIT TRAVEL DIRECTION	UNIT
PARTY_GROUP	UNIT TYPE – GENERAL	UNIT
PARTY_TYPE	UNIT TYPE – SPECIFIC	UNIT

AADT Variable Name: AADT

Definition: Calculated average AADT (e.g., '1,100').

Field Type: Numeric.

Access Control Variable Name: ACCESS

Variable Name: LANEWID

Variable Name: BEGMP

Definition: Level of access control on the roadway segment (e.g., 'Freeway').

Field Type: Text.

Average Lane Width

Definition: Average lane width of the roadway segment (e.g., '12').

Field Type: Numeric.

Begin Milepost

Definition: Beginning milepost number (e.g., '0.129').

Field Type: Numeric.

City Variable Name: CITY

Definition: City where the crash occurred.

Field Type: Coded.

'ADA'	ARCADIA	'AND'	ANDERSON
'ADEL'	ADELANTO	'ANG'	ANGELS CAMP
'AGRH'	AGOURA HILLS	'ANT'	ANTIOCH
'ALA'	ALAMEDA	'APLV'	APPLE VALLEY
'ALB'	ALBANY	'ARC'	ARCATA
'ALH'	ALHAMBRA	'ARGD'	ARROYO GRANDE
'ALT'	ALTURAS	'ART'	ARTESIA
'AMCN'	AMERICAN CANYON	'ARV'	ARVIN
'ANA'	ANAHEIM	'ATAS'	ATASCADERO

'ATN'	ATHERTON	'CLNG'	COALINGA
'ATW'	ATWATER	'CLP'	CALIPATRIA
'AUB'	AUBURN	'CLU'	COLUSA
'AVNL'	AVENAL	'CLVD'	CLOVERDALE
'AZU'	AZUSA	'CLX'	CALEXICO
'BAN'	BANNING	'CMAD'	CORTE MADERA
'BAU'	BEAUMONT	'CMB'	CAMPBELL
'BBL'	BIG BEAR LAKE	'CMRC'	COMMERCE
'BELL'	BELL	'CMRL'	CAMARILLO
'BEN'	BENICIA	'CMS'	COSTA MESA
'BER'	BERKELEY	'CMSA'	CALIMESA
'BFL'	BELLFLOWER	'CND'	CONCORD
'BIS'	BISHOP	'COA'	COACHELLA
'BKD'	BAKERSFIELD	'COL'	COLTON
'BLY'	BLYTHE	'COM'	COMPTON
'BMT'	BELMONT	'COR'	CORONA
'BPK'	BUENA PARK	'CORD'	CORONADO
'BRB'	BURBANK	'COTI'	COTATI
'BRE'	BREA	'CPO'	CUPERTINO
'BRW'	BRAWLEY	'CPTL'	CAPITOLA
'BSBN'	BRISBANE	'CRC'	CRESCENT CITY
'BSW'	BARSTOW	'CRCN'	CORCORAN
'BURL'	BURLINGAME	'CRSN'	CARSON
'BWP'	BALDWIN PARK	'CRTS'	CERRITOS
'CAL'	CALABASAS	'CSTG'	CALISTOGA
'CARP'	CARPINTERIA	'CTHC'	CATHEDRAL CITY
'CBD'	CARLSBAD	'DAPT'	DANA POINT
'CER'	CERES	'DBLN'	DUBLIN
'CFX'	COLFAX	'DLC'	DALY CITY
'CHC'	CHICO	'DLN'	DELANO
'CHN'	CHINO	'DMBR'	DIAMOND BAR
'CHNH'	CHINO HILLS	'DMR'	DUNSMUIR
'CHV'	CHULA VISTA	'DNVL'	DANVILLE
'CHW'	CHOWCHILLA	'DNY'	DOWNEY
'CLA'	CLAREMONT	'DPLS'	DOS PALOS
'CLC'	CULVER CITY	'DRO'	DEL REY OAKS
'CLLK'	CLEARLAKE	'DRS'	DORRIS
'CLM'	COLMA	'DRT'	DUARTE

'DVS'	DAVIS	'GNDL'	GLENDALE
'DXN'	DIXON	'GNFD'	GREENFIELD
'ECJ'	EL CAJON	'GNZ'	GONZALES
'ECN'	EL CENTRO	'GRC'	GROVER BEACH
'ECR'	EL CERRITO	'GRD'	GRIDLEY
'ELKG'	ELK GROVE	'GRTR'	GRAND TERRACE
'EMTE'	EL MONTE	'GUS'	GUSTINE
'EMV'	EMERYVILLE	'GVY'	GRASS VALLEY
'ENTS'	ENCINITAS	'HAN'	HANFORD
'EPAO'	EAST PALO ALTO	'HAW'	HAWTHORNE
'ESD'	ESCONDIDO	'HAY'	HAYWARD
'ESEG'	EL SEGUNDO	'HEM'	HEMET
'ESL'	ESCALON	'HER'	HERCULES
'ESN'	LAKE ELSINORE	'HES'	HESPERIA
'ETN'	ETNA	'HIGH'	HIGHLAND
'EUR'	EUREKA	'HIL'	HILLSBOROUGH
'EXR'	EXETER	'HLBG'	HEALDSBURG
'FBG'	FORT BRAGG	'HMB'	HERMOSA BEACH
'FER'	FERNDALE	'HMBY'	HALF MOON BAY
'FIL'	FILLMORE	'HNTB'	HUNTINGTON
'FIR'	FIREBAUGH		BEACH
'FJN'	FORT JONES	'HNTP'	HUNTINGTON PARK
'FMT'	FREMONT	'HOLT'	HOLTVILLE
'FNA'	FONTANA	'HRN'	HURON
'FNV'	FOUNTAIN VALLEY	'HST'	HOLLISTER
'FOW'	FOWLER	'IDY'	INDUSTRY
'FRE'	FRESNO	'IMB'	IMPERIAL BEACH
'FRFD'	FAIRFIELD	'IND'	INDIO
'FRFX'	FAIRFAX	'ING'	INGLEWOOD
'FSTC'	FOSTER CITY	'ION'	IONE
'FTA'	FORTUNA	'IRVN'	IRVINE
'FUL'	FULLERTON	'IRW'	IRWINDALE
'GAL'	GALT	'IST'	ISLETON
'GAR'	GARDENA	'JKN'	JACKSON
'GDLP'	GUADALUPE	'KMN'	KERMAN
'GDR'	GLENDORA	'KNC'	KING CITY
'GGR'	GARDEN GROVE	'KNGB'	KINGSBURG
'GIL'	GILROY	'LA'	LOS ANGELES

'LAH'	LOS ALTOS HILLS	'MAD'	MADERA
'LALM'	LOS ALAMITOS	'MAL'	MALIBU
'LAN'	LANCASTER	'MANB'	MANHATTAN
'LATS'	LOS ALTOS		BEACH
'LBCH'	LONG BEACH	'MCF'	MCFARLAND
'LBNS'	LOS BANOS	'MCL'	MONTCLAIR
'LCF'	LA CANADA	'MCP'	MARICOPA
	FLINTRIDGE	'MDA'	MENDOTA
'LEM'	LEMOORE	'MER'	MERCED
'LFYT'	LAFAYETTE	'MGH'	MORGAN HILL
'LGNB'	LAGUNA BEACH	'MLBR'	MILLBRAE
'LGNG'	LAGUNA NIGUEL	'MLP'	MENLO PARK
'LGNH'	LAGUNA HILLS	'MMLK'	MAMMOTH LAKES
'LGTS'	LOS GATOS	'MNRO'	MONROVIA
'LHB'	LA HABRA	'MNTG'	MONTAGUE
'LIO'	LIVE OAK	'MOBY'	MORRO BAY
'LKFR'	LAKE FOREST	'MOD'	MODESTO
'LKPT'	LAKEPORT	'MON'	MONTEREY
'LKSP'	LARKSPUR	'MONP'	MONTEREY PARK
'LKW'	LAKEWOOD	'MORV'	MORENO VALLEY
'LMGR'	LEMON GROVE	'MPS'	MILPITAS
'LMLN'	LOMA LINDA	'MRNA'	MARINA
'LMRD'	LA MIRADA	'MRPK'	MOORPARK
'LMS'	LOOMIS	'MRTA'	MURRIETA
'LMSA'	LA MESA	'MSHA'	MOUNT SHASTA
'LMTA'	LOMITA	'MSNV'	MISSION VIEJO
'LNDL'	LAWNDALE	'MSO'	MONTE SERENO
'LNSY'	LINDSAY	'MTBL'	MONTEBELLO
'LOD'	LODI	'MTCA'	MANTECA
'LOM'	LOMPOC	'MTZ'	MARTINEZ
'LOY'	LOYALTON	'MVL'	MARYSVILLE
'LPMA'	LA PALMA	'MVW'	MOUNTAIN VIEW
'LPU'	LA PUENTE	'MYD'	MAYWOOD
'LTRP'	LATHROP	'NAP'	NAPA
'LVMR'	LIVERMORE	'NATC'	NATIONAL CITY
'LVN'	LA VERNE	'NED'	NEEDLES
'LVTN'	LIVINGSTON	'NEVC'	NEVADA CITY
'LYN'	LYNWOOD	'NEWM'	NEWMAN

'NPTB'	NEWPORT BEACH	'PRV'	PICO RIVERA
'NRCO'	NORCO	'PSP'	PALM SPRINGS
'NRW'	NORWALK	'PSRS'	PASO ROBLES
'NVTO'	NOVATO	'PTA'	POINT ARENA
'NWK'	NEWARK	'PTRV'	PORTERVILLE
'OAK'	OAKLAND	'PWY'	POWAY
'OCN'	OCEANSIDE	'RBL'	RED BLUFF
'OJI'	OJAI	'RCH'	RICHMOND
'OKDL'	OAKDALE	'RCUC'	RANCHO
'ONT'	ONTARIO		CUCAMONGA
'ORA'	ORANGE	'RDEL'	RIO DELL
'ORCV'	ORANGE COVE	'RDG'	REDDING
'ORIN'	ORINDA	'RDL'	REDLANDS
'ORL'	ORLAND	'RDOB'	REDONDO BEACH
'OVL'	OROVILLE	'RDWC'	REDWOOD CITY
'OXN'	OXNARD	'RGCR'	RIDGECREST
'PA'	PALO ALTO	'RIA'	RIALTO
'PAS'	PASADENA	'RIP'	RIPON
'PAT'	PATTERSON	'RIV'	RIVERSIDE
'PBCH'	PISMO BEACH	'RNPK'	ROHNERT PARK
'PDST'	PALM DESERT	'ROC'	ROCKLIN
'PER'	PERRIS	'ROPV'	RANCHO PALOS
'PET'	PETALUMA		VERDES
'PFA'	PACIFICA	'RSM'	RANCHO SANTA
'PGR'	PACIFIC GROVE		MARGARITA
'PHME'	PORT HUENEME	'RSMD'	ROSEMEAD
'PIN'	PINOLE	'RSV'	ROSEVILLE
'PIT'	PITTSBURG	'RVBK'	RIVERBANK
'PLCN'	PLACENTIA	'RVS'	RIO VISTA
'PLCR'	PLACERVILLE	'SA'	SANTA ANA
'PLE'	PLEASANTON	'SAC'	SACRAMENTO
'PLHL'	PLEASANT HILL	'SAL'	SALINAS
'PLY'	PLYMOUTH	'SAR'	SARATOGA
'PMDL'	PALMDALE	'SAUS'	SAUSALITO
'POM'	POMONA	'SB'	SANTA BARBARA
'PRDS'	PARADISE	'SBD'	SAN BERNARDINO
'PRM'	PARAMOUNT	'SBR'	SAN BRUNO
'PRTL'	PORTOLA	'SCAR'	SAN CARLOS

'SCL'	SANTA CLARA	'SOLB'	SOLANA BEACH
'SCLE'	SAN CLEMENTE	'SON'	SONOMA
'SCR'	SANTA CRUZ	'SPA'	SANTA PAULA
'SCTA'	SANTA CLARITA	'SPAS'	SOUTH PASADENA
'SCTV'	SCOTTS VALLEY	'SPB'	SAN PABLO
'SD'	SAN DIEGO	'SRA'	SONORA
'SDMS'	SAN DIMAS	'SRF'	SAN RAFAEL
'SEA'	SEASIDE	'SRMN'	SAN RAMON
'SEB'	SEBASTOPOL	'SRO'	SANTA ROSA
'SEL'	SELMA	'SSF'	SOUTH SAN
'SEMT'	SOUTH EL MONTE		FRANCISCO
'SF'	SAN FRANCISCO	'STCK'	SUTTER CREEK
'SFSP'	SANTA FE SPRINGS	'STKN'	STOCKTON
'SGB'	SAN GABRIEL	'STT'	STANTON
'SGT'	SOUTH GATE	'SUIS'	SUISUN CITY
'SHLA'	SAINT HELENA	'SUNV'	SUNNYVALE
'SHLK'	SHASTA LAKE	'SUSV'	SUSANVILLE
'SIGH'	SIGNAL HILL	'TAF'	TAFT
'SIMV'	SIMI VALLEY	'TBRN'	TIBURON
'SJB'	SAN JUAN	'THOK'	THOUSAND OAKS
	BAUTISTA	'THPI'	TEHACHAPI
'SJCP'	SAN JUAN	'TMCA'	TEMECULA
	CAPISTRANO	'TMPC'	TEMPLE CITY
'SJS'	SAN JOSE	'TNP'	TWENTYNINE
'SLB'	SEAL BEACH		PALMS
'SLMO'	SAN ANSELMO	'TOR'	TORRANCE
'SLN'	SAN LEANDRO	'TRA'	TRACY
'SLO'	SAN LUIS OBISPO	'TRK'	TRUCKEE
'SLTO'	SOUTH LAKE	'TRND'	TRINIDAD
	TAHOE	'TUL'	TULARE
'SLVG'	SOLVANG	'TUR'	TURLOCK
'SM'	SAN MATEO	'TUS'	TUSTIN
'SMCA'	SANTA MONICA	'UKI'	UKIAH
'SMCS'	SAN MARCOS	'UNC'	UNION CITY
'SMRA'	SANTA MARIA	'UPL'	UPLAND
'SNDC'	SAND CITY	'VAC'	VACAVILLE
'SNT'	SANTEE	'VAL'	VALLEJO
'SOL'	SOLEDAD	'VCTV'	VICTORVILLE

Roa	dway	File

'VEN'	VENTURA	'WLKV'	WESTLAKE VILLAGE
'VER'	VERNON	'WLOS'	WILLOWS
'VIS'	VISALIA	'WLTS'	WILLITS
'VSTA'	VISTA	'WMD'	WESTMORLAND
'WAS'	WASCO	'WMS'	WILLIAMS
'WAT'	WATSONVILLE	'WSAC'	WEST
'WCOV'	WEST COVINA		SACRAMENTO
'WD'	WOODLAND	'WTM'	WESTMINSTER
'WDS'	WOODSIDE	'WTRF'	WATERFORD
'WEED'	WEED	'YC'	YUBA CITY
'WHT'	WHEATLAND	'YCPA'	YUCAIPA
'WIN'	WINTERS	'YNTV'	YOUNTVILLE
'WIT'	WHITTIER	'YRE'	YREKA
'WLC'	WALNUT CREEK	'YUCV'	YUCCA VALLEY
'WLK'	WOODLAKE		

County Variable Name: COUNTY

Definition: County where the crash occurred.

Field Type: Coded.

`ALA'	Alameda	'LAS'	Lassen
'ALP'	Alpine	'LA'	Los Angeles
'AMA'	Amador	'MAD'	Madera
'BUT'	Butte	'MRN'	Marin
'CAL'	Calaveras	'MPA'	Mariposa
'COL'	Colusa	'MEN'	Mendocino
'CC'	Contra Costa	'MER'	Merced
'DN'	Del Norte	'MOD'	Modoc
'ED'	El Dorado	'MNO'	Mono
'FRE'	Fresno	'MON'	Monterey
'GLE'	Glenn	'NAP'	Napa
HUM'	Humboldt	'NEV'	Nevada
'IMP'	Imperial	'ORA'	Orange
'INY'	Inyo	'PLA'	Placer
'KER'	Kern	'PLU'	Plumas
'KIN'	Kings	'RIV'	Riverside
'LAK'	Lake	'SAC'	Sacramento

'SBT'	San Benito	'SIS'	Siskiyhou
'SBD'	San Bernardino	'SOL'	Solano
'SD'	San Diego	'SON'	Sonoma
'SF'	San Francisco	'STA'	Stanislaus
'SJ'	San Joaquin	'SUT'	Sutter
'SLO'	San Luis Obispo	'TEH'	Tehama
'SM'	San Mateo	'TRI'	Trinity
'SB'	Santa Barbara	'TUL'	Tulare
'SCL'	Santa Clara	'TUO'	Tuolume
'SCR'	Santa Cruz	'VEN'	Ventura
'SHA'	Shasta	'YOL'	Yolo
'SIE'	Sierra	'YUB'	Yuba

Design Speed

Variable Name: DESG_SPD

Definition: Design speed of the roadway segment in miles per hour (e.g., '30').

Field Type: Numeric.

District Variable Name: DISTRICT

Definition: Caltrans district in which the roadway segment is located (e.g., '12 - Orange

County').

Field Type: Text.

Divided Highway

Variable Name: DIVIDED

Definition: Indicator of a median divided highway (e.g., 'Yes').

Field Type: Text.

End Milepost

Variable Name: ENDMP

Definition: Ending milepost number (e.g., 'o.17').

Field Type: Numeric.

Highway Alignment

Variable Name: HWY_GRP

Definition: The alignment of the section of highway (e.g., 'Divided Highway').

Field Type: Text.

Left Shoulder Width (Inside) Left Shoulder Width (Outside)

Variable Name: LSHLDWID

Variable Name: LSHL_WD2

Definition: Total width of the shoulder, both treated and untreated surfaces, on the 'left' alignment roadway segment in feet (e.g., '3'). This refers to the direction of decreasing mileposts.

Field Type: Numeric.

Median Barrier Type

Definition: Type of median barrier of the roadway segment (e.g., 'Guardrail in Median Both

Variable Name: MEDBARTY

Variable Name: MED TYPE

Variable Name: MED_VAR

Variable Name: MEDWID

Variable Name: NO_LANE1

Variable Name: NO_LANE2

Variable Name: PSMILPRF

Roadway')

Field Type: Text.

Median Type

Definition: Type of median on the roadway segment (e.g., 'Paved Median').

Field Type: Text.

Median Variance

Definition: Indicator median width varies for the roadway segment (e.g., 'Variable').

Field Type: Text.

Median Width

Definition: Median width in feet (e.g., '14').

Field Type: Numeric.

Number of Lanes (Right/Increasing) Number of Lanes (Left/Decreasing)

Definition: Number through lanes towards increasing and decreasing mileposts, respectively (e.g., '1').

Field Type: Numeric.

Postmile Prefix

Definition: An alpha code attached as a prefix to the postmile value to make the postmile value unique to other postmiles on the route that are numerically the same (e.g., 'Overlap postmile').

Field Type: Text.

Postmile Suffix

Variable Name: PSMILSUF

Variable Name: RODWYCLS

Variable Name: RTE NBR

Definition: An alpha code attached as a suffix to the postmile value to further define the road segment (e.g., 'Left independent alignment').

Field Type: Text.

Roadway Class*

Definition: Roadway Class. This variable is developed by the <u>HSIS Laboratory</u> for the purposes of readily classifying roadway data. This variable is a combination of the *Number of Lanes*, *Median Type*, and *Functional Class* variables, and Census Urban Places data. (e.g., Rural 2 Lane Roads).

Field Type: Text.

Values:

Urban Freeways

Urban Freeways Less than 4 Lanes

Urban 2 Lane Roads

Urban Multilane Divided Non-Freeway

Urban Multilane Undivided Non-Freeway

Rural Freeways

Rural Freeways Less than 4 Lanes

Rural 2-Lane Roads

Rural Multilane Divided Non-Freeway

Rural Multilane Undivided Non-Freeway

Others

Roadway Route Number

Definition: Route number of the roadway segment (e.g., '9').

Field Type: Numeric.

* Variable created or edited by HSIS Lab

Route Suffix Variable Name: RTE_SUF

Definition: This is an alpha code attached as a suffix to the route number to identify a highway (Truck or Busway route) with duplicate route number (e.g., 'Supplemental').

Variable Name: RSHLDWID

Variable Name: RSHL WD2

Variable Name: ROUTE_ID

Field Type: Text.

Right Shoulder Width (Outside) Right Shoulder Width (Inside)

Definition: Total width of the shoulder, both treated and untreated surfaces, on the 'right' alignment roadway segment in feet (e.g., '3'). This refers to the direction of increasing mileposts.

Field Type: Numeric.

Route ID Variable Name: CNTYRTE

Definition: Unique identifier of the route (e.g., '04004_CCR_R').

Field Type: Text.

Route ID (GIS)

Definition: Unique identifier of the LRS route specifically used for locating features in GIS (e.g., 'CC4_RR').

Field Type: Text.

Rural/Urban Variable Name: RURURB

Definition: Rural-urban indicator for the segment (e.g., 'Urbanized').

Field Type: Text.

Section Length

Variable Name: SEG_LNG

Definition: Roadway segment length in miles (e.g., '0.041').

Field Type: Numeric.

Surface Type (Left/Decreasing) Surface Type (Right/Increasing)

Variable Name: SURF_TYP

Variable Name: SURF_TY2

Definition: Surface type of the roadway segment (e.g., 'AC - Base & Surface > 7' Thick').

Field Type: Text.

Terrain Variable Name: TERRAIN

Definition: The general type of physical terrain (i.e., grade) of the roadway segment (e.g., 'Flat').

Field Type: Text.

Total Number of Lanes

Variable Name: NO_LANES

Definition: Total number of through lanes. This is the sum of the *Number of Lanes* (*Right/Increasing*) and *Number of Lanes* (*Left/Decreasing*) fields (e.g., '4').

Field Type: Numeric.

Travel Way Width (Left/Decreasing) Travel Way Width (Right/Increasing)

Variable Name: SURF_WID

Variable Name: SURF_WD2

Definition: Width of travel way on the roadway segment in feet (e.g., '36'). This value matches the *Total Number of Lanes* multiplied by the *Average Lane Width* value.

Field Type: Numeric.

City Code Variable Name: CITY_CODE

Definition: City in which the intersection is located.

Field Type: Coded.

'ADA'	ARCADIA	'BLY'	BLYTHE
'ADEL'	ADELANTO	'BMT'	BELMONT
'AGRH'	AGOURA HILLS	'BPK'	BUENA PARK
'ALA'	ALAMEDA	'BRB'	BURBANK
'ALB'	ALBANY	'BRE'	BREA
'ALH'	ALHAMBRA	'BRW'	BRAWLEY
'ALT'	ALTURAS	'BSBN'	BRISBANE
'AMCN'	AMERICAN CANYON	'BSW'	BARSTOW
'ANA'	ANAHEIM	'BURL'	BURLINGAME
'AND'	ANDERSON	'BWP'	BALDWIN PARK
'ANG'	ANGELS CAMP	'CAL'	CALABASAS
'ANT'	ANTIOCH	'CARP'	CARPINTERIA
'APLV'	APPLE VALLEY	'CBD'	CARLSBAD
'ARC'	ARCATA	'CER'	CERES
'ARGD'	ARROYO GRANDE	'CFX'	COLFAX
'ART'	ARTESIA	'CHC'	CHICO
'ARV'	ARVIN	'CHN'	CHINO
'ATAS'	ATASCADERO	'CHNH'	CHINO HILLS
'ATN'	ATHERTON	'CHV'	CHULA VISTA
'ATW'	ATWATER	'CHW'	CHOWCHILLA
'AUB'	AUBURN	'CLA'	CLAREMONT
'AVNL'	AVENAL	'CLC'	CULVER CITY
'AZU'	AZUSA	'CLLK'	CLEARLAKE
'BAN'	BANNING	'CLM'	COLMA
'BAU'	BEAUMONT	'CLNG'	COALINGA
'BBL'	BIG BEAR LAKE	'CLP'	CALIPATRIA
'BELL'	BELL	'CLU'	COLUSA
'BEN'	BENICIA	'CLVD'	CLOVERDALE
'BER'	BERKELEY	'CLX'	CALEXICO
'BFL'	BELLFLOWER	'CMAD'	CORTE MADERA
'BIS'	BISHOP	'CMB'	CAMPBELL
'BKD'	BAKERSFIELD	'CMRC'	COMMERCE

'CMRL'	CAMARILLO	'ENTS'	ENCINITAS
'CMS'	COSTA MESA	'EPAO'	EAST PALO ALTO
'CMSA'	CALIMESA	'ESD'	ESCONDIDO
'CND'	CONCORD	'ESEG'	EL SEGUNDO
'COA'	COACHELLA	'ESL'	ESCALON
'COL'	COLTON	'ESN'	LAKE ELSINORE
'COM'	COMPTON	'ETN'	ETNA
'COR'	CORONA	'EUR'	EUREKA
'CORD'	CORONADO	'EXR'	EXETER
'COTI'	COTATI	'FBG'	FORT BRAGG
'CPO'	CUPERTINO	'FER'	FERNDALE
'CPTL'	CAPITOLA	'FIL'	FILLMORE
'CRC'	CRESCENT CITY	'FIR'	FIREBAUGH
'CRCN'	CORCORAN	'FJN'	FORT JONES
'CRSN'	CARSON	'FMT'	FREMONT
'CRTS'	CERRITOS	'FNA'	FONTANA
'CSTG'	CALISTOGA	'FNV'	FOUNTAIN VALLEY
'CTHC'	CATHEDRAL CITY	'FOW'	FOWLER
'DAPT'	DANA POINT	'FRE'	FRESNO
'DBLN'	DUBLIN	'FRFD'	FAIRFIELD
'DLC'	DALY CITY	'FRFX'	FAIRFAX
'DLN'	DELANO	'FSTC'	FOSTER CITY
'DMBR'	DIAMOND BAR	'FTA'	FORTUNA
'DMR'	DUNSMUIR	'FUL'	FULLERTON
'DNVL'	DANVILLE	'GAL'	GALT
'DNY'	DOWNEY	'GAR'	GARDENA
'DPLS'	DOS PALOS	'GDLP'	GUADALUPE
'DRO'	DEL REY OAKS	'GDR'	GLENDORA
'DRS'	DORRIS	'GGR'	GARDEN GROVE
'DRT'	DUARTE	'GIL'	GILROY
'DVS'	DAVIS	'GNDL'	GLENDALE
'DXN'	DIXON	'GNFD'	GREENFIELD
'ECJ'	EL CAJON	'GNZ'	GONZALES
'ECN'	EL CENTRO	'GRC'	GROVER BEACH
'ECR'	EL CERRITO	'GRD'	GRIDLEY
'ELKG'	ELK GROVE	'GRTR'	GRAND TERRACE
'EMTE'	EL MONTE	'GUS'	GUSTINE
'EMV'	EMERYVILLE	'GVY'	GRASS VALLEY

'HAN'	HANFORD	'LEM'	LEMOORE
'HAW'	HAWTHORNE	'LFYT'	LAFAYETTE
'HAY'	HAYWARD	'LGNB'	LAGUNA BEACH
'HEM'	HEMET	'LGNG'	LAGUNA NIGUEL
'HER'	HERCULES	'LGNH'	LAGUNA HILLS
'HES'	HESPERIA	'LGTS'	LOS GATOS
'HIGH'	HIGHLAND	'LHB'	LA HABRA
'HIL'	HILLSBOROUGH	'LIO'	LIVE OAK
'HLBG'	HEALDSBURG	'LKFR'	LAKE FOREST
'НМВ'	HERMOSA BEACH	'LKPT'	LAKEPORT
'HMBY'	HALF MOON BAY	'LKSP'	LARKSPUR
'HNTB'	HUNTINGTON	'LKW'	LAKEWOOD
	ВЕАСН	'LMGR'	LEMON GROVE
'HNTP'	HUNTINGTON PARK	'LMLN'	LOMA LINDA
'HOLT'	HOLTVILLE	'LMRD'	LA MIRADA
'HRN'	HURON	'LMS'	LOOMIS
'HST'	HOLLISTER	'LMSA'	LA MESA
'IDY'	INDUSTRY	'LMTA'	LOMITA
'IMB'	IMPERIAL BEACH	'LNDL'	LAWNDALE
'IND'	INDIO	'LNSY'	LINDSAY
'ING'	INGLEWOOD	'LOD'	LODI
'ION'	IONE	'LOM'	LOMPOC
'IRVN'	IRVINE	'LOY'	LOYALTON
'IRW'	IRWINDALE	'LPMA'	LA PALMA
'IST'	ISLETON	'LPU'	LA PUENTE
'JKN'	JACKSON	'LTRP'	LATHROP
'KMN'	KERMAN	'LVMR'	LIVERMORE
'KNC'	KING CITY	'LVN'	LA VERNE
'KNGB'	KINGSBURG	'LVTN'	LIVINGSTON
'LA'	LOS ANGELES	'LYN'	LYNWOOD
'LAH'	LOS ALTOS HILLS	'MAD'	MADERA
'LALM'	LOS ALAMITOS	'MAL'	MALIBU
'LAN'	LANCASTER	'MANB'	MANHATTAN
'LATS'	LOS ALTOS		BEACH
'LBCH'	LONG BEACH	'MCF'	MCFARLAND
'LBNS'	LOS BANOS	'MCL'	MONTCLAIR
'LCF'	LA CANADA	'MCP'	MARICOPA
	FLINTRIDGE	'MDA'	MENDOTA

'MER'	MERCED	'OKDL'	OAKDALE
'MGH'	MORGAN HILL	'ONT'	ONTARIO
'MLBR'	MILLBRAE	'ORA'	ORANGE
'MLP'	MENLO PARK	'ORCV'	ORANGE COVE
'MMLK'	MAMMOTH LAKES	'ORIN'	ORINDA
'MNRO'	MONROVIA	'ORL'	ORLAND
'MNTG'	MONTAGUE	'OVL'	OROVILLE
'MOBY'	MORRO BAY	'OXN'	OXNARD
'MOD'	MODESTO	'PA'	PALO ALTO
'MON'	MONTEREY	'PAS'	PASADENA
'MONP'	MONTEREY PARK	'PAT'	PATTERSON
'MORV'	MORENO VALLEY	'PBCH'	PISMO BEACH
'MPS'	MILPITAS	'PDST'	PALM DESERT
'MRNA'	MARINA	'PER'	PERRIS
'MRPK'	MOORPARK	'PET'	PETALUMA
'MRTA'	MURRIETA	'PFA'	PACIFICA
'MSHA'	MOUNT SHASTA	'PGR'	PACIFIC GROVE
'MSNV'	MISSION VIEJO	'PHME'	PORT HUENEME
'MSO'	MONTE SERENO	'PIN'	PINOLE
'MTBL'	MONTEBELLO	'PIT'	PITTSBURG
'MTCA'	MANTECA	'PLCN'	PLACENTIA
'MTZ'	MARTINEZ	'PLCR'	PLACERVILLE
'MVL'	MARYSVILLE	'PLE'	PLEASANTON
'MVW'	MOUNTAIN VIEW	'PLHL'	PLEASANT HILL
'MYD'	MAYWOOD	'PLY'	PLYMOUTH
'NAP'	NAPA	'PMDL'	PALMDALE
'NATC'	NATIONAL CITY	'POM'	POMONA
'NED'	NEEDLES	'PRDS'	PARADISE
'NEVC'	NEVADA CITY	'PRM'	PARAMOUNT
'NEWM'	NEWMAN	'PRTL'	PORTOLA
'NPTB'	NEWPORT BEACH	'PRV'	PICO RIVERA
'NRCO'	NORCO	'PSP'	PALM SPRINGS
'NRW'	NORWALK	'PSRS'	PASO ROBLES
'NVTO'	NOVATO	'PTA'	POINT ARENA
'NWK'	NEWARK	'PTRV'	PORTERVILLE
'OAK'	OAKLAND	'PWY'	POWAY
'OCN'	OCEANSIDE	'RBL'	RED BLUFF
'ווס'	OJAI	'RCH'	RICHMOND

'RCUC'	RANCHO	'SEB'	SEBASTOPOL
	CUCAMONGA	'SEL'	SELMA
'RDEL'	RIO DELL	'SEMT'	SOUTH EL MONTE
'RDG'	REDDING	'SF'	SAN FRANCISCO
'RDL'	REDLANDS	'SFSP'	SANTA FE SPRINGS
'RDOB'	REDONDO BEACH	'SGB'	SAN GABRIEL
'RDWC'	REDWOOD CITY	'SGT'	SOUTH GATE
'RGCR'	RIDGECREST	'SHLA'	SAINT HELENA
'RIA'	RIALTO	'SHLK'	SHASTA LAKE
'RIP'	RIPON	'SIGH'	SIGNAL HILL
'RIV'	RIVERSIDE	'SIMV'	SIMI VALLEY
'RNPK'	ROHNERT PARK	'SJB'	SAN JUAN
'ROC'	ROCKLIN		BAUTISTA
'ROPV'	RANCHO PALOS	'SJCP'	SAN JUAN
	VERDES		CAPISTRANO
'RSM'	RANCHO SANTA	'SJS'	SAN JOSE
	MARGARITA	'SLB'	SEAL BEACH
'RSMD'	ROSEMEAD	'SLMO'	SAN ANSELMO
'RSV'	ROSEVILLE	'SLN'	SAN LEANDRO
'RVBK'	RIVERBANK	'SLO'	SAN LUIS OBISPO
'RVS'	RIO VISTA	'SLTO'	SOUTH LAKE
'SA'	SANTA ANA		TAHOE
'SAC'	SACRAMENTO	'SLVG'	SOLVANG
'SAL'	SALINAS	'SM'	SAN MATEO
'SAR'	SARATOGA	'SMCA'	SANTA MONICA
'SAUS'	SAUSALITO	'SMCS'	SAN MARCOS
'SB'	SANTA BARBARA	'SMRA'	SANTA MARIA
'SBD'	SAN BERNARDINO	'SNDC'	SAND CITY
'SBR'	SAN BRUNO	'SNT'	SANTEE
'SCAR'	SAN CARLOS	'SOL'	SOLEDAD
'SCL'	SANTA CLARA	'SOLB'	SOLANA BEACH
'SCLE'	SAN CLEMENTE	'SON'	SONOMA
'SCR'	SANTA CRUZ	'SPA'	SANTA PAULA
'SCTA'	SANTA CLARITA	'SPAS'	SOUTH PASADENA
'SCTV'	SCOTTS VALLEY	'SPB'	SAN PABLO
'SD'	SAN DIEGO	'SRA'	SONORA
'SDMS'	SAN DIMAS	'SRF'	SAN RAFAEL
'SEA'	SEASIDE	'SRMN'	SAN RAMON

'SRO'	SANTA ROSA	'VEN'	VENTURA
'SSF'	SOUTH SAN	'VER'	VERNON
	FRANCISCO	'VIS'	VISALIA
'STCK'	SUTTER CREEK	'VSTA'	VISTA
'STKN'	STOCKTON	'WAS'	WASCO
'STT'	STANTON	'WAT'	WATSONVILLE
'SUIS'	SUISUN CITY	'WCOV'	WEST COVINA
'SUNV'	SUNNYVALE	'WD'	WOODLAND
'SUSV'	SUSANVILLE	'WDS'	WOODSIDE
'TAF'	TAFT	'WEED'	WEED
'TBRN'	TIBURON	'WHT'	WHEATLAND
'THOK'	THOUSAND OAKS	'WIN'	WINTERS
'THPI'	TEHACHAPI	'WIT'	WHITTIER
'TMCA'	TEMECULA	'WLC'	WALNUT CREEK
'TMPC'	TEMPLE CITY	'WLK'	WOODLAKE
'TNP'	TWENTYNINE	'WLKV'	WESTLAKE VILLAGE
	PALMS	'WLOS'	WILLOWS
'TOR'	TORRANCE	'WLTS'	WILLITS
'TRA'	TRACY	'WMD'	WESTMORLAND
'TRK'	TRUCKEE	'WMS'	WILLIAMS
'TRND'	TRINIDAD	'WSAC'	WEST
'TUL'	TULARE		SACRAMENTO
'TUR'	TURLOCK	'WTM'	WESTMINSTER
'TUS'	TUSTIN	'WTRF'	WATERFORD
'UKI'	UKIAH	'YC'	YUBA CITY
'UNC'	UNION CITY	'YCPA'	YUCAIPA
'UPL'	UPLAND	'YNTV'	YOUNTVILLE
'VAC'	VACAVILLE	'YRE'	YREKA
'VAL'	VALLEJO	'YUCV'	YUCCA VALLEY
'VCTV'	VICTORVILLE		

County Variable Name: COUNTY

Definition: County in which the intersection is located.

Field Type: Coded.

`ALA'	Alameda	'SAC'	Sacramento
'ALP'	Alpine	'SBT'	San Benito
'AMA'	Amador	'SBD'	San Bernardino
'BUT'	Butte	'SD'	San Diego
'CAL'	Calaveras	'SF'	San Francisco
'COL'	Colusa	'SJ'	San Joaquin
'CC'	Contra Costa	'SLO'	San Luis Obispo
'DN'	Del Norte	'SM'	San Mateo
'ED'	El Dorado	'SB'	Santa Barbara
'FRE'	Fresno	'SCL'	Santa Clara
'GLE'	Glenn	'SCR'	Santa Cruz
HUM'	Humboldt	'SHA'	Shasta
'IMP'	Imperial	'SIE'	Sierra
'INY'	Inyo	'SIS'	Siskiyhou
'KER'	Kern	'SOL'	Solano
'KIN'	Kings	'SON'	Sonoma
'LAK'	Lake	'STA'	Stanislaus
'LAS'	Lassen	'SUT'	Sutter
'LA'	Los Angeles	'TEH'	Tehama
'MAD'	Madera	'TRI'	Trinity
'MRN'	Marin	'TUL'	Tulare
'MPA'	Mariposa	'TUO'	Tuolume
'MEN'	Mendocino	'VEN'	Ventura
'MER'	Merced	'YOL'	Yolo
'MOD'	Modoc	'YUB'	Yuba
'MNO'	Mono		
'MON'	Monterey		
'NAP'	Napa		
'NEV'	Nevada		
'ORA'	Orange		
'PLA'	Placer		
'PLU'	Plumas		
'RIV'	Riverside		

District Variable Name: DISTRICT

Definition: Caltrans district in which the intersection is located (e.g., '12 – Orange County').

Field Type: Text.

Highway Alignment

Variable Name: HWY_GRP

Definition: Highway group of the mainline in the intersection (e.g., 'Divided Highway').

Field Type: Text.

Intersecting Route Number

Variable Name: INT_RTE

Definition: Intersecting (cross street) route number (e.g., '395').

Field Type: Numeric.

Intersecting Route Suffix

Variable Name: INT_RSUF

Definition: Route suffix for the intersecting (i.e., cross street) route in the intersection (e.g., 'Unrelinquished').

Field Type: Text.

Intersection Name

Variable Name: INT_DESC

Definition: Intersection common name (e.g., 'TABLE ROCK DR/EAGLE ROCK WY').

Field Type: Text.

Intersection Effective Date

Variable Name: INT_DTE

Definition: Date of last change in intersection type or date originally designed if no update has been made. The oldest date is 1/1/1964 (MM/DD/YYYY).

Field Type: Date.

Intersection Light Date

Definition: Date of last change in intersection lighting or date originally designed if no update has been made. The oldest date is 1/1/1964 (MM/DD/YYYY).

Field Type: Date.

Intersection Light Type

Definition: Indicator that the intersection is lighted.

Field Type: Coded.

'N' No Lighting 'Y' Lighted

Intersection Milepost

Definition: Milepost of the cross street at the intersection (e.g., '5.4').

Field Type: Numeric.

Intersection Type

Definition: Type of the intersection based on the intersection geometry (e.g., 'Four-legged').

Field Type: Text.

Mainline AADT

Definition: Mainline AADT of the intersection (e.g., '21318').

Field Type: Numeric.

Mainline Left Turn Channelization

Definition: Left turn channelization on mainline at the intersection (e.g., 'Painted Left Turn Channelization').

Field Type: Text.

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Variable Name: ML_AADT

Variable Name: TYPEDESC

Variable Name: LGHT_DTE

Variable Name: LGHT TYP

Variable Name: INTMP

Variable Name: ML LEFT

Mainline Number of Lanes

Definition: Number of lanes on the mainline at the intersection (e.g., '2').

Field Type: Numeric.

Mainline Right Turn Channelization

Variable Name: ML_RIGHT

Variable Name: CNTYRTE

Variable Name: ML LANES

Definition: Right turn channelization on the mainline of the intersection (e.g., 'Painted Right Turn Channelization').

Field Type: Text.

Mainline Route ID

Definition: Route ID associated with the mainline route at the intersection. This can be used to link to other files in conjunction with the milepost field (e.g., '04004_CCR_R').

Field Type: Text.

Mainline Signal Mast Arm

Variable Name: ML_MAST

Variable Name: ML_TRFLO

Definition: Presence of signal mast arm on the mainline of the intersection.

Field Type: Coded.

'N' No Mast Arm 'Y' Yes, Mast Arm

Mainline Traffic Flow

Definition: Traffic flow type and operation on the mainline of the intersection (e.g., 'Two-Way Traffic - Left Turns Permitted').

Field Type: Text.

Milepost Variable Name: MILEPOST

Definition: Milepost of the intersection on the mainline (e.g., '21.04').

Field Type: Numeric.

Postmile Prefix

Definition: A prefix to the postmile value to make the postmile value unique to other postmiles on the route that are numerically the same on the mainline at the intersection (e.g., 'Overlap postmile')

Variable Name: PSMILPRF

Variable Name: PSMILSUF

Variable Name: RTE_NBR

Variable Name: RTE_SUF

Variable Name: ROUTE ID

Field Type: Text.

Postmile Suffix

Definition: An alpha code attached as a suffix to the postmile value to further define the road segment (e.g., 'Left independent alignment').

Field Type: Text.

Roadway Route Number

Definition: Route number of the mainline at the intersection (e.g., '23').

Field Type: Numeric.

Roadway Route Suffix

Definition: A suffix of the mainline road at the intersection to the postmile value to identify an equation (e.g., 'Supplemental').

Field Type: Text.

Route ID (GIS)

Definition: Unique identifier of the LRS route specifically used for locating features in GIS (e.g., 'CC4_RR').

Field Type: Text.

Rural/Urban Variable Name: INT_POPGRP

Definition: Rural-urban indicator for the intersection (e.g., 'Urban').

Field Type: Text.

Traffic Control Type

Definition: Traffic control type at the intersection (e.g., 'Stop Signs on Cross Street Only').

Variable Name: TRF_CNTL

Variable Name: INTY_RTE

Variable Name: XSTRTLFT

Variable Name: XSTLANES

Field Type: Text.

X-Street AADT Variable Name: XSTAADT

Definition: Cross street AADT (e.g., '474').

Field Type: Numeric.

X-Street County Route

Definition: Cross street (intersecting route) county route (e.g., '08395 SBD U').

Field Type: Text.

X-Street Left Turn Channelization

Definition: Left turn channelization on the cross street (e.g., 'Curbed Median Left Turn

Channelization').

Field Type: Text.

X-Street Number of Lanes

Definition: Number of lanes on the cross street (e.g., '2').

Field Type: Numeric.

X-Street Right Turn Channelization

Variable Name: XSTRTRGH

Definition: Right turn channelization on the cross-street (e.g., 'Painted Right Turn Channelization').

Field Type: Text.

X-Street Route Suffix

Variable Name: XST RSUF

Definition: A suffix to the route number to identify a highway with duplicate route number of the cross street ('Unrelinquished').

Field Type: Text.

X-Street Signal Mast Arm

Variable Name: XSTRTMST

Definition: Presence of signal mast arm on the cross street.

Field Type: Coded.

'N' No Mast Arm 'Y' Yes, Mast Arm

X-Street State Route

Variable Name: XSTSTRT

Definition: State route number for the cross street if applicable (e.g., '905').

Field Type: Numeric.

X-Street Traffic Flow

Variable Name: XSTTRFLO

Definition: Type of traffic flow on the cross-street (e.g., 'One-Way Traffic').

Field Type: Text.

City Code Variable Name: CITY_CODE

Definition: City in which the ramp is located.

Field Type: Coded.

'ADA'	ARCADIA	'BLY'	BLYTHE
'ADEL'	ADELANTO	'BMT'	BELMONT
'AGRH'	AGOURA HILLS	'BPK'	BUENA PARK
'ALA'	ALAMEDA	'BRB'	BURBANK
'ALB'	ALBANY	'BRE'	BREA
'ALH'	ALHAMBRA	'BRW'	BRAWLEY
'ALT'	ALTURAS	'BSBN'	BRISBANE
'AMCN'	AMERICAN CANYON	'BSW'	BARSTOW
'ANA'	ANAHEIM	'BURL'	BURLINGAME
'AND'	ANDERSON	'BWP'	BALDWIN PARK
'ANG'	ANGELS CAMP	'CAL'	CALABASAS
'ANT'	ANTIOCH	'CARP'	CARPINTERIA
'APLV'	APPLE VALLEY	'CBD'	CARLSBAD
'ARC'	ARCATA	'CER'	CERES
'ARGD'	ARROYO GRANDE	'CFX'	COLFAX
'ART'	ARTESIA	'CHC'	CHICO
'ARV'	ARVIN	'CHN'	CHINO
'ATAS'	ATASCADERO	'CHNH'	CHINO HILLS
'ATN'	ATHERTON	'CHV'	CHULA VISTA
'ATW'	ATWATER	'CHW'	CHOWCHILLA
'AUB'	AUBURN	'CLA'	CLAREMONT
'AVNL'	AVENAL	'CLC'	CULVER CITY
'AZU'	AZUSA	'CLLK'	CLEARLAKE
'BAN'	BANNING	'CLM'	COLMA
'BAU'	BEAUMONT	'CLNG'	COALINGA
'BBL'	BIG BEAR LAKE	'CLP'	CALIPATRIA
'BELL'	BELL	'CLU'	COLUSA
'BEN'	BENICIA	'CLVD'	CLOVERDALE
'BER'	BERKELEY	'CLX'	CALEXICO
'BFL'	BELLFLOWER	'CMAD'	CORTE MADERA
'BIS'	BISHOP	'CMB'	CAMPBELL
'BKD'	BAKERSFIELD	'CMRC'	COMMERCE

'CMRL'	CAMARILLO	'ENTS'	ENCINITAS
'CMS'	COSTA MESA	'EPAO'	EAST PALO ALTO
'CMSA'	CALIMESA	'ESD'	ESCONDIDO
'CND'	CONCORD	'ESEG'	EL SEGUNDO
'COA'	COACHELLA	'ESL'	ESCALON
'COL'	COLTON	'ESN'	LAKE ELSINORE
'COM'	COMPTON	'ETN'	ETNA
'COR'	CORONA	'EUR'	EUREKA
'CORD'	CORONADO	'EXR'	EXETER
'COTI'	COTATI	'FBG'	FORT BRAGG
'CPO'	CUPERTINO	'FER'	FERNDALE
'CPTL'	CAPITOLA	'FIL'	FILLMORE
'CRC'	CRESCENT CITY	'FIR'	FIREBAUGH
'CRCN'	CORCORAN	'FJN'	FORT JONES
'CRSN'	CARSON	'FMT'	FREMONT
'CRTS'	CERRITOS	'FNA'	FONTANA
'CSTG'	CALISTOGA	'FNV'	FOUNTAIN VALLEY
'CTHC'	CATHEDRAL CITY	'FOW'	FOWLER
'DAPT'	DANA POINT	'FRE'	FRESNO
'DBLN'	DUBLIN	'FRFD'	FAIRFIELD
'DLC'	DALY CITY	'FRFX'	FAIRFAX
'DLN'	DELANO	'FSTC'	FOSTER CITY
'DMBR'	DIAMOND BAR	'FTA'	FORTUNA
'DMR'	DUNSMUIR	'FUL'	FULLERTON
'DNVL'	DANVILLE	'GAL'	GALT
'DNY'	DOWNEY	'GAR'	GARDENA
'DPLS'	DOS PALOS	'GDLP'	GUADALUPE
'DRO'	DEL REY OAKS	'GDR'	GLENDORA
'DRS'	DORRIS	'GGR'	GARDEN GROVE
'DRT'	DUARTE	'GIL'	GILROY
'DVS'	DAVIS	'GNDL'	GLENDALE
'DXN'	DIXON	'GNFD'	GREENFIELD
'ECJ'	EL CAJON	'GNZ'	GONZALES
'ECN'	EL CENTRO	'GRC'	GROVER BEACH
'ECR'	EL CERRITO	'GRD'	GRIDLEY
'ELKG'	ELK GROVE	'GRTR'	GRAND TERRACE
'EMTE'	EL MONTE	'GUS'	GUSTINE
'EMV'	EMERYVILLE	'GVY'	GRASS VALLEY

'HAN'	HANFORD	'LEM'	LEMOORE
'HAW'	HAWTHORNE	'LFYT'	LAFAYETTE
'HAY'	HAYWARD	'LGNB'	LAGUNA BEACH
'HEM'	HEMET	'LGNG'	LAGUNA NIGUEL
'HER'	HERCULES	'LGNH'	LAGUNA HILLS
'HES'	HESPERIA	'LGTS'	LOS GATOS
'HIGH'	HIGHLAND	'LHB'	LA HABRA
'HIL'	HILLSBOROUGH	'LIO'	LIVE OAK
'HLBG'	HEALDSBURG	'LKFR'	LAKE FOREST
'HMB'	HERMOSA BEACH	'LKPT'	LAKEPORT
'HMBY'	HALF MOON BAY	'LKSP'	LARKSPUR
'HNTB'	HUNTINGTON	'LKW'	LAKEWOOD
	BEACH	'LMGR'	LEMON GROVE
'HNTP'	HUNTINGTON PARK	'LMLN'	LOMA LINDA
'HOLT'	HOLTVILLE	'LMRD'	LA MIRADA
'HRN'	HURON	'LMS'	LOOMIS
'HST'	HOLLISTER	'LMSA'	LA MESA
'IDY'	INDUSTRY	'LMTA'	LOMITA
'IMB'	IMPERIAL BEACH	'LNDL'	LAWNDALE
'IND'	INDIO	'LNSY'	LINDSAY
'ING'	INGLEWOOD	'LOD'	LODI
'ION'	IONE	'LOM'	LOMPOC
'IRVN'	IRVINE	'LOY'	LOYALTON
'IRW'	IRWINDALE	'LPMA'	LA PALMA
'IST'	ISLETON	'LPU'	LA PUENTE
'JKN'	JACKSON	'LTRP'	LATHROP
'KMN'	KERMAN	'LVMR'	LIVERMORE
'KNC'	KING CITY	'LVN'	LA VERNE
'KNGB'	KINGSBURG	'LVTN'	LIVINGSTON
'LA'	LOS ANGELES	'LYN'	LYNWOOD
'LAH'	LOS ALTOS HILLS	'MAD'	MADERA
'LALM'	LOS ALAMITOS	'MAL'	MALIBU
'LAN'	LANCASTER	'MANB'	MANHATTAN
'LATS'	LOS ALTOS		BEACH
'LBCH'	LONG BEACH	'MCF'	MCFARLAND
'LBNS'	LOS BANOS	'MCL'	MONTCLAIR
'LCF'	LA CANADA	'MCP'	MARICOPA
	FLINTRIDGE	'MDA'	MENDOTA

'MER'	MERCED	'OKDL'	OAKDALE
'MGH'	MORGAN HILL	'ONT'	ONTARIO
'MLBR'	MILLBRAE	'ORA'	ORANGE
'MLP'	MENLO PARK	'ORCV'	ORANGE COVE
'MMLK'	MAMMOTH LAKES	'ORIN'	ORINDA
'MNRO'	MONROVIA	'ORL'	ORLAND
'MNTG'	MONTAGUE	'OVL'	OROVILLE
'MOBY'	MORRO BAY	'OXN'	OXNARD
'MOD'	MODESTO	'PA'	PALO ALTO
'MON'	MONTEREY	'PAS'	PASADENA
'MONP'	MONTEREY PARK	'PAT'	PATTERSON
'MORV'	MORENO VALLEY	'PBCH'	PISMO BEACH
'MPS'	MILPITAS	'PDST'	PALM DESERT
'MRNA'	MARINA	'PER'	PERRIS
'MRPK'	MOORPARK	'PET'	PETALUMA
'MRTA'	MURRIETA	'PFA'	PACIFICA
'MSHA'	MOUNT SHASTA	'PGR'	PACIFIC GROVE
'MSNV'	MISSION VIEJO	'PHME'	PORT HUENEME
'MSO'	MONTE SERENO	'PIN'	PINOLE
'MTBL'	MONTEBELLO	'PIT'	PITTSBURG
'MTCA'	MANTECA	'PLCN'	PLACENTIA
'MTZ'	MARTINEZ	'PLCR'	PLACERVILLE
'MVL'	MARYSVILLE	'PLE'	PLEASANTON
'MVW'	MOUNTAIN VIEW	'PLHL'	PLEASANT HILL
'MYD'	MAYWOOD	'PLY'	PLYMOUTH
'NAP'	NAPA	'PMDL'	PALMDALE
'NATC'	NATIONAL CITY	'POM'	POMONA
'NED'	NEEDLES	'PRDS'	PARADISE
'NEVC'	NEVADA CITY	'PRM'	PARAMOUNT
'NEWM'	NEWMAN	'PRTL'	PORTOLA
'NPTB'	NEWPORT BEACH	'PRV'	PICO RIVERA
'NRCO'	NORCO	'PSP'	PALM SPRINGS
'NRW'	NORWALK	'PSRS'	PASO ROBLES
'NVTO'	NOVATO	'PTA'	POINT ARENA
'NWK'	NEWARK	'PTRV'	PORTERVILLE
'OAK'	OAKLAND	'PWY'	POWAY
'OCN'	OCEANSIDE	'RBL'	RED BLUFF
'OJI'	OJAI	'RCH'	RICHMOND

'RCUC'	RANCHO	'SEB'	SEBASTOPOL
	CUCAMONGA	'SEL'	SELMA
'RDEL'	RIO DELL	'SEMT'	SOUTH EL MONTE
'RDG'	REDDING	'SF'	SAN FRANCISCO
'RDL'	REDLANDS	'SFSP'	SANTA FE SPRINGS
'RDOB'	REDONDO BEACH	'SGB'	SAN GABRIEL
'RDWC'	REDWOOD CITY	'SGT'	SOUTH GATE
'RGCR'	RIDGECREST	'SHLA'	SAINT HELENA
'RIA'	RIALTO	'SHLK'	SHASTA LAKE
'RIP'	RIPON	'SIGH'	SIGNAL HILL
'RIV'	RIVERSIDE	'SIMV'	SIMI VALLEY
'RNPK'	ROHNERT PARK	'SJB'	SAN JUAN
'ROC'	ROCKLIN		BAUTISTA
'ROPV'	RANCHO PALOS	'SJCP'	SAN JUAN
	VERDES		CAPISTRANO
'RSM'	RANCHO SANTA	'SJS'	SAN JOSE
	MARGARITA	'SLB'	SEAL BEACH
'RSMD'	ROSEMEAD	'SLMO'	SAN ANSELMO
'RSV'	ROSEVILLE	'SLN'	SAN LEANDRO
'RVBK'	RIVERBANK	'SLO'	SAN LUIS OBISPO
'RVS'	RIO VISTA	'SLTO'	SOUTH LAKE
'SA'	SANTA ANA		TAHOE
'SAC'	SACRAMENTO	'SLVG'	SOLVANG
'SAL'	SALINAS	'SM'	SAN MATEO
'SAR'	SARATOGA	'SMCA'	SANTA MONICA
'SAUS'	SAUSALITO	'SMCS'	SAN MARCOS
'SB'	SANTA BARBARA	'SMRA'	SANTA MARIA
'SBD'	SAN BERNARDINO	'SNDC'	SAND CITY
'SBR'	SAN BRUNO	'SNT'	SANTEE
'SCAR'	SAN CARLOS	'SOL'	SOLEDAD
'SCL'	SANTA CLARA	'SOLB'	SOLANA BEACH
'SCLE'	SAN CLEMENTE	'SON'	SONOMA
'SCR'	SANTA CRUZ	'SPA'	SANTA PAULA
'SCTA'	SANTA CLARITA	'SPAS'	SOUTH PASADENA
'SCTV'	SCOTTS VALLEY	'SPB'	SAN PABLO
'SD'	SAN DIEGO	'SRA'	SONORA
'SDMS'	SAN DIMAS	'SRF'	SAN RAFAEL
'SEA'	SEASIDE	'SRMN'	SAN RAMON

'SRO'	SANTA ROSA	'VEN'	VENTURA
'SSF'	SOUTH SAN	'VER'	VERNON
	FRANCISCO	'VIS'	VISALIA
'STCK'	SUTTER CREEK	'VSTA'	VISTA
'STKN'	STOCKTON	'WAS'	WASCO
'STT'	STANTON	'WAT'	WATSONVILLE
'SUIS'	SUISUN CITY	'WCOV'	WEST COVINA
'SUNV'	SUNNYVALE	'WD'	WOODLAND
'SUSV'	SUSANVILLE	'WDS'	WOODSIDE
'TAF'	TAFT	'WEED'	WEED
'TBRN'	TIBURON	'WHT'	WHEATLAND
'THOK'	THOUSAND OAKS	'WIN'	WINTERS
'THPI'	TEHACHAPI	'WIT'	WHITTIER
'TMCA'	TEMECULA	'WLC'	WALNUT CREEK
'TMPC'	TEMPLE CITY	'WLK'	WOODLAKE
'TNP'	TWENTYNINE	'WLKV'	WESTLAKE VILLAGE
	PALMS	'WLOS'	WILLOWS
'TOR'	TORRANCE	'WLTS'	WILLITS
'TRA'	TRACY	'WMD'	WESTMORLAND
'TRK'	TRUCKEE	'WMS'	WILLIAMS
'TRND'	TRINIDAD	'WSAC'	WEST
'TUL'	TULARE		SACRAMENTO
'TUR'	TURLOCK	'WTM'	WESTMINSTER
'TUS'	TUSTIN	'WTRF'	WATERFORD
'UKI'	UKIAH	'YC'	YUBA CITY
'UNC'	UNION CITY	'YCPA'	YUCAIPA
'UPL'	UPLAND	'YNTV'	YOUNTVILLE
'VAC'	VACAVILLE	'YRE'	YREKA
'VAL'	VALLEJO	'YUCV'	YUCCA VALLEY
'VCTV'	VICTORVILLE		

County Code

Definition: County in which the ramp is located.

Field Type: Coded.

'ALA'	Alameda	'AMA'	Amador
'ALP'	Alpine	'BUT'	Butte

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Variable Name: COUNTY

'CAL'	Calaveras	'PLU'	Plumas
'COL'	Colusa	'RIV'	Riverside
'CC'	Contra Costa	'SAC'	Sacramento
'DN'	Del Norte	'SBT'	San Benito
'ED'	El Dorado	'SBD'	San Bernardino
'FRE'	Fresno	'SD'	San Diego
'GLE'	Glenn	'SF'	San Francisco
HUM'	Humboldt	'SJ'	San Joaquin
'IMP'	Imperial	'SLO'	San Luis Obispo
'INY'	Inyo	'SM'	San Mateo
'KER'	Kern	'SB'	Santa Barbara
'KIN'	Kings	'SCL'	Santa Clara
'LAK'	Lake	'SCR'	Santa Cruz
'LAS'	Lassen	'SHA'	Shasta
'LA'	Los Angeles	'SIE'	Sierra
'MAD'	Madera	'SIS'	Siskiyhou
'MRN'	Marin	'SOL'	Solano
'MPA'	Mariposa	'SON'	Sonoma
'MEN'	Mendocino	'STA'	Stanislaus
'MER'	Merced	'SUT'	Sutter
'MOD'	Modoc	'TEH'	Tehama
'MNO'	Mono	'TRI'	Trinity
'MON'	Monterey	'TUL'	Tulare
'NAP'	Napa	'TUO'	Tuolume
'NEV'	Nevada	'VEN'	Ventura
'ORA'	Orange	'YOL'	Yolo
'PLA'	Placer	'YUB'	Yuba

District Variable Name: DISTRICT

Definition: Caltrans district in which the ramp is located (e.g., '07 – Los Angeles').

Field Type: Text.

Highway Alignment

Definition: The alignment of the highway (e.g., 'Divided Highway').

Field Type: Text.

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Variable Name: HWY_GRP

On/Off Ramp Indicator

Variable Name: ON_OFFRP

Variable Name: PSMILPRF

Variable Name: PSMILSUF

Variable Name: RMP_ADT

Variable Name: AREA4

Definition: Indicator of the flow of traffic on the ramp. 'On' indicates traffic entering the mainline via the ramp, while 'off' indicates traffic exiting the mainline of the ramp.

Field Type: Coded.

'ON' On Ramp
'OFF' Off Ramp
'OTH' Other

Postmile Prefix

Definition: A prefix to the postmile value to make the postmile value unique to other postmiles on the route that are numerically the same (e.g., 'Realignment').

Field Type: Text.

Postmile Suffix

Definition: An alpha code attached as a suffix to the postmile value to further define the road segment (e.g., 'Left independent alignment').

Field Type: Text.

Ramp AADT

Definition: AADT on the ramp (e.g., '6726').

Field Type: Numeric.

Ramp Area4 Indicator

Definition: Area 4 is the area beyond the end of the ramp where the ramp traffic merges or mixes with the cross-street traffic. This area is coded as Area 4 only if the cross street is NOT a state highway or another ramp.

Field Type: Coded.

'Y' Yes

'N'

No

Ramp Milepost

Variable Name: MILEPOST

Definition: Milepost of the route on which the ramp is located (e.g., '19.768').

Field Type: Numeric.

Route ID Variable Name: CNTYRTE

Definition: Unique identifier of the route on which the ramp is located (e.g., 'o4oo4_CCR_R'). This represents the route on which the ramp gore is located.

Field Type: Text.

Route ID (GIS)

Variable Name: ROUTE_ID

Definition: Unique identifier of the LRS route specifically used for locating features in GIS (e.g., 'CC4_RR').

Field Type: Text.

Route Number

Variable Name: RTE_NBR

Definition: The route number on which the ramp is located (e.g., '405').

Field Type: Numeric.

Route Suffix Variable Name: RTE_SUF

Definition: A suffix to the route number to identify a highway (Truck or Busway route) with duplicate route number (e.g., 'Supplemental').

Field Type: Text.

Rural/Urban

Variable Name: RMP_POPGRP

Definition: Whether the ramp occurs in an urban or rural setting.

Field Type: Coded.

'R' Rural

'U' Urbanized

Alcohol Involved

Variable Name: ALCH_FLG

Variable Name: BIKE_FLG

Definition: Indicator that Alcohol was involved in the crash (e.g., 'Yes').

Field Type: Text.

Bicycle Involved in the Crash

Definition: Indicator that a bicycle was involved in the crash (e.g., 'Yes').

Field Type: Text.

County Variable Name: COUNTY

Definition: County in which the crash occurred.

Field Type: Coded.

`ALA'	Alameda	'MAD'	Madera
'ALP'	Alpine	'MRN'	Marin
'AMA'	Amador	'MPA'	Mariposa
'BUT'	Butte	'MEN'	Mendocino
'CAL'	Calaveras	'MER'	Merced
'COL'	Colusa	'MOD'	Modoc
'CC'	Contra Costa	'MNO'	Mono
'DN'	Del Norte	'MON'	Monterey
'ED'	El Dorado	'NAP'	Napa
'FRE'	Fresno	'NEV'	Nevada
'GLE'	Glenn	'ORA'	Orange
HUM'	Humboldt	'PLA'	Placer
'IMP'	Imperial	'PLU'	Plumas
'INY'	Inyo	'RIV'	Riverside
'KER'	Kern	'SAC'	Sacramento
'KIN'	Kings	'SBT'	San Benito
'LAK'	Lake	'SBD'	San Bernardino
'LAS'	Lassen	'SD'	San Diego
'LA'	Los Angeles	'SF'	San Francisco

'SJ'	San Joaquin	'SIS'	Siskiyhou
'SLO'	San Luis Obispo	'SOL'	Solano
'SM'	San Mateo	'SON'	Sonoma
'SB'	Santa Barbara	'STA'	Stanislaus
'SCL'	Santa Clara	'SUT'	Sutter
'SCR'	Santa Cruz	'TEH'	Tehama
'SHA'	Shasta	'TRI'	Trinity
'SIE'	Sierra	'TUL'	Tulare
		'TUO'	Tuolume
		'VEN'	Ventura
		'YOL'	Yolo
		'YUB'	Yuba

Crash Date Variable Name: ACC_DATE

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

Field Type: Date.

Crash ID Variable Name: ACC_ID

Definition: Unique identifier of the crash. This variable can be used to link the Crash and Unit files (e.g., '4816062').

Field Type: Numeric.

Crash Report Level

Definition: Indicator that the crash was reportable based on the legal reporting threshold (e.g., 'Above Reporting Level').

Variable Name: RPT LEV

Variable Name: SEVERITY

Field Type: Text.

Crash Severity

Definition: The most severe injury in the crash (e.g., 'Suspected Serious Injury').

Field Type: Text.

Crash Year Variable Name: ACCYR

Definition: Year crash occurred (e.g., '2018').

Field Type: Numeric.

Day of Week Variable Name: WEEKDAY

Definition: Day of the week when the crash occurred.

Field Type: Coded.

'SUN' Sunday

'MON'	Monday
'TUE'	Tuesday
'WED'	Wednesday
'THU'	Thursday
'FRI'	Friday
'SAT'	Saturday

District Variable Name: DISTRICT

Definition: Caltrans district in which the crash occurred (e.g., '12 - Orange County').

Field Type: Text.

File Type Variable Name: FILETYP

Definition: File type record of the crash (e.g., 'Highway Record').

Field Type: Text.

Intersection Crash

Definition: Indicator that the crash occurred in an intersection (e.g., 'In Intersection').

Field Type: Text.

Intersection/Ramp Crash Location

Definition: Location of the crash in relation to a ramp or intersection (e.g., 'Ramp Intersection (Exit)').

Field Type: Text.

Light Condition

Variable Name: LIGHT

Variable Name: INTER

Variable Name: INT_RMP

Definition: The type/level of light present at the time of the crash (e.g., 'Dark - Street Light').

Field Type: Text.

Location Type

Variable Name: LOC TYP

Definition: Location type of the crash (e.g., 'Highway').

Field Type: Text.

Milepost Variable Name: MILEPOST

Definition: Reference point (i.e., milepost) where the crash occurred along the applicable route (e.g., 'o.6o6').

Variable Name: MTCY_FLG

Variable Name: PED_FLG

Variable Name: TOT_INJ

Field Type: Numeric.

Motorcycle Involved

Definition: Indicator that a motorcyclist was involved in the crash (e.g., 'Yes').

Field Type: Text.

Pedestrian Flag

Definition: Indicator that a pedestrian was involved in the crash (e.g., 'Yes').

Field Type: Text.

Persons Injured

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

Field Type: Numeric.

Persons Killed Variable Name: TOT KILL

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

Field Type: Numeric.

Postmile Prefix

Variable Name: PSMILPRF

Definition: An alpha code attached as a prefix to the postmile value to make the postmile value unique to other postmiles on the route that are numerically the same (e.g., 'Duplicate postmile at meandering county line').

Field Type: Text.

Postmile Suffix

Variable Name: PSMILSUF

Definition: An alpha code attached as a suffix to the postmile value to identify an equation (e.g., 'Right independent alignment').

Field Type: Text.

Primary Collision Factor

Variable Name: CAUSE1

Definition: Primary contributing factor associated with the crash (e.g., 'Failure to Yield').

Field Type: Text.

Road Surface

Variable Name: RDSURF

Definition: The condition of the road surface when the crash occurred (e.g., 'Wet').

Field Type: Text.

Roadway Class*

Variable Name: RODWYCLS

Definition: Roadway Class. This variable is developed by the HSIS Laboratory for the purposes of readily classifying roadway data. This variable is a combination of the Number of Lanes, Median Type, and Functional Class variables, and Census Urban Places data. (e.g., Rural 2 Lane Roads).

Field Type: Text.

Values:

Urban Freeways

^{*} Variable created or edited by HSIS Lab

Urban Freeways Less than 4 Lanes

Urban 2 Lane Roads

Urban Multilane Divided Non-Freeway

Urban Multilane Undivided Non-Freeway

Rural Freeways

Rural Freeways Less than 4 Lanes

Rural 2-Lane Roads

Rural Multilane Divided Non-Freeway

Rural Multilane Undivided Non-Freeway

Others

Roadway Condition

Definition: Notable exceptional conditions associated with the road when the crash occurred (e.g., 'Flooded').

Variable Name: RD_DEF1

Variable Name: RTE_NBR

Variable Name: ROUTE_ID

Field Type: Text.

Roadway Route Number

Definition: The number of the route where the crash occurred (e.g., '1').

Field Type: Numeric.

Route ID Variable Name: CNTYRTE

Definition: Unique identifier of the route on which the crash occurred (e.g., '04004_CCR_R').

Field Type: Text.

Route ID (GIS)

Definition: Unique identifier of the LRS route specifically used for locating features in GIS (e.g., 'CC4_RR').

Field Type: Text.

Route Suffix Variable Name: RTE_SUF

Definition: This is an alpha code attached as a suffix to the route number to identify a highway (Truck or Busway route) with duplicate route number (e.g., 'Supplemental').

Field Type: Text.

Time of Crash Variable Name: HOUR

Variable Name: TOT_BIKE_INJ

Variable Name: TOT_BIKEKIL

Variable Name: TOT_MTCYLINJ

Variable Name: TOT MTCYLKIL

Variable Name: TOT PEDINJ

Definition: Time at which the crash occurred using a 24-hour clock (e.g., '1630').

Field Type: Numeric.

Total Bicyclists Injured

Definition: Total number of bicyclists injured in the crash (e.g., '1').

Field Type: Numeric.

Total Bicyclists Killed

Definition: Total number of bicyclists killed in the crash (e.g., 'o').

Field Type: Numeric.

Total Motorcyclists Injured

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

Field Type: Numeric.

Total Motorcyclists Killed

Definition: Total number of motorcyclists killed in the crash (e.g., 'o').

Field Type: Numeric.

Total Pedestrians Injured

Definition: Total number of pedestrians injured in the crash (e.g., 'o').

Field Type: Numeric.

Total Pedestrians Killed

Variable Name: TOT_PEDKILL

Definition: Total number of pedestrians killed in the crash (e.g., 'o').

Field Type: Numeric.

Total Number of Vehicles

Variable Name: NUMVEHS

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

Field Type: Numeric.

Traffic Control Operating

Variable Name: TRF_OPER

Definition: Indicator of the traffic control's operational status at the time and location of the crash (e.g., 'Control Functioning').

Field Type: Text.

Truck Involvement

Variable Name: TRK_FLG

Definition: Indicator that a truck was involved in the crash (e.g., 'Yes').

Field Type: Text.

Type of Crash

Variable Name: ACCTYPE

Definition: Type of collision associated with the crash (e.g., 'Rear End').

Field Type: Text.

Weather Primary Weather Secondary

Variable Name: WEATHER

Variable Name: WEATHER1

Definition: The weather condition at the time of the crash. There is a second field for supplementary weather conditions (e.g., 'Cloudy, Fog').

Field Type: Text.

Crash ID Variable Name: ACC_ID

Definition: Unique identifier of the crash. This variable can be used to link the Unit and Crash files (e.g., '4816062').

Field Type: Numeric.

Crash Location 1 Variable Name: POSN_1
Crash Location 2 Variable Name: POSN_2
Crash Location 3 Variable Name: POSN_3
Crash Location 4 Variable Name: POSN_4

Definition: The primary location of the collision. Additional fields reflect subsequent locations associated with the crash (e.g., 'Right Lane, Beyond Shoulder Drivers Right').

Field Type: Text.

Highway Indicator Type

Definition: The unit's relationship to a state highway (e.g., 'Intersecting State Road').

Variable Name: HWY_IND_TYPE

Variable Name: MOVEMENT_TYPE

Field Type: Text.

Movement Type

Definition: The type of movement associated with the unit at the time of the crash (e.g., 'Slowing/Stopping').

Field Type: Text.

Object Struck 1 Variable Name: OBJECT_1
Object Struck 2 Variable Name: OBJECT_2
Object Struck 3 Variable Name: OBJECT_3
Object Struck 4 Variable Name: OBJECT_4

Definition: First object struck with every subsequent object field representing the next object struck if applicable (e.g., 'Light or Signal Pole', 'Over Embankment').

Field Type: Text.

Party Drug or Physical Impairment Variable Name: IMPAIRMENT_CODE_2

Definition: Any drug or physical impairment that led to the crash (e.g., 'Under Drug Influence').

Variable Name: IMPAIRMENT_CODE_1

Variable Name: PED_ACTN

Variable Name: PED_INJ_CODE

Field Type: Text.

Party Sobriety

Definition: Applicable alcohol or drug impairment if applicable (e.g., 'HBD_Under Influence (>0.08%)')

Field Type: Text.

Pedestrian Action

Definition: The location and action of the pedestrian if the unit is a pedestrian (e.g., 'Xing – Not Xwalk').

Field Type: Text.

Pedestrian Injury Code

Definition: The level of injury that the pedestrian sustained in the crash.

Field Type: Coded.

ʻl' Injured

'K' Killed

Blank No Pedestrian Involved, or No Injury Involved

Special Information

Variable Name: SPECIAL_FACTOR_CODE

Variable Name: MAJOR_INJURY

Variable Name: MINOR_INJURY

Variable Name: POSSIBLE_INJURY

Definition: Any special and additional information concerning the unit.

Field Type: Coded.

'A' Hazardous Materials

'B' Cell Phone in use

'C' Cell Phone not in use

'D' Cell Phone none/unknown

'<' Not Stated

Total Suspected Serious Injuries

Definition: The total number of major injuries in the unit involved (e.g., '2'). This reflects an injury level of 'A' (suspected serious injury) on the KABCO scale.

Field Type: Numeric.

Total Suspected Minor Injuries

Definition: The total number of minor injuries in the unit involved (e.g., '3'). This reflects an injury level of 'B' (suspected minor injury) on the KABCO scale.

Field Type: Numeric.

Total Possible Injuries

Definition: Total number of possible injuries in the unit of the crash (e.g., '2'). This reflects an injury level of 'C' (possible injury) on the KABCO scale.

Field Type: Numeric.

Unit Number Variable Name: UNIT_VEC

Definition: The relative unit number as it applies to the crash (e.g., '1').

Field Type: Numeric.

Unit Travel Direction

Variable Name: VEH_DIR

 $\textit{Definition:} \ \mathsf{Cardinal} \ \mathsf{direction} \ \mathsf{that} \ \mathsf{the} \ \mathsf{unit} \ \mathsf{was} \ \mathsf{traveling} \ \mathsf{at} \ \mathsf{the} \ \mathsf{time} \ \mathsf{of} \ \mathsf{the} \ \mathsf{crash} \ (\mathsf{e.g.,} \ \mathsf{p.g.})$

'Southbound').

Field Type: Text.

Unit Type – General

Variable Name: PARTY_GROUP

Definition: The general type of unit involved in the crash.

Field Type: Coded.

'PED' Pedestrian 'VEH' Vehicle 'OTH' Other

Unit Type – Specific

Variable Name: PARTY_TYPE

Definition: The specific type of unit involved in the crash (e.g., 'Passenger Car/Station Wagon').

Field Type: Text.

File	Variable Name	Variable	Description of Change	Year of Change
Crash	ACC_DATE	DATE OF ACCIDENT - YMD	No change	
Crash	ACCTYPE	TYPE OF COLLISION	Variable created	2001
			Variable type change from coded to text	2018
Crash	ACCYR	COLLISION ACCYR	No change	
Crash	ALCH_FLG	ALCOHOL INVOLVED	Variable created	2001
			Variable type change from coded to text	2018
Crash	BIKE_FLG	BICYCLE INVOLVED	Variable created	2003
			Variable type change from coded to text	2018
Crash	CASENO	UNIQUE ACCIDENT CASEO	Variable name changed to "ACC_ID"	2018
Crash	CAUSE1	PRIMARY COLL	Variable type change from	2018
		FACTOR	coded to text	
Crash	CAUSHPAL	COLL FACTOR ALPHA (CHP)	Variable discontinued	2018
Crash	CAUSHPCD	COLL FACTOR CODING (CHP)	Variable discontinued	2018
Crash	CAUSHPCT	COLL FACTOR CATEGORY (CHP)	Variable discontinued	2018
Crash	CAUSHPLG	COLL FACTOR LEGAL CODE(CHP)	Variable discontinued	2018
Crash	CAUSHPSB	COLL FACTOR CODE SUBSECTION (CHP)	Variable discontinued	2018
Crash	CNTY_RTE	COUNTY ROUTE	No change	
Crash	COUNTY	COUNTY	Change in coding	2018
Crash	DISTANCE	DISTANCE	Variable discontinued	2018
Crash	DISTRICT	DISTRICT	Variable type change from coded to text	2018
Crash	FILETYP	FILE TYPE	Variable discontinued	2004
			Variable continued	2018
			Variable type change from coded to text	
Crash	HIT_RUN	HIT AND RUN	Variable discontinued	2018
Crash	HOUR	TIME OF ACCIDENT	No change	
Crash	HWY_GRP	HIGHWAY GROUP	Variable discontinued	2018
Crash	INT_RMP	INTS/RAMP ACC LOCATION	Variable type change from coded to text	2018

File	Variable Name	Variable	Description of Change	Year of Change
Crash	INTER	INTERSECTION CRASH	Variable created	2005
			Variable type change from coded to text	2018
Crash	JUR_TYPE	JURISDICTION TYPE	Variable created	1995
			Variable discontinued	2001
Crash	LIGHT	LIGHT CONDITION	Variable type change from coded to text	2018
Crash	LOC_TYP	LOCATION TYPE	Variable created	2004
			Variable type change from coded to text	2018
Crash	LOCATN	COUNTY/CITY CODE WHERE CRASH OCCURRED	Variable discontinued	2018
Crash	MILEPOST	MILEPOST	No change	
Crash	MTCY_FLG	MOTORCYCLE INVOLVED	Variable created	2001
			Variable type change from coded to text	2018
Crash	NUM_OCCS	OCCUPANTS	Variable discontinued	2000
Crash	NUMVEHS	TOT-NBR-VEHICLES	No change	
Crash	PED_ACTN	PEDESTRIAN ACTION	Variable created	2003
			Variable discontinued	2018
Crash	PED_FLG	PEDESTRIAN INVOLVED	Variable created	2001
			Variable type change from coded to text	2018
Crash	POP_GRP	POPULATION GROUP = (CITY/RURAL GROUP)	Variable discontinued	2018
Crash	PSMILPRF	POSTMILE PREFIX	No change	
Crash	PSMILSUF	POSTMILE SUFFIX	No change	
Crash	RD_DEF1	ROADWAY CONDITION	Variable type change from coded to text	2018
Crash	RD_DEF2	ROAD CONDITION 2	Variable discontinued	2018
Crash	RD_DEF ₃	ROAD CONDITION 3	Variable discontinued	2002
Crash	RDSURF	ROAD-SURFACE	Variable type change from coded to text	2018
Crash	RODWYCLS	ROADWAY CLASSIFICATION	Variable created or edited by HSIS Lab	1991
Crash	RPT_LEV	ACCIDENT REPORT LEVEL	Variable type change from coded to text	2018
Crash	RTE_NBR	RDWAY ROUTE NUMBER	No change	
Crash	RTE_SUF	RDWAY ROUTE SUFFIX	Variable type change from coded to text	2018
Crash	SDE_HWY	SIDE-OF-HIGHWAY	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Crash	SEVERITY	COLLISION SEVERITY	Variable type change from coded to text	2018
Crash	SP_COND	SPECIAL CONDITION	Variable created	2003
			Variable discontinued	2018
Crash	TOT_BIKEINJ	TOTAL BICYCLISTS INJURED	Variable created	2003
			Variable name changed to "TOT_BIKE_INJ"	2018
Crash	TOT_BIKEKIL	TOTAL BICYCLISTS KILLED	Variable created	2003
Crash	TOT_INJ	OCCUPANTS INJURED	No change	
Crash	TOT_KILL	OCCUPANTS KILLED	No change	
Crash	TOT_MTCYLINJ	TOTAL MOTORCYCLISTS INJURED	Variable created	2003
Crash	TOT_MTCYLKIL	TOTAL MOTORCYCLISTS KILLED	Variable created	2003
Crash	TOT_PEDINJ	TOTAL PEDESTRIANS INJURED	Variable created	2003
Crash	TOT_PEDKILL	TOTAL PEDESTRIANS KILLED	Variable created	2003
Crash	TOWAWAY	INJURY, FATAL, OR TOWAWAY	Variable discontinued	2018
Crash	TRF_OPER	TRAFFIC CONTROL OPERATING	Variable type change from coded to text	2018
Crash	TRK_FLG	TRUCK INVOLVED	Variable created	2001
			Variable type change from coded to text	2018
Crash	VEH_AT_FAULT	VEHICLE AT FAULT	Variable discontinued	2001
Crash	VEH_INVL	MOTOR VEHICLES INVOLVED	Variable discontinued	2018
Crash	VTYPE_AT_FAUL T_CHP	CHP VEHICLE TYPE AT FAULT	Variable created	2001
			Variable discontinued	2018
Crash	VTYPE_AT_FAUL T_DOT	VEHICLE TYPE AT FAULT	Variable created	2001
			Variable discontinued	2018
Crash	WEATHER	WEATHER	Variable name changed to "WEATHER1"	2002
			Variable name changed to "WEATHER"	2018
			Variable type change from coded to text	2018

File	Variable Name	Variable	Description of Change	Year of Change
Crash	WEATHER1	WEATHER	Variable created as "WEATHER2"	2002
			Variable name changed to "WEATHER1"	2018
			Variable type change from coded to text	2018
Crash	WEATHER2	WEATHER	Variable created	2002
Consoli		DAY OF WEEK	Variable discontinued	2018
Crash	WEEKDAY	DAY-OF-WEEK	Change in coding	2018
Unit	ACCYR	COLLISION ACCYR	Variable discontinued	2018
Unit	BELT1	BELT USAGE	Variable created	2001
			Variable discontinued	2001
Unit	CASENO	UNIQUE ACCIDENT CASEO	Variable name changed to "ACC_ID"	2018
Unit	CAUSE	CONTRIBUTION FACTOR	Variable created	2002
			Variable discontinued	2018
Unit	CELPHONE	CELL PHONE	Variable created	2002
			Variable discontinued	2018
Unit	CONTRIB1	FIRST ASSOCIATED FACTOR	Variable discontinued	2018
Unit	CONTRIB ₂	SECOND ASSOCIATED FACTOR	Variable discontinued	2018
Unit	DEFECT	VEHICLE DEFECT	Variable created	2002
			Variable discontinued	2018
Unit	DIR_TRVL	DIRECTION OF TRAVEL	Variable name changed to "VEH_DIR"	2018
			Variable type change from coded to text	2018
Unit	DRV_AGE	DRIVER AGE	Variable discontinued	2018
Unit	DRV_INJ	DRIVER EXTENT OF INJURY	Variable discontinued	2018
Unit	DRV_RACE	DRIVER RACE	Variable created	2002
			Variable discontinued	2018
Unit	DRV_SEX	DRIVER SEX	Variable discontinued	2018
Unit	DRVREST1	DRIVER SAFETY EQUIPMENT	Variable created	2002
			Variable discontinued	2018
Unit	DRVREST2	DRIVER SAFETY EQUIPMENT	Variable created	2002
			Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Unit	FIRE	VEH FUEL LEAKS AND FIRES	Variable created	2002
			Variable discontinued	2018
Unit	HAZ_CODE	HAZARDOUS MATERIAL	Variable created	2002
			Variable discontinued	2018
Unit	HAZMAT	HAZARDOUS MATERIAL	Variable created	2002
			Variable discontinued	2018
Unit	INSUR	INSURANCE	Variable created	2001
			Variable discontinued	2018
Unit	LOC_TYP1	FIRST COLL LOCATION	Variable name changed to "POSN_1"	2018
			Variable type change from coded to text	2018
Unit	LOC_TYP2	SECOND COLL LOCATION	Variable name changed to "POSN_2"	2018
		LOCATION	1 0511_2	
			Variable type change from coded to text	2018
Unit	LOC_TYP3	THIRD COLL LOCATION	Variable name changed to "POSN_3"	2018
			Variable type change from coded to text	2018
Unit	LOC_TYP4	FOURTH COLL LOCATION	Variable name changed to "POSN_4"	2018
			Variable type change from coded to text	2018
Unit	MAJOR_INJURY	TOTAL SUSPECTED SERIOUS INJURIES	Variable created	2018
Unit	MAKE	VEHICLE MAKE	Variable discontinued	2018
Unit	MINOR_INJURY	TOTAL SUSPECTED MINOR INJURIES	Variable created	2018
Unit	MISCACT1	MOVEMENT PRECEDING COLL	Variable name changed to "MOVEMENT_TYPE"	2018
			Variable type change from coded to text	2018
Unit	NUM_INJ	TOTAL NUMBER INJURED	Variable discontinued	2018
Unit	NUM_KILL	TOTAL NUMBER KILLED	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Unit	OBJECT1	FIRST OBJECT STRUCK	Variable name changed to "OBJECT_1"	2018
			Variable type change from coded to text	2018
Unit	OBJECT ₂	SECOND OBJECT STRUCK	Variable name changed to "OBJECT_2"	2018
			Variable type change from coded to text	2018
Unit	OBJECT ₃	THIRD OBJECT STRUCK	Variable name changed to "OBJECT_3"	2018
			Variable type change from coded to text	2018
Unit	OBJECT4	FOURTH OBJECT STRUCK	Variable name changed to "OBJECT_4"	2018
			Variable type change from coded to text	2018
Unit	PART_TYP	PARTY TYPE	Variable name changed to "PARTY_GROUP"	2018
			Change in coding	2018
Unit	PED_ACTN	PEDESTRIAN ACTION	Variable created	2018
Unit	PED_INJ_CODE	PEDESTRIAN INJURY CODE	Variable created	2018
Unit	PHYSCOND	DRIVER PHYSICAL CONDITION	Variable name changed to "IMPAIRMENT_CODE_2"	2018
			Variable type change from coded to text	2018
Unit	POSSIBLE_INJURY	TOTAL POSSIBLE INJURIES	Variable created	2018
Unit	RTE_TYPE	HIGHWAY TYPE INDICATOR	Variable name changed to "HWY_IND_TYPE"	2018
			Variable type change from coded to text	2018
Unit	SCHLBUS	SCHOOL BUS	Variable created	2002
			Variable discontinued	2018
Unit	SOBRIETY	SOBRIETY	Variable name changed to "IMPAIRMENT_CODE_1"	2018
			Variable type change from coded to text	2018

Unit	File	Variable Name	Variable	Description of Change	Year of Change
Unit SUB_VIOL VIOLATION SUFFIX Variable discontinued 2018 Unit TRAIL_CODE TRAILER CODE Variable created 2003 Unit TRAIL_CODE TRUCK CODE Variable created 2003 Unit TRK_CODE TRUCK CODE Variable created 2003 Unit VEH_AT_FAUL VEHICLE AT FAULT Variable discontinued 2018 Unit VEH_AT_FAUL VEHICLE AT FAULT Variable discontinued 2018 Unit VEHNO VEHICLE NUMBER Variable discontinued 2018 Unit VEHNO VEHICLE TYPE Variable name changed to "UNIT_VEC" Unit VEHTYPE VEHICLE TYPE Variable name changed to "PARTY_TYPE" Variable type change from coded to text Unit VIOL VIOLATION Variable discontinued 2018 Unit VIOLS CAPMOVEHICLE Variable discontinued 2018 Unit VIOLS CADMV VEHICLE Variable discontinued 2018 Unit VTOWED VEHICLE TOWED Variable discontinued 2018 Unit VTOWING VEHICLE TOWING Variable discontinued 2018 Unit VTOWING VEHICLE Variable discontinued 2003 Unit VTOWING VEHICLE Variable discontinued 2003 UNIT_VEHICLE VARIABLE VAR	Unit	SPEC_INF		Variable created	
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Road ADT_HIST ADT HISTORY Variable discontinued 2003	Road			Variable discontinued	2003
	Road	ADT_HIST		Variable discontinued	2003
	Road		ALPHA MESSAGE	Variable discontinued	2003
Road ADT_STUS ADT STATUS PROFILE Variable discontinued 2018	Road		ADT STATUS PROFILE	Variable discontinued	_

File	Variable Name	Variable	Description of Change	Year of Change
Road	BEGMP	POSTMILE-BEGMP	No change	
Road	CITY	CITY	No change	
Road	CNTYRTE	ROAD COUNTY ROUTE	No change	
Road	COUNTY	COUNTY	No change	
Road	CURB1	CURB AND LANDSCAPE	Variable discontinued	2018
Road	DES_NBR	ROAD DESC NUMBER	Variable discontinued	2003
Road	DESG_SPD	DESIGN SPEED	No change	
Road	DISTRICT	DISTRICT	No change	
Road	DIVIDED	DIVIDED HIGHWAY	Variable type change from coded to text	2018
Road	ENDMP	POSTMILE + SEG_LNG	No change	
Road	FEAT_LF	LEFT RDBD SPECIAL FEATURE	Variable discontinued	2018
Road	FEAT_RG	RIGHT RDBD SPECIAL FEATURE	Variable discontinued	2018
Road	FED_AID	FEDERAL AID (IN LIEU)	Variable discontinued	2018
Road	FED_PREF	FEDERAL AID RTE PREFIX	Variable discontinued	2018
Road	FED_RTE	FEDERAL AID RTE	Variable discontinued	2018
Road	FILETYP	FILE TYPE	Variable discontinued	2003
Road	FUNC_CLS	FUNCTIONAL CLASS	Variable discontinued	2018
Road	HIST_ADD	HISTORY ELEMENTS RELATIVE ADDR	Variable discontinued	2018
Road	HWY_GRP	HIGHWAY GROUP	Variable type change from coded to text	2018
Road	INS_OTS	INSIDE OUTSIDE CITY	Variable discontinued	2003
Road	LANEWID	AVERAGE LANE WIDTH	No change	
Road	LSHL_WD2	LEFT SHOULDER WIDTH RD2	No change	
Road	LSHLDWID	LEFT SHOULDER WIDTH RD1	No change	
Road	LST_SEG_CHG _DTE	DATE OF LAST CHANGE	Variable created	2005
			Variable discontinued	2018
Road	LTRD_DTE	LEFT ROADBED DATE	Variable discontinued	2003
Road	LTRD_HST	LEFT ROADBED HISTORY	Variable discontinued	2018
Road	MAINT_LEVL	MAINTENANCE LEVEL SERVICE CODE	Variable created	2005
Road	MED_DTE	RAMP MEDIAN DATE	Variable discontinued Variable discontinued	2007
Road	MED_HIST	MEDIAN HISTORY	Variable discontinued Variable discontinued	2018
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File	Variable Name	Variable	Description of Change	Year of Change
Road	MED_TYPE	MEDIAN TYPE	Variable type change from coded to text	2018
Road	MED_VAR	MEDIAN VARIANCE	Variable type change from coded to text	2018
Road	MEDBARTY	MEDIAN BARRIER TYPE	Variable type change from coded to text	2018
Road	MEDWID	MEDIAN WIDTH	No change	
Road	MVMT	MILLION VEHICLE MILES	Variable created	1999
		TRAVELED	Variable discontinued	2018
Road	NA_MILE	NON-ADD MILEAGE	Variable discontinued	2018
Road	NAT_LND	NATIONAL LANDS	Variable discontinued	2018
Road	NO_LANE1	NUMBER OF LANES RD1	No change	
Road	NO_LANE2	NUMBER OF LANES RD2	No change	
Road	NO_LANES	TOTAL NUMBER OF LANES	No change	
Road	PAV_WDL	LEFT PAVED SHLD WDTH RD1	Variable discontinued	2018
Road	PAV_WDL2	LEFT PAVED SHLD WDTH RD2	Variable discontinued	2018
Road	PAV_WDR2	RIGHT PAVED SHLD WIDTH RD2	Variable discontinued	2018
Road	PAV_WIDR	RIGHT PAVED SHLD WDTH RD1	Variable discontinued	2018
Road	PSMILPRF	POSTMILE PREFIX	No change	
Road	PSMILSUF	POSTMILE SUFFIX	No change	
Road	RD_DATE	ROAD DATE	Variable discontinued	2003
Road	RD_DESC	ROAD DESCRIPTION	Variable discontinued	2018
Road	RECTYPE	RECORD TYPE	Variable discontinued	2003
Road	RGRD_DTE	RIGHT ROADBED DATE	Variable discontinued	2018
Road	RGRD_HSR	RIGHT ROADBED HISTORY	Variable discontinued	2018
Road	RO_SEQ	ROUTE ORDER SEQUENCE	Variable discontinued	2018
Road	RODWYCLS	ROADWAY CLASSIFICATION	Variable created or editable by HSIS Lab	1994
Road	RSHL_WD2	RIGHT SHOULDER WIDTH RD2	No change	
Road	RSHLDWID	RIGHT SHOULDER WIDTH RD1	No change	
Road	RTE_NBR	RDWAY ROUTE NUMBER	No change	
Road	RTE_SUF	RDWAY ROUTE SUFFIX	No change	

File	Variable Name	Variable	Description of Change	Year of Change
Road	RU_IO	RURAL/URBAN INSIDE OUTSIDE CITY	Variable discontinued	2018
Road	RURURB	RURAL URBAN	Variable type change from coded to text	2018
Road	SCN_FRWY	SCENIC FREEWAY	Variable discontinued	2018
Road	SEG_LNG	SECTION LENGTH	No change	
Road	SURF_TY2	SURFACE TYPE RD2	Variable type change from coded to text	2018
Road	SURF_TYP	SURFACE TYPE RD1	Variable type change from coded to text	2018
Road	SURF_WD2	TRAVELED-WAY WIDTH RD2	No change	
Road	SURF_WID	TRAVELED-WAY WIDTH RD1	No change	
Road	TERRAIN	TERRAIN	Variable type change from coded to text	2018
Road	TOLL	TOLL AND FOREST RDS	Variable discontinued	2018
Road	TRK2AX	2-AXLE TRUCK AADT	Variable discontinued	2018
Road	TRK3AX	3-AXLE TRUCK AADT	Variable discontinued	2018
Road	TRK4AX	4-AXLE TRUCK AADT	Variable discontinued	2018
Road	TRK5AX	5+-AXLE TRUCK AADT	Variable discontinued	2018
Road	TRKCNTFL	TRUCK COUNT FLAG	Variable discontinued	2018
Road	TRKTOT	TOTAL TRUCK AADT	Variable created	1995
			Variable discontinued	2018
Intersection	CITY_CODE	CITY CODE	Variable created as "CITY_CDE" Variable name changed to	2003
Intersection	CNTYRTE	INTERSECTION COUNTY ROUTE	"CITY_CODE" No change	
Intercection	COUNTY	COUNTY	No change	
Intersection Intersection	DISTRICT	DISTRICT	No change No change	
Intersection	HWY_GRP	HIGHWAY GROUP	Variable type change from coded to text	2018
Intersection	INT_ADDR	HISTORY ELEMENTS RELATIVE	Variable discontinued	2003
Intersection	INT_DESC	INTERSECTION DESCRIPTION	No change	
Intersection	INT_DTE	INTERSECTION EFFECTIVE DATE	No change	
Intersection	INT_HST	INTERSECTION TYPE HISTORY	Variable discontinued	2003
Intersection	INT_PRF	INTERSECTING RTE PREFIX	Variable discontinued	2018
Intersection	INT_POPGRP	POPULATION CODE	Variable created	2003

File	Variable Name	Variable	Description of Change	Year of Change
Intersection	INT_RSUF	INTERSECTING RTE SUFFIX	Variable type change from coded to text	2018
Intersection	INT_RTE	INTERSECTING RTE NBR	No change	
Intersection	INT_SEQ	INTERSECTING RTE ORDER SEQ	Variable discontinued	2018
Intersection	INTMP	INTERSECTION MILEPOST	No change	
Intersection	INTY_RTE	CROSS STREET COUNTY ROUTE	No change	
Intersection	JUNCTYPE	JUNCTION TYPE	Variable discontinued	2018
Intersection	LGHT_DTE	INTERSECTION LIGHT DATE	No change	
Intersection	LGHT_HST	INTERSECTION LIGHT HISTORY	Variable discontinued	2003
Intersection	LGHT_TYP	INTERSECTION LIGHT TYPE	No change	
Intersection	LOG_ERR	LOG ERROR INDICATOR	Variable discontinued	2003
Intersection	MED_DTE	RAMP MEDIAN DATE	Variable discontinued	2003
Intersection	MED_HIST	MEDIAN HISTORY	Variable discontinued	2003
Intersection	MED_IND	RAMP MEDIAN INDICATOR	Variable discontinued	2003
Intersection	MILEPOST	MILEPOST	No change	
Intersection	ML_AADT	MAINLINE AADT	No change	
Intersection	ML_ADTDT	MAINLINE ADT DATE	Variable discontinued	2003
Intersection	ML_ADTHS	MAINLINE ADT HISTORY	Variable discontinued	2003
Intersection	ML_DATE	MAINLINE HISTORY DATE	Variable discontinued	2018
Intersection	ML_HIST	MAINLINE HISTORY	Variable discontinued	2003
Intersection	ML_LANES	MAINLINE NUMBER OF LANES	No change	
Intersection	ML_LEFT	MAINLINE LEFT TURN	Variable type change from coded to text	2018
Intersection	ML_LNGT	MAINLINE SECTION LENGTH	Variable discontinued	2018
Intersection	ML_MAST	MAINLINE SIGNAL MASTARM	No change	
Intersection	ML_RIGHT	MAINLINE RIGHT TURN	Variable type change from coded to text	2018
Intersection	ML_TRFLO	MAINLINE TRAFFIC FLOW	Variable type change from coded to text	2018
Intersection	PSMILPRF	POSTMILE PREFIX	No change	
Intersection	PSMILSUF	POSTMILE SUFFIX	Variable discontinued	2003
Intersection	RECTYPE	RECORD TYPE	Variable discontinued	2003
Intersection	RO_SEQ	ROUTE ORDER SEQUENCE	Variable discontinued	2018

File	Variable Name	Variable	Description of Change	Year of Change
Intersection	RTE_NBR	RDWAY ROUTE NUMBER	No change	
Intersection	RTE_SUF	RDWAY ROUTE SUFFIX	No change	
Intersection	TRF_CNTL	TRAFFIC CONTROL TYPE	Variable type change from coded to text	2018
Intersection	TRFCTLDT	TRAFFIC CONTROL TYPE DATE	Variable discontinued	2003
Intersection	TRFCTLHS	TRAFFIC CONTROL TYPE HISTORY	Variable discontinued	2003
Intersection	TYPEDESC	INTERSECTION TYPE	Variable type change from coded to text	2018
Intersection	XSTAADT	X-STREET AADT	No change	
Intersection	XSTADTDT	X-STREET ADT DATE	Variable discontinued	2003
Intersection	XSTADTHS	X-STREET ADT HISTORY	Variable discontinued	2003
Intersection	XSTLANES	X-STREET NUMBER OF LANES	No change	
Intersection	XSTLNGT	X-STREET SECTION LENGTH	Variable discontinued	2018
Intersection	XSTRTDTE	X-STREET DATE	Variable discontinued	2018
Intersection	XSTRTHST	X-STREET HISTORY	Variable discontinued	2003
Intersection	XSTRTLFT	X-STREET LEFT TURN CHANNELIZATION	Variable type change from coded to text	2018
Intersection	XSTRTMST	X-STREET SIGNAL	No change	
Intersection	XSTRTRGH	X-STREET RIGHT TURN	Variable type change from coded to text	2018
Intersection	XSTSTRT	X-STREET STATE ROUTE	Variable type change from coded to text	2018
Intersection	XSTTRFLO	X-STREET TRAFFIC FLOW	Variable type change from coded to text	2018
Intersection	XST_RSUF	X-STREET ROUTE SUFFIX	Variable created	2003
Interchange	AREA4	RAMP AREA 4 INDICATOR	No change	
Interchange	CITY_CODE	CITY CODE	Variable created as "CITY_CDE"	2003
			Variable name changed to "CITY_CODE"	2017
Interchange	CNTYRTE	RAMP COUNTY ROUTE	No change	
Interchange	COUNTY	COUNTY	Variable created	2003
Interchange	DIR_CODE	DIRECTION	Variable created	2003
			Variable discontinued	2018
Interchange	DISTRICT	DISTRICT	No change	
Interchange	HWY_GRP	HIGHWAY GROUP	Variable type change from coded to text	2018

File	Variable Name	Variable	Description of Change	Year of Change
Interchange	MED_DTE	RAMP MEDIAN DATE	Variable discontinued	2003
Interchange	MED_HST	RAMP MEDIAN HISTORY	Variable discontinued	2003
Interchange	MED_IND	RAMP MEDIAN	Variable discontinued	2003
Interchange	MILEPOST	RAMP MILEPOST	No change	
Interchange	ON_OFFRP	ON/OFF RAMP INDICATOR	Change in coding	2018
Interchange	PSMILPRF	POSTMILE PREFIX	Variable created	2003
Interchange	RAMP_TYP	RAMP TYPE	Variable created	2003
			Variable discontinued	2018
Interchange	RECTYPE	RECORD TYPE	Variable discontinued	2003
Interchange	RMADTDTE	RAMP ADT DATE	Variable discontinued	2003
Interchange	RMADTHST	RAMP ADT HISTORY	Variable discontinued	2003
Interchange	RMP_ADT	RAMP AADT	No change	
Interchange	RMP_BEGMPOFFSET	RAMP BEGIN MILEPOST	Variable created	2003
			Variable discontinued	2018
Interchange	RMP_DTE	RAMP TYPE DATE	Variable discontinued	2003
Interchange	RMP_HST	RAMP HISTORY	Variable created	1995
			Variable discontinued	2003
Interchange	RMP_POPGRP	RAMP POPULATION CODE	Change in coding	2018
Interchange	RMP_SEQ	RAMP SEQUENCE	Variable created	2003
			Variable discontinued	2018
Interchange	RMP_TYPE	RAMP TYPE	Variable discontinued	2003
Interchange	RTE_NBR	RDWAY ROUTE NUMBER	Variable created	2003
Interchange	RTE_SUF	RDWAY ROUTE SUFFIX	Variable created	2003
Interchange	TRF_CNTL	TRAFFIC CONTROL TYPE	Variable created	2003
			Variable discontinued	2018