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FARS
Analytic Reference Guide
1975 to 2008

Preface

The purpose of this reference guide is to provide a historical perspective of the data coding of Fatality Analysis Reporting System (FARS) from 1975 to 2008. In other words, it presents the evolution of FARS data elements and attributes through the year 2008.

Formerly referred to as the Fatal Accident Reporting System, the FARS is a collection of files documenting all qualifying fatal crashes since 1975 that occurred within the 50 States, the District of Columbia, and Puerto Rico. To be included in this census of crashes, a crash had to involve a motor vehicle traveling on a trafficway customarily open to the public, and must result in the death of a person (occupant of a vehicle or a nonmotorist) within 30 days of the crash.

Since 1975, a comprehensive coding manual has been produced each year. The coding manual provides a set of written instructions to every FARS analyst on how to transfer the data from a police accident/crash report (PAR) to the FARS system. Since 1975, FARS has undergone several changes. To augment the coding manual, classes are held each year to train the coders and a system wide FARS meeting is held to encourage uniform coding for later analysis.

By default the coding manual has taken on an additional role: an aid to the data user. When doing analysis across years, to ensure accuracy each variable of interest must be checked in each year's coding manual. An unsuspecting analyst might assume that if one had a complete set of coding manuals and sufficient diligence, one could produce the desired results. Unfortunately, the data in the current files available for analysis does not correspond with the historical coding manuals. This is especially true for the early years of the program.

A complete set of consistent coding manuals, unfortunately, does not organize the data for the purpose of analysis. A data analyst may need the FARS data functionally organized. Within any functional category one needs to know what data is available and how to access them. There is a serious question of organization. Should the functional categories be organized across the three major files, Accident, Vehicle, and Person? Or should the functional categories be organized for each of the three files? There are advantages to both. Experience suggests that most analysts prefer to work with a single file if possible; thus the second approach has been adopted.

The information contained in this analytic reference is not complete. For example, only a brief section on the Vehicle Identification Number (VIN) has been included. The information reported seems to be consistent for all automobile VINs across years. It does not address other types of vehicles. The full VIN interpretation requires an additional manual and is beyond the scope of this document.

Several SAS computer programs were developed to analyze the variables to check for inconsistency across years. The programs worked well, but were not automatic and may not have identified all inconsistencies.

Many useful points of cross-reference have been included. However, they are far from complete. It would be an error to assume that all instances of a heading are included in the cross-reference. It is rather a suggestion on topics that one should consider when one

starts to conduct analysis.

Each edition corrects known errors of previous editions and your help is requested to identify problems with the current publication. Older copies of this reference guide may be replaced with this one. All material in earlier editions has been retained.

Editions of this reference guide prior to 2007 were completed by Joseph M. Tessmer and Marilouise Burgess. Subsequent editions are based on the foundation that they built and others' inputs. No major changes have been made in this edition.

Thank you for your interest in highway traffic safety.

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Instructions

The FARS analytic reference guide has seven sections. Three of these sections address each of the three principle files, namely the Accident, Vehicle, and Person files. Each of these three sections is divided into three subsections. The first subsection is a cross-tabulation or index of the variables and key words/topics for the file. The variables and key words are in alphabetical order in the first column. The names of the variables are in upper case, while the key words are in lower case. The second subsection lists all the variables by year for the file. The third subsection contains detailed information on each of the variables.

In the first subsection, for a given file, to the right of the FARS variables and key words are one or more headings of the segments and corresponding page numbers, which provides the information about the variable, key words, or associated variables to be considered. The third subsections are arranged alphabetically by heading. Each of the variables in a segment is addressed in reverse chronological order, that is, most recent items first. The dates for which the variables are defined appear along with the allowable values for each time period. Often similar variables will appear in the same segment. This is particularly true of variables that have had a name change over time. For example, the variable to examine roadway function, that is interstate versus local road, et al., has been ROAD_FNC since 1981. However, from 1975 to 1980 the variable CL_TWAY was used. In this document they are in the same segment, Roadway Function Class, and CL_TWAY directly follows ROAD_FNC.

There are a total of seven sections in this reference guide, namely the preface/instructions, list of variables, Accident file, Vehicle file, (Vehnit file since 2005), Person file, compact disk comments, and references. The page numbers for the pre**f**ace/instructions start with "F-" followed by a lowercase roman numeral. The list of varia**b**les is numbered with "B-" followed by an arabic numeral. The three file sections start with "A-", "V-", and "P-" respectively followed by either a lowercase roman numeral or an arabic numeral. Roman numerals are used for the first and second subsections, the list of variables/cross tabulations and the list of variables by year, at the beginning of each file section. Arabic numerals number the files' third subsection. The section on the **c**ompact disk is numbered with "C-" followed by an arabic numeral. The final section is the **r**eferences, where each page is numbered with an "R-" followed by an arabic numeral.

This guide has documentation on variables that appear on more than one file, i.e., at least two of the Accident, Vehicle, or Person files. This reflects the SAS data structure at the National Center for Statistics and Analysis (NCSA) and may not correspond to the structure of the data at any other site. The exception is the data on the vehicle model which is in both the Vehicle and Person files. The vehicle model data requires 49 pages of this document and, for the sake of brevity, only appears once in the Vehicle file. The popular ASCII sets of data, on CDs, do not repeat variables. If the ASCII data sets are converted to SAS using the supplied conversion software, the data sets will have the data structure of the National Center for Statistics and Analysis.

When appropriate, notes, often suggested by users, are included in the documentation to guide researchers in the use of this data. The notes often highlight peculiarity of the data, which have been uncovered during analysis and may prevent unprofitable avenues of research.

For any variable critical to the analysis being conducted, it is good practice to examine the variable by State.

THE

FARS

VARIABLES

The following is a list of variables within the FARS data system. The variables are listed in alphabetical order.

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
AGE			AGE	Age
AIR_BAG			AIR_BAG	Air Bag Availability
ALC_DET			ALC_DET	Method of Alcohol Determination
ALC_RES			ALC_RES	Alcohol Test Results
ALIGNMNT	ALIGNMNT			Roadway Alignment
ARR_HOUR	ARR_HOUR			Arrival Time EMS – Hour
ARR_MIN	ARR_MIN			Arrival Time EMS – Minutes
ATST_TYP			ATST_TYP	Alcohol Test Type
AUT_REST			AUT_REST	Automatic Restraint – Function
AVOID		AVOID		Crash Avoidance Maneuver
AXLES		AXLES		Number of Axles
BODY_TYP		BODY_TYP	BODY_TYP	Body Type
BUS_USE		BUS_USE		Bus Use
CARGO_BT		CARGO_BT		Cargo Body Type
CDL_STAT		CDL_STAT		Commercial Motor Driver License Status
CERT_NO			CERT_NO	Death Certificate
CF1	CF1			Crash-Related Factor 1
CF2	CF2			Crash-Related Factor 2
CF3	CF3			Crash-Related Factor 3
CHAS_TR		CHAS_TR		VIN Chassis – Truck

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
CITY	CITY			City
CL_TWAY	CL_TWAY			Class Trafficway
COUNTY	COUNTY		COUNTY	County
C_M_ZONE	C_M_ZONE			Construction/Maintenance Zone
DAY	DAY		DAY	Crash Date – Day
DAY_WEEK	DAY_WEEK			Day of Week
DEATHS		DEATHS		Fatal in Vehicle
DEATH_DA			DEATH_DA	Death Date – Day
DEATH_HR			DEATH_HR	Death Time – Hour
DEATH_MN			DEATH_MN	Death Time – Minute
DEATH_MO			DEATH_MO	Death Date – Month
DEATH_TM			DEATH_TM	Death Time
DEATH_YR			DEATH_YR	Death Date – Year
DOA			DOA	Dead on Arrival
DRINKING			DRINKING	Police-Reported Alcohol Involvement
DEFORMED		DEFORMED		Extent of Deformation
DRUGRES1			DRUGREST1	Drug Test Results 1
DRUGRES2			DRUGREST2	Drug Test Results 2
DRUGRES3			DRUGREST3	Drug Test Results 3
DRUGS			DRUGS	Drug Involvement
DRUGTEST			DRUGTEST	Drug Test Type

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
DRUGTST1			DRUGTST1	Drug Test Type 1
DRUGTST2			DRUGTST2	Drug Test Type 2
DRUGTST3			DRUGTST3	Drug Test Type 3
DRUG_DET			DRUG_DET	Drug Determination
DRUG_RES			DRUG_RES	Drug Test Results
DRUNK_DR	DRUNK_DR			Drinking Drivers
DR_CF1		DR_CF1		Driver-Related Factor 1
DR_CF2		DR_CF2		Driver-Related Factor 2
DR_CF3		DR_CF3		Driver-Related Factor 3
DR_CF4		DR_CF4		Driver-Related Factor 4
DR_DRINK		DR_DRINK		Drunk Drivers
DR_HGT		DR_HGT		Driver Height
DR_PRES		DR_PRES		Driver Presence
DR_TRAIN		DR_TRAIN		Driver Training
DR_WGT		DR_WGT		Driver Weight
DR_ZIP		DR_ZIP		Driver ZIP Code
EJECTION			EJECTION	Ejection
EJ_PATH			EJ_PATH	Ejection Path
EMER_USE		EMER_USE	EMER_USE	Emergency Use
EXTRICAT			EXTRICAT	Extrication
FATALS	FATALS			Crash Fatalities
FED_AID	FED_AID			Federal Aid System

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
FIRE_EXP		FIRE_EXP	FIRE_EXP	Fire Occurrence
FIRST_MO		FIRST_MO		First Crash – Month
FIRST_YR		FIRST_YR		First Crash – Year
FLDCD_TR		FLDCD_TR		Truck Fuel Code
GVWR		GVWR		GVW Rating
HARM_EV	HARM_EV	HARM_EV	HARM_EV	First Harmful Event
HAZ_CARG		HAZ_CARG		Hazardous Cargo
HAZ_INV		HAZ_INV		Hazardous Material Involvement
HAZ_PLAC		HAZ_PLAC		Hazardous Material Placard
HAZ_ID		HAZ_ID		Hazardous Material ID Number
HAZ_CNO		HAZ_CNO		Hazardous Material Class No.
HAZ_REL		HAZ_REL		Hazardous Material Release
HISPANIC			HISPANIC	Hispanic Origin
HIT_RUN	HIT_RUN	HIT_RUN		Hit-and-Run
HOSPITAL			HOSPITAL	Taken to Hospital
HOSP_HR	HOSP_HR			EMS Time at Hospital – Hour
HOSP_MN	HOSP_MN			EMS Time at Hospital – Minute
HOUR	HOUR		HOUR	Time of Crash – Hour
IMPACT1		IMPACT1	IMPACT1	Impact Point – Initial
IMPACT2		IMPACT2	IMPACT2	Impact Point – Principal
IMPACTS		IMPACTS	IMPACTS	Vehicle Role
INJ_SEV			INJ_SEV	Injury Severity
J_KNIFE		J_KNIFE		Jackknife

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
LAG_HRS			LAG_HRS	Crash to Death – Hours
LAG_MINS			LAG_MINS	Crash to Death – Minutes
LAND_USE	LAND_USE			Land Use
LAST_MO		LAST_MO		Last Crash, etc. – Month
LAST_YR		LAST_YR		Last Crash, etc. – Year
LATITUDE	LATITUDE			Global Position – Latitude
LGT_COND	LGT_COND			Light Condition
LOCATION			LOCATION	Nonmotorist Location
LONGITUD	LONGITUD			Global Position – Longitude
L_CL_VEH		L_CL_VEH		License/Class Vehicle Compliance
L_COMPL		L_COMPL		Driver License Type Compliance
L_ENDORS		L_ENDORS		Compliance with License Status
L_RESTRI		L_RESTRI		Compliance with License Restrictions
L_STATE		L_STATE		License State
L_STATUS		L_STATUS		Driver License Status/Type
L_TYPE		L_TYPE		Driver License Status/Type
MAKE		MAKE	MAKE	Vehicle Make
MAK_MOD		MAK_MOD	MAK_MOD	Vehicle Model
MAN_COLL	MAN_COLL	MAN_COLL	MAN_COLL	Manner of Collision
MAN_REST			MAN_REST	Manual Restraint Use
MCARR_ID		MCARR_ID		Motor Carrier ID
MCYCL_DS		MCYCL_DS	MCYCL_DS	Motorcycle CC Displacement

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
MCYCL_TY		MCYCL_TY		VIN Type Motorcycle
MILEPT	MILEPT			Milepoint
MINUTE	MINUTE		MINUTE	Minute
MODEL		MODEL		Vehicle Model Code
MOD_YEAR		MOD_YEAR	MOD_YEAR	Model Year
MONTH	MONTH	MONTH	MONTH	Crash Date – Month
M_HARM		M_HARM		Most Harmful Event
NHS	NHS			National Highway System
NOT_HOUR	NOT_HOUR			Notification Time EMS – Hour
NOT_MIN	NOT_MIN			Notification Time EMS – Minute
NO_LANES	NO_LANES			Number of Travel Lanes
N_MOT_NO			N_MOT_NO	Striking Vehicle
OCUPANTS		OCUPANTS		Number of Occupants
OWNER		OWNER		Registered Vehicle Owner
PAVE_TYP	PAVE_TYP			Roadway Surface Type
PEDS	PEDS			Number of Forms Submitted for Persons Not in Motor Vehicles
PERSONS	PERSONS			Person Forms Submitted
PER_NO			PER_NO	Person Number
PER_TYP			PER_TYP	Person Type
PREV_ACC		PREV_ACC		Previous Recorded Crashes
PREV_DWI		PREV_DWI		Previous DWI Convictions

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
PREV_OTH		PREV_OTH		Previous Other Harmful MV Convictions
PREV_SPD		PREV_SPD		Previous Speeding Convictions
PREV_SUS		PREV_SUS		Previous Recorded Suspensions
PROFILE	PROFILE			Roadway Profile
P_CF1			P_CF1	Person-Related Factor 1
P_CF2			P_CF2	Person-Related Factor 2
P_CF3			P_CF3	Person-Related Factor 3
RACE			RACE	Race Origin
RAIL	RAIL			Rail Grade Xing ID
REG_STAT		REG_STAT		Registration State
REL_JUNC	REL_JUNC			Relation to Junction
REL_ROAD	REL_ROAD			Relation to Roadway
REST_USE			REST_USE	Protection System Use
ROAD_FLO	ROAD_FLO			Roadway Flow
ROAD_FNC	ROAD_FNC		ROAD_FNC	Roadway Function Class
ROLLOVER		ROLLOVER	ROLLOVER	Rollover
ROUTE	ROUTE			Route Signing
SCH_BUS	SCH_BUS		SCH_BUS	School-Bus-Related
SEAT_POS			SEAT_POS	Seating Position
SER_TR		SER_TR	SER_TR	VIN Series – Truck
SEQ1		SEQ1		Sequence of Event
SEQ2		SEQ2		Sequence of Event

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
SEQ3		SEQ3		Sequence of Event
SEQ4		SEQ4		Sequence of Event
SEQ5		SEQ5		Sequence of Event
SEQ6		SEQ6		Sequence of Event
SEX			SEX	Sex
SPEC_USE		SPEC_USE	SPEC_USE	Special Use
SP_JUR	SP_JUR			Special Jurisdiction
SP_LIMIT	SP_LIMIT			Speed Limit
STATE	STATE	STATE	STATE	State
ST_CASE	ST_CASE	ST_CASE	ST_CASE	State/Case Number
SUR_COND	SUR_COND			Roadway Surface Condition
TA_1_CL	TA_1_CL			TA-1 Class
TEST_RES			TEST_RES	Alcohol Test Results
TOWAWAY		TOWAWAY		Manner of Leaving Scene
TOW_VEH		TOW_VEH	TOW_VEH	Towed Trailing Unit
TOXCLGY			TOXCLGY	Drug Noted in Toxicology Report
TRAF_FLO	TRAF_FLO			Trafficway Flow
TRA_CONT	TRA_CONT			Traffic Controls
TRAV_SP		TRAV_SP		Travel Speed
TWAY_FLO	TWAY_FLO			Trafficway Flow
TWAY_ID	TWAY_ID			Trafficway ID
TWAY_ID2	TWAY_ID2			Trafficway ID
T_CONT_F	T_CONT_F			Controls Functioning

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
UNDERIDE		UNDERIDE		Underride/Override
UNITTYPE		UNITTYPE		Unit Type
VEHICLES	VEHICLES			Vehicles Involved in Crash
VEH_CF1		VEH_CF1		Vehicle-Related Factor 1
VEH_CF2		VEH_CF2		Vehicle-Related Factor 2
VEH_MAN		VEH_MAN		Vehicle Maneuver
VEH_NO		VEH_NO	VEH_NO	Vehicle Number
VE_FORMS	VE_FORMS	VE_FORMS	VE_FORMS	Vehicle Forms Submitted
VE_TOTAL		VE_TOTAL		Vehicle Forms Submitted
VIN		VIN		Vehicle ID Number
VINA_MOD		VINA_MOD	VINA_MOD	VIN Model
VIN_1		VIN_1		
VIN_2		VIN_2		
VIN_3		VIN_3		
VIN_4		VIN_4		
VIN_5		VIN_5		
VIN_6		VIN_6		
VIN_7		VIN_7		
VIN_8		VIN_8		
VIN_9		VIN_9		
VIN_10		VIN_10		
VIN_11		VIN_11		
VIN_12		VIN_12		

FARS VARIABLES	ACCIDENT VARIABLES	VEHICLE VARIABLES	PERSON VARIABLES	FARS LABELS
VIN_BT		VIN_BT	VIN_BT	VIN Body Type
VIN_LNGT		VIN_LNGT		VIN Length
VIN_WGT		VIN_WGT	VIN_WGT	VIN Weight – Auto
VIOL_CHG		VIOL_CHG		Violations Charged
VIOLCHG1		VIOLCHG1		Violation Charge 1
VIOLCHG2		VIOLCHG2		Violation Charge 2
VIOLCHG3		VIOLCHG3		Violation Charge 3
V_CONFIG		V_CONFIG		Vehicle Configuration
WEATHER1	WEATHER1			Atmospheric Condition
WEATHER2	WEATHER2			Atmospheric Condition
WGTCD_TR		WGTCD_TR	WGTCD_TR	Weight Code – Truck
WHLBS_LG		WHLBS_LG	WHLBS_LG	Wheelbase Long – Auto
WHLBS_SH		WHLBS_SH	WHLBS_SH	Wheelbase Short – Auto
WORK_INJ			WORK_INJ	Fatal At Work
YEAR	YEAR			

THE

ACCIDENT

FILE

Accident File X-Ref

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Variable (Bold)	**Heading**	**Page #**	**Name**		**Page**
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ARR_MIN (1975 to 1998) (1999 and later)	Time	A-67	A37	Arrival Time EMS	141
Arterials	Federal Aid System or Roadway Function Class	A-13, A-52			
Blacktop *(Bituminous)*	Roadway Surface Condition	A-60			
CF1 (1975 to 1981) (1982 and later)	Related Factors Crash Level	A-42	A39	Related Factors - Accident Level	149
CF2 (1975 to 1981) (1982 and later)	Related Factors Crash Level	A-42	A39	Related Factors - Accident Level	149
CF3 (1975 to 1981) (1982 and later)	Related Factors Crash Level	A-42	A39	Related Factors - Accident Level	149
CITY (1975 and later)	City/County	A-3	A7	City	29
CL_TWAY (1975 to 1980) (1981 – Data not available) (1982 to 1986) (1987 and later – see ROUTE)	Roadway Function Class *(Continued)*	A-52	A12	Route Signing	45
Collector	Roadway Function Class	A-52			
College/ University	Special Jurisdiction	A-63			
Concrete	Roadway Surface Condition	A-60			
Construction	Construction/Maintenance Zone	A-4			
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This is a note for the table/matrix below. This note applies to all three tables/matrices, i.e., the Accident file table/matrix, the Vehicle file table/matrix, and the Person file table/matrix.

The first column under which the letter “A” appears is the first year that variable was coded. If the letter “A” appears across the row there have been no significant changes in the way in which the variable has been coded. If the letter “B” appears in a row, there has been a significant change in the way the variable has been coded. The first column, which contains the letter “B,” indicates which year the first change was made. The letter “C” indicates the year the second change was made, and so on.

Year	ALIGNMNT	ARR_HOUR	ARR_MIN	CF1, CF2, CF3	CITY	CL_TWAY	COUNTY	C_M_ZONE	DAY	DAY_WEEK	DRUNK_DR	FATALS
1975	A	A	A	A	A	A	A	-	A	A	A	A
1976	A	A	A	A	A	A	A	-	A	A	A	A
1977	A	A	A	A	A	A	A	-	A	A	A	A
1978	A	A	A	A	A	A	A	-	A	A	A	A
1979	A	A	A	A	A	A	A	-	A	A	A	A
1980	A	A	A	A	A	A	A	A	A	A	A	A
1981	A	A	A	A	A	-	A	A	A	A	A	A
1982	A	A	A	B	A	B	A	B	A	A	A	A
1983	A	A	A	B	A	B	A	B	A	A	A	A
1984	A	A	A	B	A	B	A	B	A	A	A	A
1985	A	A	A	B	A	B	A	B	A	A	A	A
1986	A	A	A	B	A	B	A	B	A	A	A	A
1987	A	A	A	B	A	-	A	B	A	A	A	A
1988	A	A	A	B	A	-	A	B	A	A	A	A
1989	A	A	A	B	A	-	A	B	A	A	A	A
1990	A	A	A	B	A	-	A	B	A	A	A	A
1991	A	A	A	B	A	-	A	B	A	A	A	A
1992	A	A	A	B	A	-	A	B	A	A	A	A
1993	A	A	A	B	A	-	A	B	A	A	A	A
1994	A	A	A	B	A	-	A	B	A	A	A	A
1995	A	A	A	B	A	-	A	B	A	A	A	A
1996	A	A	A	B	A	-	A	B	A	A	A	A
1997	A	A	A	B	A	-	A	B	A	A	A	A
1998	A	A	A	B	A	-	A	B	A	A	A	A
1999	A	B	B	C	A	-	A	B	A	A	A	A
2000	A	B	B	C	A	-	A	B	A	A	A	A
2001	A	B	B	C	A	-	A	B	A	A	A	A
2002	A	B	B	C	A	-	A	B	A	A	A	A
2003	A	B	B	C	A	-	A	B	A	A	A	A
2004	A	B	B	C	A	-	A	B	A	A	A	A
2005	A	B	B	C	A	-	A	B	A	A	A	A
2006	A	B	B	D	A	-	A	B	A	A	A	A
2007	A	B	B	D	A	-	A	B	A	A	A	A
2008	A	B	B	E	A	-	A	B	A	A	A	A

Year	FED_AID	HARM_EV	HIT_RUN	HOSP_HR	HOSP_MIN	HOUR	LAND_USE	LATTITUDE	LGT_COND	LONGITUD	MAN_COLL	MILEPT
1975	-	A	A	-	-	A	A	-	A	-	A	-
1976	-	A	A	-	-	A	A	-	A	-	A	-
1977	-	A	B	-	-	A	A	-	A	-	A	-
1978	-	A	B	-	-	A	A	-	A	-	B	-
1979	-	A	B	-	-	A	A	-	A	-	B	-
1980	-	A	B	-	-	A	A	-	B	-	B	-
1981	-	A	B	-	-	A	A	-	B	-	B	-
1982	A	B	C	-	-	A	A	-	B	-	B	A
1983	A	B	C	-	-	A	A	-	B	-	B	A
1984	A	B	C	-	-	A	A	-	B	-	B	A
1985	A	B	C	-	-	A	A	-	B	-	B	A
1986	A	B	C	-	-	A	A	-	B	-	B	A
1987	B	B	C	A	A	A	-	-	B	-	B	A
1988	B	B	C	A	A	A	-	-	B	-	B	A
1989	B	B	C	A	A	A	-	-	B	-	B	A
1990	B	B	C	A	A	A	-	-	B	-	B	A
1991	B	B	C	A	A	A	-	-	B	-	B	A
1992	B	B	C	A	A	A	-	-	B	-	B	A
1993	B	C	C	A	A	A	-	-	B	-	B	A
1994	-	D	C	A	A	A	-	-	B	-	B	A
1995	-	D	C	A	A	A	-	-	B	-	B	A
1996	-	E	C	A	A	A	-	-	B	-	B	A
1997	-	F	C	A	A	A	-	-	B	-	B	A
1998	-	F	C	A	A	A	-	-	B	-	B	A
1999	-	F	C	B	B	A	-	A	B	A	B	A
2000	-	F	C	B	B	A	-	A	B	A	B	A
2001	-	F	C	B	B	A	-	A	B	A	B	A
2002	-	F	D	B	B	A	-	A	B	A	C	A
2003	-	F	E	B	B	A	-	A	B	A	C	A
2004	-	G	F	B	B	A	-	A	B	A	C	A
2005	-	H	F	B	B	A	-	A	B	A	C	A
2006	-	H	F	B	B	A	-	A	B	A	C	A
2007	-	H	F	B	B	A	-	A	B	A	C	A
2008	-	I	F	B	B	A	-	A	B	A	C	A

Year	MINUTE	MONTH	NHS	NOT HOUR	NOT_MIN	NO_LANES	PAVE_TYP	PEDS	PERSONS	PROFILE	RAIL	REL_JUNC
1975	A	A	-	A	A	A	A	-	A	A	-	A
1976	A	A	-	A	A	A	A	-	A	A	-	A
1977	A	A	-	A	A	A	A	-	A	A	-	A
1978	A	A	-	A	A	A	A	-	A	A	-	A
1979	A	A	-	A	A	A	A	-	A	A	A	A
1980	A	A	-	A	A	B	A	-	A	A	A	A
1981	A	A	-	A	A	B	A	-	A	A	A	A
1982	A	A	-	A	A	B	A	-	B	B	A	A
1983	A	A	-	A	A	B	A	-	B	B	A	A
1984	A	A	-	A	A	B	A	-	B	B	A	A
1985	A	A	-	A	A	B	A	-	B	B	A	A
1986	A	A	-	A	A	B	A	-	B	B	A	A
1987	A	A	-	A	A	B	A	-	B	B	A	A
1988	A	A	-	A	A	B	A	-	B	B	A	A
1989	A	A	-	A	A	B	A	-	B	B	A	A
1990	A	A	-	A	A	B	A	-	B	B	A	A
1991	A	A	-	A	A	B	A	A	B	B	A	B
1992	A	A	-	A	A	B	A	A	B	B	A	B
1993	A	A	-	A	A	B	A	A	B	B	A	B
1994	A	A	A	A	A	B	A	A	B	B	A	B
1995	A	A	A	A	A	B	A	A	B	B	A	B
1996	A	A	A	A	A	B	A	A	B	B	A	B
1997	A	A	A	A	A	B	A	A	B	B	A	B
1998	A	A	A	A	A	B	A	A	B	B	A	B
1999	A	A	A	A	A	B	A	A	B	B	A	B
2000	A	A	A	A	A	B	A	A	B	B	A	B
2001	A	A	A	A	A	B	A	A	B	B	A	B
2002	A	A	A	A	A	B	A	A	B	B	A	B
2003	A	A	A	A	A	B	A	A	B	B	A	C
2004	A	A	A	A	A	B	A	A	B	B	A	C
2005	A	A	A	A	A	B	A	A	B	B	A	C
2006	A	A	A	A	A	B	A	A	B	B	A	C
2007	A	A	A	A	A	B	A	A	B	B	A	C
2008	A	B	A	A	A	B	A	A	B	B	A	C

Year	REL_ROAD	ROAD_FLO	ROAD_FNC	ROUTE	SCH_BUS	SP_JUR	SP_LIMIT	STATE	ST_CASE	SUR_COND	TA_1_CL	TRAF_FLO
1975	A	A	-	-	-	A	A	A	A	A	-	-
1976	A	A	-	-	-	B	A	A	A	A	-	-
1977	A	A	-	-	A	C	B	A	A	A	-	-
1978	A	A	-	-	A	C	B	A	A	A	A	-
1979	A	A	-	-	A	C	C	A	A	A	A	-
1980	A	A	-	-	A	C	D	A	A	A	A	-
1981	A	A	A	-	A	C	D	A	A	A	A	-
1982	A	-	A	-	A	C	D	A	A	A	-	-
1983	A	-	A	-	A	C	D	A	A	A	-	-
1984	A	-	A	-	A	C	D	A	A	A	-	-
1985	A	-	A	-	A	C	D	A	A	A	-	-
1986	A	-	A	-	A	C	D	A	A	A	-	-
1987	A	-	B	A	A	C	D	A	A	A	-	A
1988	A	-	B	A	A	C	D	A	A	A	-	A
1989	A	-	B	A	A	C	D	A	A	A	-	A
1990	A	-	B	A	A	C	D	A	A	A	-	A
1991	A	-	B	A	A	C	D	A	A	A	-	A
1992	A	-	B	A	A	C	D	A	A	A	-	A
1993	A	-	B	A	A	C	D	A	A	A	-	A
1994	A	-	B	A	A	C	D	A	A	A	-	A
1995	A	-	B	A	A	C	D	A	A	A	-	A
1996	A	-	B	A	A	C	D	A	A	A	-	A
1997	A	-	B	A	A	C	D	A	A	A	-	A
1998	B	-	B	A	A	C	D	A	A	A	-	A
1999	B	-	B	A	A	C	D	A	A	A	-	A
2000	B	-	B	A	A	C	D	A	A	A	-	A
2001	C	-	B	A	A	C	D	A	A	A	-	B
2002	C	-	B	A	A	C	D	A	A	A	-	B
2003	C	-	B	A	A	C	D	A	A	A	-	C
2004	C	-	B	A	A	C	D	B	A	A	-	C
2005	C	-	B	A	A	C	D	B	A	A	-	C
2006	C	-	B	A	A	C	D	B	A	A	-	C
2007	C	-	B	A	A	C	D	B	A	B	-	C
2008	C	-	B	A	A	C	D	B	A	B	-	C

Year	TRA_CONT	TWAY_FLO	TWAY_ID	TWAY_ID2	T_CONT_F	VEHICLES	VE_FORMS	VE_TOTAL	WEATHER	WEATHER1	WEATHER2	YEAR
1975	A	-	-	-	-	-	-	-	A	-	-	A
1976	A	-	-	-	-	A	A	-	A	-	-	A
1977	A	-	-	-	-	A	A	-	A	-	-	A
1978	A	-	-	-	-	A	A	-	A	-	-	A
1979	A	-	-	-	-	A	A	-	A	-	-	A
1980	A	-	-	-	-	A	A	-	B	-	-	A
1981	A	-	-	-	-	A	A	-	B	-	-	A
1982	B	A	A	-	A	-	B	-	C	-	-	A
1983	B	A	A	-	A	-	B	-	C	-	-	A
1984	B	A	A	-	A	-	B	-	C	-	-	A
1985	B	A	A	-	A	-	B	-	C	-	-	A
1986	B	A	A	-	A	-	B	-	C	-	-	A
1987	B	-	A	-	A	-	B	-	C	-	-	A
1988	B	-	A	-	A	-	B	-	C	-	-	A
1989	B	-	A	-	A	-	B	-	C	-	-	A
1990	B	-	A	-	A	-	B	-	C	-	-	A
1991	B	-	A	-	A	-	B	-	C	-	-	A
1992	B	-	A	-	A	-	B	-	C	-	-	A
1993	B	-	A	-	A	-	B	-	C	-	-	A
1994	B	-	A	-	A	-	B	-	C	-	-	A
1995	B	-	A	-	A	-	B	-	C	-	-	A
1996	B	-	A	-	A	-	B	-	C	-	-	A
1997	B	-	A	-	A	-	B	-	C	-	-	A
1998	B	-	B	-	A	-	B	-	C	-	-	B
1999	B	-	B	-	A	-	B	-	C	-	-	B
2000	B	-	B	-	A	-	B	-	C	-	-	B
2001	B	-	B	-	A	-	B	-	C	-	-	B
2002	C	-	B	-	A	-	B	-	C	-	-	B
2003	C	-	C	-	A	-	B	-	C	-	-	B
2004	C	-	C	C	A	-	B	-	C	-	-	B
2005	C	-	C	C	A	-	B	-	C	-	-	B
2006	C	-	C	C	A	-	B	A	C	-	-	B
2007	C	-	C	C	A	-	B	A	-	A	A	B
2008	C	-	C	C	A	-	B	A	-	A	A	B

Atmospheric Conditions

2007 and later

Variable = WEATHER1 or WEATHER2

Element = Blank
- 0 - No Additional Atmospheric Conditions
- 1 - Clear/Cloud (No Adverse Conditions)
- 2 - Rain *(Mist)*
- 3 - Sleet *(Hail)*
- 4 - Snow or Blowing Snow
- 5 - Fog, Smog, Smoke
- 6 -Severe Crosswinds
- 7 - Blowing Sand, Soil, Dirt
- 8 - Other
- 9 - Unknown

1982 and 2006

Variable = WEATHER

Element = Blank
- 1 - No Adverse Atmospheric Conditions
- 2 - Rain *(Mist)*
- 3 - Sleet *(Hail)*
- 4 - Snow
- 5 - Fog
- 6 - Rain and Fog
- 7 - Sleet and Fog
- 8 - Other: Smog, Smoke, Blowing Sand or Dust
- 9 - Unknown

1980 to 1981

Variable = WEATHER

Element =
- 1 - Normal
- 2 - Rain
- 3 - Sleet
- 4 - Snow
- 5 - Fog
- 8 - Other: Smog, Smoke, Blowing Sand or Dust
- 9 - Unknown

(Continued on Next Page)

Atmospheric Conditions (Continued)

1975 to 1979

Variable = WEATHER

Element =
1 - Clear
2 - Rain
3 - Sleet
4 - Snow
7 - Cloudy
9 - Unknown

Note: The original documentation for 1979 and earlier data are not consistent with the current data file structure. The codes above will provide the desired results.

See Roadway Surface Conditions

City/County

1975 and later

Variable = CITY

Element = Blanks

0000	- Not Applicable
0001 – 9996	- Use GSA Geographical Codes
9997	- Other
9999	- Unknown

Variable = COUNTY

Element = Blanks

000	- Not Applicable
001 – 996	- Use GSA Geographical Codes
997	- Other
999	- Unknown

Note: GSA geographical codes are some what stable. Occasionally one code will be divided into two codes.

If you need a copy of the current city/county codes contact GSA at 202-501-0176 or 202-219-0077.

Construction/Maintenance Zone

The construction/maintenance zone variable identifies crashes that occurred in a construction or maintenance zone. Use of the codes does not imply that the crash was caused by the construction or maintenance activity or zone.

1982 and later

Variable = C_M_ZONE

Element = Blank

0 - None

This element is used when it is reasonably certain that elements "1-4" do not apply.

1 - Construction

This element indicates that the crash occurred in the vicinity of highway construction activity or within an area marked by signs, barricades, or other devices as a highway construction zone. Highway construction includes construction of appurtenances such as guardrails or ditches, surveying activity, installation of utilities within the right-of-way, etc. The use of this element does not imply that the crash was caused by the construction activity or zone.

2 - Maintenance

This element indicates that the crash occurred in the vicinity of highway maintenance activity or within an area marked by signs, barricades, or other devices as a highway maintenance zone. Highway maintenance includes pavement marking, painting guardrail, cleaning ditches, mowing grass, etc.

3 - Utility

This element indicates that the crash occurred in the vicinity of utility work such as electrical work within the right-of-way. The utility company must perform the work.

4 - Work Zone, Type Unknown

This element is used when there is insufficient information to distinguish between construction, maintenance and utility.

1980 to 1981

Variable = C_M_ZONE

Element = 0 - None
1 - Construction
2 - Maintenance
3 - Construction or Maintenance

1975 to 1979

Variable = C_M_ZONE

The variable exists in the data sets but has not been initialized. The data was not collected.

Date

1975 and later

Variable = MONTH *(Also in the PERSON file and since 1995 in the VEHICLE file)*

Element = 01 – 12 - Month of the Crash 1 = January ... 12 = December

99 - Unknown (since 2008)

1975 and later

Variable = DAY *(Also in the PERSON file)*

Element = 01 – 31 - Day of the Month of the Crash

99 - Unknown

1975 and later

Variable = DAY_WEEK *(This variable has been calculated based on the year, month, and day)*

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

Problems have arisen when using the DAY_WEEK variable in files from the years 1983-1985.

1998 and later

Variable = YEAR

Element = Year in which the crash took place. *(**4** digits, i.e., 1999)*

1975 to 1997

Variable = YEAR

Element = Year in which the crash took place. *(**2** digits, i.e., 87)*

(Continued on Next Page)

Date (of the accident/crash) (Continued)

NHTSA'S TIME OF DAY / DAY OF WEEK CONVENTION	
Classification	**Data Year and Code**
Time of Day	**1975-later HOUR (*Military*)**
Daytime (6 a.m. – 5:59 p.m.)	6-17
Nighttime (6 p.m. – 5:59 a.m.)	0-5, 18-24
Unknown	99
Day of Week	**DAY_WEEK w/ HOUR**
Weekday 6 a.m. Monday thru 5:59 p.m. Friday	(DAY_WEEK=2 and 6<=HOUR<=23) or (DAY_WEEK in (3,4,5)) or (DAY_WEEK =6 and (0<= HOUR <=17 or HOUR 24))
Weekend 6 p.m. Friday thru 5:59 a.m. Monday	(DAY_WEEK =6 and 18<= HOUR <=23) or (DAY_WEEK in (1,7)) or (DAY_WEEK =2 and (0<= HOUR <=5 or HOUR 24))
Unknown	(DAY_WEEK =9) or (DAY_WEEK in (2,6) and HOUR =99)

Holidays - Note: The length of a "FARS holiday" depends on the day on which the holiday occurs. NHTSA uses the following times for holiday analysis:

DAY OF HOLIDAY	TIME PERIOD USED FOR ANALYSIS
Sunday or Monday	6 p.m. Friday to 5:59 a.m. Tuesday
Tuesday	6 p.m. Friday to 5:59 a.m. Wednesday
Wednesday	6 p.m. Tuesday to 5:59 a.m. Thursday
Thursday	6 p.m. Wednesday to 5:59 a.m. Monday
Friday or Saturday	6 p.m. Thursday to 5:59 a.m. Monday

The following table gives the holiday periods from 1982 to 2004. The number of whole days in the holiday period is shown in parentheses.

(Continued on Next Page)

Date (of the accident/crash) (Continued)

YEAR	NEW YEAR'S DAY	MEMORIAL DAY	FOURTH OF JULY	LABOR DAY	THANKSGIVING DAY	CHRISTMAS DAY
1982	6 p.m. Thu. 12/31/1981 to 5:59 a.m. Mon. 01/04/1982 (3)	6 p.m. Fri. 05/28/1982 to 5:59 a.m. Tue. 06/01/1982 (3)	6 p.m. Fri. 07/02/1982 to 5:59 a.m. Tue. 07/06/1982 (3)	6 p.m. Fri. 09/03/1982 to 5:59 a.m. Tue. 09/07/1982 (3)	6 p.m. Wed. 11/24/1982 to 5:59 a.m. Mon. 11/29/1982 (4)	6 PM Thu. 12/23/1982 to 5:59 a.m. Mon. 12/27/1982 (3)
1983	6 p.m. Thu. 12/30/1982 to 5:59 a.m. Mon. 01/03/1983 (3)	6 p.m. Fri. 05/27/1983 to 5:59 a.m. Tue. 05/31/1983 (3)	6 p.m. Fri. 07/01/1983 to 5:59 a.m. Tue. 07/05/1983 (3)	6 p.m. Fri. 09/02/1983 to 5:59 a.m. Tue. 09/06/1983 (3)	6 p.m. Wed. 11/23/1983 to 5:59 a.m. Mon. 11/28/1983 (4)	6 p.m. Fri. 12/23/1983 to 5:59 a.m. Tue. 12/27/1983 (3)
1984	6 p.m. Fri. 12/30/1983 to 5:59 a.m. Tue. 01/03/1984 (3)	6 p.m. Fri. 05/25/1984 to 5:59 a.m. Tue. 05/29/1984 (3)	6 p.m. Tue. 07/03/1984 to 5:59 a.m. Thu. 07/05/1984 (1)	6 p.m. Fri. 08/31/1984 to 5:59 a.m. Tue. 09/04/1984 (3)	6 p.m. Wed. 11/21/1984 to 5:59 a.m. Mon. 11/26/1984 (4)	6 p.m. Fri. 12/21/1984 to 5:59 a.m. Wed. 12/26/1984 (4)
1985	6 p.m. Fri. 12/28/1984 to 5:59 a.m. Wed. 01/02/1985 (4)	6 p.m. Fri. 05/24/1985 to 5:59 a.m. Tue. 05/28/1985 (3)	6 p.m. Wed. 07/03/1985 to 5:59 a.m. Mon. 07/08/1985 (4)	6 p.m. Fri. 08/30/1985 to 5:59 a.m. Tue. 09/03/1985 (3)	6 p.m. Wed. 11/27/1985 to 5:59 a.m. Mon. 12/02/1985 (4)	6 p.m. Tue. 12/24/1985 to 5:59 a.m. Thu. 12/26/1985 (1)
1986	6 p.m. Tue. 12/31/1985 to 5:59 a.m. Thu. 01/02/1986 (1)	6 p.m. Fri. 05/23/1986 to 5:59 a.m. Tue. 05/27/1986 (3)	6 p.m. Thu. 07/03/1986 to 5:59 a.m. Mon. 07/07/1986 (3)	6 p.m. Fri. 08/29/1986 to 5:59 a.m. Tue. 09/02/1986 (3)	6 p.m. Wed. 11/26/1986 to 5:59 a.m. Mon. 12/01/1986 (4)	6 p.m. Wed. 12/24/1986 to 5:59 a.m. Mon. 12/29/1986 (4)
1987	6 p.m. Wed. 12/31/1986 to 5:59 a.m. Mon. 01/05/1987 (4)	6 p.m. Fri. 05/22/1987 to 5:59 a.m. Tue. 05/26/1987 (3)	6 p.m. Thu. 07/02/1987 to 5:59 a.m. Mon. 07/06/1987 (3)	6 p.m. Fri. 09/04/1987 to 5:59 a.m. Tue. 09/08/1987 (3)	6 p.m. Wed. 11/25/1987 to 5:59 a.m. Mon. 11/30/1987 (4)	6 p.m. Thu. 12/24/1987 to 5:59 a.m. Mon. 12/28/1987 (3)
1988	6 p.m. Thu. 12/31/1987 to 5:59 a.m. Mon. 01/04/1988 (3)	6 p.m. Fri. 05/27/1988 to 5:59 a.m. Tue. 05/31/1988 (3)	6 p.m. Fri. 07/01/1988 to 5:59 a.m. Tue. 07/05/1988 (3)	6 p.m. Fri. 09/02/1988 to 5:59 a.m. Tue. 09/06/1988 (3)	6 p.m. Wed. 11/23/1988 to 5:59 a.m. Mon. 11/28/1988 (4)	6 p.m. Fri. 12/23/1988 to 5:59 a.m. Tue. 12/27/1988 (3)
1989	6 p.m. Fri. 12/30/1988 to 5:59 a.m. Tue. 01/03/1989 (3)	6 p.m. Fri. 05/26/1989 to 5:59 a.m. Tue. 05/30/1989 (3)	6 p.m. Fri. 06/30/1989 to 5:59 a.m. Wed. 07/05/1989 (4)	6 p.m. Fri. 09/01/1989 to 5:59 a.m. Tue. 09/05/1989 (3)	6 p.m. Wed. 11/22/1989 to 5:59 a.m. Mon. 11/27/1989 (4)	6 p.m. Fri. 12/22/1989 to 5:59 a.m. Tue. 12/26/1989 (3)
1990	6 p.m. Fri. 12/29/1989 to 5:59 a.m. Tue. 01/02/1990 (3)	6 p.m. Fri. 05/25/1990 to 5:59 a.m. Tue. 05/29/1990 (3)	6 p.m. Tue. 07/03/1990 to 5:59 a.m. Thu. 07/05/1990 (1)	6 p.m. Fri. 08/31/1990 to 5:59 a.m. Tue. 09/04/1990 (3)	6 p.m. Wed. 11/21/1990 to 5:59 a.m. Mon. 11/26/1990 (4)	6 p.m. Fri. 12/21/1990 to 5:59 a.m. Wed. 12/26/1990 (4)
1991	6 p.m. Fri. 12/28/1930 to 5:59 a.m. Wed. 01/02/1991 (4)	6 p.m. Fri. 05/24/1991 to 5:59 a.m. Tue. 05/28/1991 (3)	6 p.m. Wed. 07/03/1991 to 5:59 a.m. Mon. 07/08/1991 (4)	6 p.m. Fri. 08/30/1991 to 5:59 a.m. Tue. 09/03/1991 (3)	6 p.m. Wed. 11/27/1991 to 5:59 a.m. Mon. 12/02/1991 (4)	6 p.m. Tue. 12/24/1991 to 5:59 a.m. Thu. 12/26/1991 (1)
1992	6 p.m. Tue. 12/31/1991 to 5:59 a.m. Thu. 01/02/1992 (1)	6 p.m. Fri. 05/22/1992 to 5:59 a.m. Tue. 05/26/1992 (3)	6 p.m. Thu. 07/02/1992 to 5:59 a.m. Mon. 07/06/1992 (3)	6 p.m. Fri. 09/04/1992 to 5:59 a.m. Tue. 09/08/1992 (3)	6 p.m. Wed. 11/25/1992 to 5:59 a.m. Mon. 11/30/1992 (4)	6 p.m. Thu. 12/24/1992 to 5:59 a.m. Mon. 12/28/1992 (3)

(Continued on Next Page)

Date (of the accident/crash) (Continued)

YEAR	NEW YEAR'S DAY	MEMORIAL DAY	FOURTH OF JULY	LABOR DAY	THANKSGIVING DAY	CHRISTMAS DAY
1993	6 p.m. Thu. 12/31/1992 to 5:59 a.m. Mon. 01/04/1993 (3)	6 p.m. Fri. 05/28/1993 to 5:59 a.m. Tue. 06/01/1993 (3)	6 p.m. Fri. 07/02/1993 to 5:59 a.m. Tue. 07/06/1993 (3)	6 p.m. Fri. 09/03/1993 to 5:59 a.m. Tue. 09/07/1993 (3)	6 p.m. Wed. 11/24/1993 to 5:59 a.m. Mon. 11/29/1993 (4)	6 p.m. Thu. 12/23/1993 to 5:59 a.m. Mon. 12/27/1993 (3)
1994	6 p.m. Thu. 12/30/1993 to 5:59 a.m. Mon. 01/03/1994 (3)	6 p.m. Fri. 05/27/1994 to 5:59 a.m. Tue. 05/31/1994 (3)	6 p.m. Fri. 07/01/1994 to 5:59 a.m. Tue. 07/05/1994 (3)	6 p.m. Fri. 09/02/1994 to 5:59 a.m. Tue. 09/06/1994 (3)	6 p.m. Wed. 11/23/1994 to 5:59 a.m. Mon. 11/28/1994 (4)	6 p.m. Fri. 12/23/1994 to 5:59 a.m. Tue. 12/27/1994 (3)
1995	6 p.m. Fri. 12/30/1994 to 5:59 a.m. Tue. 01/03/1995 (3)	6 p.m. Fri. 05/26/1995 to 5:59 a.m. Tue. 05/30/1995 (3)	6 p.m. Fri. 06/30/1995 to 5:59 a.m. Wed. 07/05/1995 (4)	6 p.m. Fri. 09/01/1995 to 5:59 a.m. Tue. 09/05/1995 (3)	6 p.m. Wed. 11/22/1995 to 5:59 a.m. Mon. 11/27/1995 (4)	6 p.m. Fri. 12/22/1995 to 5:59 a.m. Tue. 12/26/1995 (3)
1996	6 p.m. Fri. 12/29/1995 to 5:59 a.m. Tue. 01/02/1996 (3)	6 p.m. Fri. 05/24/1996 to 5:59 a.m. Tue. 05/28/1996 (3)	6 p.m. Wed. 07/03/1996 to 5:59 a.m. Mon. 07/08/1996 (4)	6 p.m. Fri. 08/30/1996 to 5:59 a.m. Tue. 09/03/1996 (3)	6 p.m. Wed. 11/27/1996 to 5:59 a.m. Mon. 12/02/1996 (4)	6 p.m. Tue. 12/24/1996 to 5:59 a.m. Thu. 12/26/1996 (1)
1997	6 p.m. Tue. 12/31/1996 to 5:59 a.m. Thu. 01/02/1997 (1)	6 p.m. Fri. 05/23/1997 to 5:59 a.m. Tue. 05/27/1997 (3)	6 p.m. Thu. 07/03/1997 to 5:59 a.m. Mon. 07/07/1997 (3)	6 p.m. Fri. 08/29/1997 to 5:59 a.m. Tue. 09/02/1997 (3)	6 p.m. Wed. 11/26/1996 to 5:59 a.m. Mon. 12/01/1997 (4)	6 p.m. Wed. 12/24/1997 to 5:59 a.m. Mon. 12/29/1997 (4)
1998	6 p.m. Wed. 12/31/1997 to 5:59 a.m. Mon. 01/05/1998 (4)	6 p.m. Fri. 05/22/1998 to 5:59 a.m. Tue. 05/26/1998 (3)	6 p.m. Thu. 07/02/1998 to 5:59 a.m. Mon. 07/06/1998 (3)	6 p.m. Fri. 09/04/1998 to 5:59 a.m. Tue. 09/08/1998 (3)	6 p.m. Wed. 11/25/1998 to 5:59 a.m. Mon. 11/30/1998 (4)	6 p.m. Thu. 12/24/1998 to 5:59 a.m. Mon. 12/28/1998 (3)
1999	6 p.m. Thu. 12/31/1998 to 5:59 a.m. Mon. 01/04/1999 (3)	6 p.m. Fri. 05/28/1999 to 5:59 a.m. Tue. 06/01/1999 (3)	6 p.m. Fri. 07/02/1999 to 5:59 a.m. Tue. 07/06/1999 (3)	6 p.m. Fri. 09/03/1999 to 5:59 a.m. Tue. 09/07/1999 (3)	6 p.m. Wed. 11/24/1999 to 5:59 a.m. Mon. 11/29/1999 (4)	6 p.m. Thu. 12/23/1999 to 5:59 a.m. Mon. 12/27/1999 (3)
2000	6 p.m. Thu. 12/30/1999 to 5:59 a.m. Mon. 01/03/2000 (3)	6 p.m. Fri. 05/26/2000 to 5:59 a.m. Tue. 05/30/2000 (3)	6 p.m. Fri. 06/30/2000 to 5:59 a.m. Wed. 07/05/2000 (4)	6 p.m. Fri. 09/01/2000 to 5:59 a.m. Tue. 09/05/2000 (3)	6 p.m. Wed. 11/22/2000 to 5:59 a.m. Mon. 11/27/2000 (4)	6 p.m. Fri. 12/22/2000 to 5:59 a.m. Tue. 12/26/2000 (3)
2001	6 p.m. Fri. 12/28/2000 to 5:59 a.m. Wed. 01/02/2001 (4)	6 p.m. Fri. 05/25/2001 to 5:59 a.m. Tue. 05/29/2001 (3)	6 p.m. Tue. 07/03/2001 to 5:59 a.m. Thu. 07/05/2001 (1)	6 p.m. Fri. 08/31/2001 to 5:59 a.m. Tue. 09/04/2001 (3)	6 p.m. Wed. 11/21/2001 to 5:59 a.m. Mon. 11/26/2001 (4)	6 p.m. Fri. 12/21/2001 to 5:59 a.m. Wed. 12/26/2001 (4)
2002	6 p.m. Fri. 12/28/2001 to 5:59 a.m. Wed. 01/02/2002 (4)	6 p.m. Fri. 05/24/2002 to 5:59 a.m. Tue. 05/28/2002 (3)	6 p.m. Wed. 07/03/2002 to 5:59 a.m. Mon. 07/08/2002 (4)	6 p.m. Fri. 08/30/2002 to 5:59 a.m. Tue. 09/03/2002 (3)	6 p.m. Wed. 11/27/2002 to 5:59 a.m. Mon. 12/02/2002 (4)	6 p.m. Tue. 12/24/2002 to 5:59 a.m. Thu. 12/26/2002 (1)
2003	6 p.m. Tue. 12/31/2002 to 5:59 a.m. Thu. 01/02/2003 (1)	6 p.m. Fri. 05/23/2003 to 5:59 a.m. Tue. 05/27/2003 (3)	6 p.m. Thu. 07/03/2003 to 5:59 a.m. Mon. 07/07/2003 (3)	6 p.m. Fri. 08/29/2003 to 5:59 a.m. Tue. 09/02/2003 (3)	6 p.m. Wed. 11/26/2003 to 5:59 a.m. Mon. 12/01/2003 (4)	6 p.m. Wed. 12/24/2003 to 5:59 a.m. Mon. 12/29/2003 (4)

Date (of the accident/crash) (Continued)

YEAR	NEW YEAR'S DAY	MEMORIAL DAY	FOURTH OF JULY	LABOR DAY	THANKSGIVING DAY	CHRISTMAS DAY
2004	6 p.m. Wed. 12/31/2003 to 5:59 a.m. Mon. 01/05/2004 (4)	6 p.m. Fri. 05/28/2004 to 5:59 a.m. Tue. 06/01/2004 (3)	6 p.m. Fri. 07/02/2004 to 5:59 a.m. Tue. 07/06/2004 (3)	6 p.m. Fri. 09/03/2004 to 5:59 a.m. Tue. 09/07/2004 (3)	6 p.m. Wed. 11/24/2004 to 5:59 a.m. Mon. 11/29/2004 (4)	6 p.m. Thu. 12/23/2004 to 5:59 a.m. Mon. 12/27/2004 (3)
2005	6 p.m. Thu. 12/30/2004 to 5:59 a.m. Mon. 01/03/2005 (3)	6 p.m. Fri. 05/27/2005 to 5:59 a.m. Tue. 05/31/2005 (3)	6 p.m. Fri. 07/01/2005 to 5:59 a.m. Tue. 07/05/2005 (3)	6 p.m. Fri. 09/02/2005 to 5:59 a.m. Tue. 09/06/2005 (3)	6 p.m. Wed. 11/23/2005 to 5:59 a.m. Mon. 11/28/2005 (4)	6 p.m. Fri. 12/23/2005 to 5:59 a.m. Tue. 12/27/2005 (3)
2006	6 p.m. Fri. 12/30/2005 to 5:59 a.m. Tue. 01/03/2006 (3)	6 p.m. Fri. 05/26/2006 to 5:59 a.m. Tue. 05/30/2006 (3)	6 p.m. Fri. 06/30/2006 to 5:59 a.m. Wed. 07/05/2006 (4)	6 p.m. Fri. 09/01/2006 to 5:59 a.m. Tue. 09/05/2006 (3)	6 p.m. Wed. 11/22/2006 to 5:59 a.m. Mon. 11/27/2006 (4)	6 p.m. Fri. 12/22/2006 to 5:59 a.m. Tue. 12/26/2006 (3)
2007	6 p.m. Fri. 12/29/2006 to 5:59 a.m. Tue. 01/02/2007 (3)	6 p.m. Fri. 05/25/2007 to 5:59 a.m. Tue. 05/29/2007 (3)	6 p.m. Tue. 07/03/2007 to 5:59 a.m. Thu. 07/05/2007 (1)	6 p.m. Fri. 08/31/2007 to 5:59 a.m. Tue. 09/04/2007 (3)	6 p.m. Wed. 11/21/2007 to 5:59 a.m. Mon. 11/26/2007 (4)	6 p.m. Fri. 12/21/2007 to 5:59 a.m. Wed. 12/26/2007 (4)
2008	6 p.m. Fri. 12/28/2007 to 5:59 a.m. Wed. 01/02/2008 (4)	6 p.m. Fri. 05/23/2008 to 5:59 a.m. Tue. 05/27/2008 (3)	6 p.m. Thu. 07/03/2008 to 5:59 a.m. Mon. 07/07/2008 (3)	6 p.m. Fri. 08/29/2008 to 5:59 a.m. Tue. 09/02/2008 (3)	6 p.m. Wed. 11/26/2008 to 5:59 a.m. Mon. 12/01/2008 (4)	6 p.m. Wed. 12/24/2008 to 5:59 a.m. Mon. 12/29/2008 (4)
2009	6 p.m. Wed. 12/31/2008 to 5:59 a.m. Thu. 01/05/2009 (4)	6 p.m. Fri. 05/22/2009 to 5:59 a.m. Tue. 05/26/2009 (3)	6 p.m. Thu. 07/02/2009 to 5:59 a.m. Mon. 07/06/2009 (3)	6 p.m. Fri. 09/04/2009 to 5:59 a.m. Tue. 09/08/2009 (3)	6 p.m. Wed. 11/25/2009 to 5:59 a.m. Mon. 11/30/2009 (4)	6 p.m. Thu. 12/24/2009 to 5:59 a.m. Mon. 12/28/2009 (3)
2010	6 p.m. Thu 12/31/2009 to 5:59 a.m. Mon. 01/04/2010 (3)	6 p.m. Fri. 05/28/2010 to 5:59 a.m. Tue. 06/01/2010 (3)	6 p.m. Fri. 07/02/2010 to 5:59 a.m. Tue. 07/06/2010 (3)	6 p.m. Fri. 09/03/2010 to 5:59 a.m. Tue. 09/07/2010 (3)	6 p.m. Wed. 11/24/2010 to 5:59 a.m. Mon. 11/29/2010 (4)	6 p.m. Thu. 12/23/2010 to 5:59 a.m. Mon. 12/27/2010 (3)

Drunk Driver

1975 and later

Variable = DRUNK_DR

Element = Number of drunk drivers involved in the fatal crash.

This is a derived variable. Data from the Vehicle file are analyzed and if there is sufficient information to conclude that a driver was drunk, i.e., if the blood alcohol concentration (BAC) is positive, or if the police reported alcohol involvement, then the driver is counted as a drunk driver. A driver being charged with an alcohol violation by itself does not have the driver counted as a drunk driver. Note that alcohol data is often missing. For that reason this variable may undercount the actual number of drunk drivers. For detailed analysis of alcohol involvement, the alcohol files should be used.

A crash is alcohol-involved if a driver, pedestrian, or pedal cyclist involved in the crash has (1) police-reported alcohol involvement, or (2) a positive alcohol test result.

From 1975 to 1993 the maximum number of drunk drivers was 6. Virtually all crashes have no more than two drunk drivers.

Two useful partitions of this variable are:

(1) no drunk drivers, one or more drunk drivers involved, and

(2) no drunk drivers, one drunk driver, multiple drunk drivers

In the early years of FARS, especially 1975 and 1976, the alcohol data must be used with care. In these two years no drunk drivers were identified for North Dakota. In 1975/76 Alabama, Mississippi, New Mexico, North Carolina, Texas, and West Virginia have a reported drunk driver rate for fatal crashes of less than 5 percent. In 1979 the data from these States reports a drunk-driver rate for fatal crashes between 18.5 percent and 43.0 percent.

Fatalities

1975 and later

Variable = FATALS

Element = Number of fatalities that occurred in the crash.

The variable FATALS is equivalent to looking at the sum from the Person file where INJ_SEV = 4. In 1985, 1981, 1978 and 1975, on rare occasions the value of FATALS is set at zero. That is, there are no fatality injured individuals in the Person file. In order to match NHTSA's count of fatalities this number must be used.

However, by definition there must have been at least one fatality to be in FARS. This leads to an apparent contradiction. Depending on the purpose at hand a program statement similar to:

"IF (FATALS EQ 0) THEN FATALS = 1" could help correct the problem. One can reason that at least one fatality must have occurred in the crash or else it would not be listed in FARS. However, it is possible that more than one fatality occurred in one or more of these crashes.

Note that the variable DEATHS under the heading Fatalities, in the Vehicle file, provides the number of fatalities in each vehicle involved in the crash.

Fatality Counts

One is often required to count the number of fatalities that have a given set of attributes that are contained in the Vehicle or Person files, for example, to count the number of crashes where the driver was drowsy, sleepy, asleep, or fatigued. The drowsy-driver information is found in the Vehicle file using the related factors - driver level variables, DR_CF1-DR_CF4. If one does a conventional merge of the Accident file with the Vehicle file and uses the proc freq to obtain the frequency/counts one will get a count of the vehicles with a drowsy driver not a count of the crashes with a drowsy driver. The SAS code below will provide the correct count for 1992 data. Note in 1992 there were only three driver-level-related factors DR_CF1, DR_CF2, and DR_CF3.

Sample SAS code:

```
LIBNAME FARS92 'enter the path name for the FARS data here';

/* THIS PROGRAM COUNTS THE NUMBER OF FATALITIES
FOR 1992 THAT INVOLVED A SLEEPY, FATIGUED, OR DROWSY DRIVER */

DATA VEH;
SET FARS92.VEHICLE (KEEP=ST_CASE DR_CF1 DR_CF2 DR_CF3);
        BY ST_CASE;  /*REQUIRED TO GET FIRST.ST_CASE & LAST.ST_CASE*/
        IF FIRST.ST_CASE THEN COUNT =0;
/*RETAIN DOES NOT RESET COUNT TO ZERO UNTIL THERE IS A NEW ST_CASE*/
        RETAIN COUNT;
IF ((DR_CF1 EQ 1) OR (DR_CF2 EQ 1) OR (DR_CF3 EQ 1)) THEN COUNT =1;
        IF LAST.ST_CASE AND (COUNT EQ 1) THEN OUTPUT;
RUN;

DATA ACC;
SET FARS92.ACCIDENT (KEEP = ST_CASE FATALS);

DATA ACC_VEH;
        MERGE ACC (IN=A) VEH (IN=V);
        BY ST_CASE;
        IF A AND V;

/* THE VARIABLE _ONE_ IS SET TO 1 EVERY TIME A CRASH INVOLVES A DROWSY DRIVER */
        _ONE_ = 1;
RUN;

PROC FREQ DATA = ACC_VEH;
        TABLES _ONE_;
/* THE VARIABLE _ONE_ IS MULTIPLIED BY FATALS, THE NUMBER OF
FATALITIES INVOLVED IN THE CRASH */
        WEIGHT FATALS;
RUN;
```

Federal Aid System

1994 and later

Variable = NHS

Element = Blank
- 0 - This Section is not on the National Highway System
- 1 - This Section is on the National Highway System
- 9 - Unknown

1987 to 1993

Variable = FED_AID

Element =
- 1 - Interstate
- 2 - Federal Aid Primary (*other than interstate*)
- 3 - Federal Aid Urban
- 4 - Federal Aid Secondary (*rural only*)
- 5 - Non-Federal Aid
- 9 - Unknown

1982 to 1986

Variable = FED_AID

Element =
- 1 - Interstate
- 2 - Other Federal Aid Primary
- 3 - Federal Aid Secondary
- 4 - Federal Aid Urban Arterials
- 5 - Federal Aid Urban Collectors
- 6 - Non-Federal Aid Arterials
- 7 - Non-Federal Aid Collectors
- 8 - Non-Federal Aid Local
- 9 - Unknown

(Continued on Next Page)

Federal Aid System (Continued)

1978 to 1981

Variable = TA_1_CL

Element = 1 - Interstate
2 - Other Federal Aid Primary
3 - Federal Aid Secondary
4 - Federal Aid Urban Arterials
5 - Federal Aid Urban Collectors
6 - Non-Federal Aid Arterials
7 - Non-Federal Aid Collectors
8 - Non-Federal Aid Local
9 - Unknown

1975 to 1977

Variable = TA_1_CL

The variable is in the file, but has not been initialized, i.e., no data for this variable. This may be due to the extensive revisions by the Federal Highway Administration (FHWA) in 1977, which caused extensive modifications to this field for all data before 1978.

Global Position

1999 and later

[These data are not contained in the public FARS files.]

Variable = LATITUDE

Element = DDMMSSSS *(DD MM SS.SS – Degrees/Minutes/Seconds)*
This is character data of numerals not numeric data.

Where DD are Degrees:	Blank	
	17 – 71	- Actual Value
	88	- Not Available *(if State exempt)*
	99	- Unknown
Where MM are Minutes:	Blank	
	00 – 59	- Actual Value
	88	- Not Available *(if State exempt)*
	99	- Unknown

Where SS.SS are Seconds: Blank
00.00 – 59.99- Actual Value

Not Available *(if State exempt)*
Unknown

For "Unknown" code All 99 99 99.99
For "Not Available code 88 88 88.88 *(If exempt from entering this data)*

If the element is 12345678 then:

12 are the number of degrees / 88 Not Available / 99 Unknown
34 are the number of minutes / 88 Not Available / 99 Unknown
5678 are the number of seconds with a decimal point between the 6 and 7.

8888 - Not Available / 9999 Unknown

88888888 - Not available
99999999 - Unknown

In 1999 less than 0.5 percent of the crashes had data for this variable. It is suggested that before one uses this variable that this variable be examined by State and year.

(Continued on Next Page)

Global Position *(Continued)*

[These data are not contained in the public FARS files.]

Variable = LONGITUD

Element = DDDMMSSSS *(DDD MM SS.SS – Degrees/Minutes/Seconds)*

Where DDD are Degrees:
- Blank
- 065 – 178 - Actual Value
- 888 - Not Available *(if State exempt)*
- 999 - Unknown

Where MM are Minutes:
- Blank
- 00 – 59 - Actual Value
- 88 - Not Available *(if State exempt)*
- 99 - Unknown

Where SS.SS are Seconds:
- Blank
- 00.00 – 59.99 - Actual Value
- 88.88 - Not Available *(if State exempt)*
- 99.99 - Unknown

For "Unknown" code All 999 99 99.99
For "Not Available code 888 88 88.88 *(If exempt from entering this data)*

If the element is 123456789 then:

123 are the number of degrees / 888 Not Available / 999 Unknown
45 are the number of minutes / 88 Not Available / 99 Unknown
6789 are the number of seconds with a decimal point between the 7 and 8.
8888 - Not Available / 9999 Unknown

88888888 - Not Available
99999999 - Unknown

In 1999 less than 0.5 percent of the crashes had data for this variable. It is suggested that before one uses this variable that this variable be examined by State and year.

Harmful Event

This is repeated in the Vehicle and Person files.

2004 and later

Variable = HARM_EV First harmful event applies to the crash. The most harmful event variable M_HARM applies to the vehicle. Harmful events are judgment calls of the FARS analysts based on the data within the police crash report. Note that Most Harmful Event M_HARM was not collected prior to 1979.

Element = 01 - Overturn/Rollover

This element is used if a vehicle rotates 90 degrees or more, side-to-side or end-to-end, producing the first damage or injury. For motorcycles, laying the motorcycle down on its side is sufficient to code overturn if damage or injury is produced.

02 - Fire/Explosion

03 - Immersion

04 - Gas Inhalation

This element includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

05 - Fell/Jumped from Vehicle

The element is used when falling or jumping (not suicide) from the vehicle is the first event causing damage or injury. For example, a passenger of a motor vehicle in transport leans against the car door, it opens and the passenger falls out and is injured by the fall.

06 - Injured in Vehicle

Use where an occupant is injured during an unstabilized situation without a collision, Examples: a pickup truck stops short and its load crashes through the passenger compartment, injuring or killing the driver, or a part of the engine comes loose and bounces back into its own vehicle.

07 - Other Non-Collision

As an example, driving off a cliff where damage is not the result of an overturn or collision with an object

08 - Pedestrian

09 - Pedalcycle

10 - Railway Train

11 - Animal

This element is used for collisions with animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart, or other transport device. See element 49 for ridden animals and animals drawing transport devices. **See Driver Level-Related Factor. - 83 – Live Animal in Road to determine if it applies.**

12 - Motor Vehicle in Transport on Same Roadway

Use this element when one motor vehicle collides with another motor vehicle on an undivided highway or the same side of a divided highway.

13 - Motor Vehicle in Transport on Other Roadway

This element differs from Element 12 in that it applies to events where a vehicle leaves one roadway and enters a different roadway, having a collision with a motor vehicle in transport in a different roadway. Example: one vehicle travels across the median of a divided highway, enters oncoming traffic, and is struck; or when a vehicle traveling on an overpass leaves the trafficway and strikes or is stuck by vehicle traveling on a trafficway below.

Element 13 should not be used in an “at intersection crash” (where the First Harmful Event occurs in the intersection).

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files

2004 and later

14 - Parked Motor Vehicle *(not In Transport)*

This element refers to the collision of a motor vehicle in transport with a motor vehicle not in transport. Parked motor vehicle includes vehicles parked outside the roadway and those parked in the roadway in lanes not designed for travel at the time of crash. *(Do not include Vehicle/Driver Level information for the parked vehicle. Do include Person Level information if there were occupants in the vehicle.)*. Occupants of parked motor vehicles are coded Non-motorists.

15 - Nonmotorist on Personal Conveyance

A personal conveyance is (1) a human-powered, non-motorized device not propelled by pedaling, (2) such devices even when motorized. Includes ride-able *toys (roller skates, inline skates, skateboards, skates, baby carriages, scooters, toy wagons)*, motorized ride-able toys *(motorized skateboard, motorized scooter, motorized toy car)*, devices for personal mobility *assistance (Segway-style devices, motorized and non-motorized wheelchairs, handicapped scooters)*.

Exclusions: Golf carts, low-speed vehicles *(LSV)*, go-carts, mini-bikes are excluded because they are motor vehicles *(see Collision with Motor Vehicle Elements.)*

16 - Thrown or Falling Object

This element is a non-collision event and, unless there is another collision during the crash, IMPACT POINTS for the vehicle involved must be coded 00 Examples: falling tree/rock, dropping/throwing something off bridge, throwing a snowball. However, it does not have to come from above, excludes cataclysms.

17 - Boulder

This element is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

18 - Other Object *(not fixed)*

This element is used for fallen trees, already lying in roadway; construction cones or barrels on road *(temporary)*.

See Element 45- Working Construction, Maintenance or Utility Vehicles for transport devices used as equipment *(i.e., cherry picker at work, paint striper at work, etc.)*.

19 - Building

20 - Impact Attenuator/Crash Cushion

This element is used if a device for controlling the absorption of energy is released during vehicle collision *("crash cushions")*. Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

21 - Bridge Pier or Abutment

This element refers to support structures most likely to be struck by vehicles passing under bridges *(see element 43-Other Fixed Object for vehicles striking the bottom of a bridge while traveling on a trafficway underneath it).* If the vehicle first strikes a concrete barrier protecting a bridge pier or abutment, use element 25-Concrete Traffic Barrier.

Bridge Pier – a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments.

Bridge Abutment – wall supporting the ends of a bridge generally retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood. *(Includes wing-walls.)*

22 - Bridge Parapet End

This element is used for components of the upper portion of bridges. The end of a low wall which runs along the outer most edge of the roadway or sidewalk on the bridge and usually composed of brick, stone, or concrete. The term "balustrade" is often used synonymously with "parapet."

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files

2004 and later

23 - Bridge Rail

This element is for components of the upper portion of bridges. A wooden, brick, stone, concrete, or metal fence-like wall which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet.

a) A bridge does not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

b) See bridge components diagram for bridge elements 21, 22 and 23.

c) Barriers as in elements 24, 25 and 26 refer to a physical structure such as a guardrail, a concrete safety barrier or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

Element 50 *(Bridge Overhead Structure)* is used when striking the bottom of a bridge while traveling on a trafficway underneath it.

24 - Guardrail Face

This element represents a low barrier running along the edge of a road shoulder either on the right or the left and which has the primary longitudinal structure composed of metal *(plates, cable, mesh, box beam, etc.)*. A guardrail is differentiated from element 25-Concrete Traffic Barrier by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, these are metal whereas in concrete barriers these are concrete *(including concrete rails)*.

Guardrails that serve as bridge rails should be coded 23 - Bridge Rail.

25 - Concrete Traffic Barrier

Refers to the longitudinal traffic barriers constructed of concrete and located on the outside of the road surface, in a median, or in gore areas. This includes all temporary concrete barriers regardless of location *(i.e., temporary Jersey barrier on a bridge being used to control traffic during bridge repair/construction)*. Concrete walls (vertical side surfaces) do not apply here; see element 39-Wall.

When a vehicle is traveling under a bridge and strikes a concrete barrier used to protect the bridge pier or abutment, use element 25.

26 - Other Traffic Barrier

This element is used for all other longitudinal barriers such as wood or rock and unknown barrier composition types.

27 - Highway/Traffic Sign Post

This element is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in transport. Includes mile markers. *(See element 46 for traffic signal supports.)*

28 - Overhead Sign Support/Sign

This element is used when the sign supported is above the highway. The difference between elements 27 and 28 is the location of the sign *(overhead or the side of the road)*.

29 - Luminary/Light Support

This element refers to supports for highway lighting systems, not including other private lighting systems *(e.g., parking lot lights)*. Support does not include other fixed objects to which lighting is affixed *(e.g., telephone poles)*.

30 - Utility Pole

Electrical, telephone, cable and other utility pole supports.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files

2004 and later

31 - Other Post, Other Pole, or Other Support

This element is used for posts other than highway signs. (e.g., reflectors on poles along side of roadway, parking meters, flag poles, etc.). (For mailbox posts, use element 53 – Mail Box (since 2004))

32 - Culvert

This element is any structure entirely under the roadway *(driveway or entranceway)* and less than 20 feet in span measured along the center line of the roadway.

33 - Curb

This element is a concrete or asphalt structure up to 12 inches in height, which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Be careful that the PAR provides some indication that damage has occurred when a vehicle strikes a curb.

34 - Ditch

35 - Embankment - Earth

36 - Embankment - Rock, Stone, or Concrete

37 - Embankment - Material Type Unknown

Element 35-37 *(Embankments) are raised structures to hold back water, to carry a roadway, or the result of excavation or washout (including erosion)* that may be faced with earth *(element 35)* or rock *(sometimes called a berm)*, stone or concrete *(element 36)*. An embankment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

In crashes involving a field approach or crossing, if in doubt about when to use elements 32, 34 *(Culvert/Ditch)* or elements 35-37 *(Embankment)*, use this criteria:

a) Use element 32, 34 if the driver would not have been able to recover from the ditch even if there had been no field approach *(crossing)*.

b) Use element 35, 36, 37 if the driver would have been able to recover from the ditch, but struck the field approach *(crossing)* prior to doing so.

c) Use element 35, 36, 37 if it is not known whether or not the driver would have been able to recover from the ditch and a field approach *(crossing)* is involved.

38 - Fence

This element includes the fence posts. A fence can be made of wood, chain link, stone, etc. *(not shrub hedges serving as containment for property).*

39 - Wall

This element is a primarily vertical *(± 15 degrees from vertical)* structure composed of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas but not for containment as in the primary function of a fence. Also not included as walls are wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls should be coded as element 21.

40 - Fire Hydrant

41 - Shrubbery

42 - Tree (Standing Tree Only)

This element is used when a vehicle strikes a standing tree. If a vehicle strikes a tree lying in the roadway, use element 18 – Other Object (Not Fixed). If a tree falls on a vehicle as it is passing by, use element 16 – Thrown or Falling Object.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files

2004 and later

43 - Other Fixed Object

This is used when the object is fixed *(considered a permanent structure)* and is not described by any of the other fixed object elements, includes utility wires and guy wires attached to utility poles.

44 - Pavement Surface Irregularity

Potholes, grooves, and grates are examples.

45 - Working Construction, Maintenance or Utility Vehicles

This element is used when the motor vehicle in transport strikes a construction, maintenance, or utility vehicle, which is working and not "in transport." Examples: cherry picker working on the telephone lines, a paint striper vehicle painting lines on the road, a tractor mowing grass on trafficway, a county/state snow plow plowing snow, a highway dump truck dumping asphalt for a new travel lane, etc.

Note: Before 2004, this element was called "Transport Device Used as Equipment." It included other working activities in addition to construction, maintenance, and utility work on trafficways. From 2004 forward, element 45 excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, police vehicles at a construction work site, etc.). Use Related Factors Vehicle Level element 42-Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) to identify these vehicles.

If a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, as traffic control, or at a construction/maintenance site. The question becomes, Has its function changed from being a motor vehicle in transport to a working vehicle?" The answer is "No." These situations are treated as motor vehicles in transport striking another motor vehicle in transport (elements 12 or 13 are used). Use Related Factors – Vehicle Level element 41 – Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities to identify that this vehicle was struck while performing these work activities.

Taxis/limousines and commercial buses, etc., are always considered to be "in transport" because their primary work function is to transport people from one place to another. *(See elements 12, 13, or 14.)*

46 - Traffic Signal Support/Signal

47 - Vehicle Occupant Struck or Run Over by Own Vehicle (since 1997)

Use this element when an occupant falls or comes out of a vehicle and is struck or run over by that vehicle. This does not apply to occupants ejected during overturns.

48 - Collision With Snow Bank

Used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

49 - Ridden Animal or Animal-Drawn Conveyance

This element is used for collisions with animals being used as transportation. This includes ridden animals and animals (or teams of animals) drawing a transport device *(e.g., a horse drawing a sleigh, a team of horses drawing a stagecoach, etc.)*.

50 - Bridge Overhead Structure

This element is used when a vehicle strikes the bottom of a bridge while traveling on a trafficway underneath the bridge.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files

2004 and later

51 - Jackknife

This element applies to a condition that occurs to an articulated vehicle, *(any vehicle with a trailing unit(s) connected by a hitch, e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.)* while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer*(s)* yaws from its normal straight-line path behind the power unit.

52 - Guardrail End

This element is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

53 - Mail Box

54 - Motor Vehicle Struck by Falling/Shifting Cargo or Anything Set in Motion by Another Motor Vehicle in Transport

55 - Other Not in-Transport Motor Vehicle (2005 – 07)

55 - Motor Vehicle in Motion Ouside the Trafficway (since 2008)

57 - Cable Barrier (since 2008)

60 - Cargo/Equipment Loss or Shift

This element should not be used for the vehicle setting the object in motion in a collision crash. Element 60 is only used as a first harmful event for non-collision crashes.

99 - Unknown

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

Variable = HARM_EV

Element = 01 - Overturn/Rollover

This element is used if a vehicle rotates 90 degrees or more, side-to-side or end-to-end, producing the first damage or injury. For motorcycles, laying the motorcycle down on its side is sufficient to code overturn if damage or injury is produced.

02 - Fire/Explosion

03 - Immersion

04 - Gas Inhalation

This element includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

05 - Fell from Vehicle *(Other Than Cargo/Equipment Loss or Shift)*

The element is used when falling or jumping (not suicide) from the vehicle is the first event causing damage or injury. For example, a passenger of a motor vehicle in transport leans against the car door, it opens, and the passenger falls out, and is injured by the fall.

06 - Injured in Vehicle *(Other Than Cargo/Equipment Loss or Shift)*

Use where an occupant is injured during an un-stabilized situation without a collision, Examples: a pickup truck stops short and its load crashes through passenger compartment, injuring or killing the driver, or a part of the engine comes loose and bounces back into its own vehicle.

07 - Other Non-Collision

As an example, driving off a cliff where damage is not the result of an overturn or collision with an object

08 - Pedestrian

09 - Pedalcycle

10 - Railway Train

11 - Animal

This element is used for collisions with animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device. See element 49 for ridden animals and animals drawing transport devices. **See Driver Level-Related Factor. - 83 – Live Animal in Road to determine if it applies.**

12 - Motor Vehicle in Transport on Same Roadway

Use this element when one motor vehicle collides with another motor vehicle on an undivided highway or the same side of a divided highway.

13 - Motor Vehicle in Transport on Other Roadway

This element differs from element 12 in that it applies to events where a vehicle leaves one roadway and enters a different roadway, having a collision with a motor vehicle in transport in a different roadway. Example: One vehicle travels across the median of a divided highway, enters oncoming traffic and is struck; or, when a vehicle traveling on an overpass, leaves the trafficway and strikes or is stuck by a vehicle traveling on a trafficway below.

Element 13 should not be used in an “at intersection crash” (where the First Harmful Event occurs in the intersection).

14 - Parked Motor Vehicle *(Not in Transport)*

This element refers to the collision of a motor vehicle in transport with a motor vehicle not in transport. Parked motor vehicles include vehicles parked outside the roadway and those parked in the roadway in lanes not designed for travel at the time of crash. *(Do not include Vehicle/Driver Level information for the parked vehicle. Do include Person Level information if there were occupants in the vehicle.)* Occupants of parked motor vehicles are coded “Nonmotorists.”

15 - Other Type Nonmotorist

Wheelchair occupants, skateboarders, human-propelled sled riders, as an example.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

16 - Thrown or Falling Object

This element is a non-collision event and, unless there is another collision during the crash, IMPACT POINTS for the vehicle involved must be coded "00" Examples: Falling tree/rock, dropping/throwing something off bridge, throwing a snowball. However, it does not have to come from above. Excludes Cataclysms

17 - Boulder

This element is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

18 - Other Object *(not fixed)*

This element e.g., fallen tree, already laying in roadway; construction cones or barrels on road *(temporary)*. See element 45- Working Construction, Maintenance or Utility Vehicles for transport devices used as equipment *(i.e., cherry picker at work, paint striper at work, etc.)*.

19 - Building

20 - Impact Attenuator/Crash Cushion

This element is used if a device for controlling the absorption of energy is released during vehicle collision *("crash cushions")*. Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

21 - Bridge Pier or Abutment

This element refers to support structures most likely to be struck by vehicles passing under bridges *(see element 43-Other Fixed Object for vehicles striking the bottom of a bridge while traveling on a trafficway underneath it).* If the vehicle first strikes a concrete barrier protecting a bridge pier or abutment, use element 25-Concrete Traffic Barrier.

Bridge Pier – a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments

Bridge Abutment – wall supporting the ends of a bridge generally retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood, *(Includes wing-walls.)*

22 - Bridge Parapet End

This element is used for components of the upper portion of bridges. The end of a low wall which runs along the outer most edge of the roadway or sidewalk on the bridge and usually composed of brick, stone, or concrete. The term "balustrade" is often used synonymously with "parapet."

23 - Bridge Rail

This element is for components of the upper portion of bridges. A wooden, brick, stone, concrete, or metal fence-like wall which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet.

a) A Bridge does not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

b) See bridge components diagram for bridge elements 21, 22 and 23.

c) Barriers as in elements 24, 25 and 26 refer to a physical structure such as a guardrail, a concrete safety barrier or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

Element 50 *(Bridge Overhead Structure)* is used when striking the bottom of a bridge while traveling on a trafficway underneath it.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

24 - Guardrail Face

This element represents a low barrier running along the edge of a road shoulder either on the right or the left and which has the primary longitudinal structure composed of metal *(plates, cable, mesh, box beam, etc.)*. A guardrail is differentiated from element 25-Concrete Traffic Barrier by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete *(including concrete rails)*.
Guardrails, which serve as bridge rails, should be coded 23 – Bridge Rail.

25 - Concrete Traffic Barrier

Refers to the longitudinal traffic barriers constructed of concrete and located on the outside of the road surface, in a median, or in gore areas. This includes all temporary concrete barriers regardless of location *(i.e., temporary Jersey barrier on a bridge being used to control traffic during bridge repair/construction)*. Concrete walls (vertical side surfaces) do not apply here; see element 39-Wall.
When a vehicle is traveling under a bridge and strikes a concrete barrier used to protect the bridge pier or abutment, use element 25.

26 - Other Traffic Barrier

This element is used for all other longitudinal barriers such as wood or rock and unknown barrier composition types.

27 - Highway/Traffic Sign Post

This element is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in transport, includes mile markers. *(See Element 46 for traffic signal supports.)*

28 - Overhead Sign Support/Sign

This element is used when the sign supported is above the highway. The difference between elements 27 and 28 is the location of the sign *(overhead or the side of the road)*.

29 - Luminary/Light Support

This element refers to supports for highway lighting systems, not including other private lighting systems *(e.g., parking lot lights)*. Support does not include other fixed objects to which lighting is affixed *(e.g., telephone poles)*.

30 - Utility Pole

Electrical, telephone, cable and other utility pole supports.

31 - Other Post, Other Pole, or Other Support

This element is used for posts other than highway signs (e.g., reflectors on poles along side of roadway, parking meters, flag poles, etc.). (For mailbox posts, use element 53 – Mail Box (since 2004).)

32 - Culvert

This element is any structure entirely under the roadway *(driveway or entranceway)* and less than 20 feet in span measured along the centerline of the roadway.

33 - Curb

This element is a concrete or asphalt structure up to 12 inches in height, which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Be careful that the PAR provides some indication that damage has occurred when a vehicle strikes a curb.

34 - Ditch

35 - Embankment - Earth

36 - Embankment - Rock, Stone, or Concrete

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

37 - Embankment - Material Type Unknown

Element 35-37 *(Embankments are raised structures to hold back water, to carry a roadway, or the result of excavation or washout (including erosion)* that may be faced with earth *(element 35)* or rock *(sometimes called a berm)*, stone or concrete *(element 36)*. An embankment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions; such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

In crashes involving a field approach or crossing, if in doubt about when to use elements 32, 34 *(Culvert/Ditch)* or elements 35-37 *(Embankment)* then use these criteria:

d) Use element 32, 34 if the driver would not have been able to recover from the ditch even if there had been no field approach *(crossing)*.

e) Use element 35, 36, 37 if the driver would have been able to recover from the ditch, but struck the field approach *(crossing)* prior to doing so.

f) Use element 35, 36, 37 if it is not known whether the driver would have been able to recover from the ditch and a field approach *(crossing)* is involved.

38 - Fence

This element includes the fence posts. A fence can be made of wood, chain link, stone, etc. *(not shrub hedges serving as containment for property).*

39 - Wall

This element is a primarily vertical *(± 15 degrees from vertical)* structure composed of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas but not for containment as in the primary function of a fence, also not included as walls are wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls should be coded as element 21.

40 - Fire Hydrant

41 - Shrubbery

42 - Tree (Standing Tree Only)

This element is used when a vehicle strikes a standing tree. If a vehicle strikes a tree lying in the roadway, use element 18 – Other Object (Not Fixed). If a tree falls on a vehicle as it is passing by, use element 16 – Thrown or Falling Object.

43 - Other Fixed Object

This is used when the object is fixed *(considered a permanent structure)* and is not described by any of the other fixed object elements, includes utility wires and guy wires attached to utility poles.

44 - Pavement Surface Irregularity (1993 only)

Potholes, grooves, and grates, are examples.

45 - Transport Device Used as Equipment (1993 – 03)

This element includes a cherry picker at work, a paint striper vehicle striping road, tractor mowing grass on trafficway, snow plow plowing snow, etc.

45 - Working Construction, Maintenance or Utility Vehicles (since 2004)

This element is used when the motor vehicle in transport strikes a construction, maintenance or utility vehicle, which is working and not "in transport." Examples: cherry picker working on the telephone lines, a paint striper vehicle painting lines on the road, a tractor mowing grass on trafficway, a county/state snow plow plowing snow, a highway dump truck dumping asphalt for a new travel lane, etc.

Note: Before 2004, this element was called "Transport Device Used as Equipment." It included other working activities in addition to construction, maintenance and utility work on trafficways. From 2004 forward, element 45 excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, police vehicles at a construction work site, etc.).

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

Use Related Factors Vehicle Level element 42-Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) to identify these vehicles.
If a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of an crash, at a traffic stop, as traffic control, or at a construction/maintenance site the question becomes, "Has its function changed from being a motor vehicle in transport to a working vehicle?" The answer is "No." These situations are treated as motor vehicles in transport striking another motor vehicle in transport (elements 12 or 13 are used.) Use Related Factors – Vehicle Level element 41 – Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities to identify that this vehicle was stuck while performing these work activities.
Taxis/limousines and commercial buses, etc, are always considered to be "in transport" because their primary work function is to transport persons from one place to another. *(See elements 12, 13, or 14).*

46 - Traffic Signal Support/Signal

47 - Vehicle Occupant Struck or Run Over by Own Vehicle (since 1997)

Use this element when an occupant falls or comes out of a vehicle and is struck or run over by that vehicle. This does not apply to occupants ejected during overturns.

48 - Collision With Snow Bank (since 1997)

Used when snow fall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

49 - Ridden Animal or Animal-Drawn Conveyance (since 1998)

This element is used for collisions with animals being used as transportation. This includes ridden animals and animals (or teams of animals) drawing a transport device *(e.g., a horse drawing a sleigh, a team of horses drawing a stage coach, etc.)*.

50 - Bridge Overhead Structure

This element is used when a vehicle strikes the bottom of a bridge while traveling on a trafficway underneath the bridge.

51 - Jackknife *(causing injury or damage)* (since 2004)

This element applies to a condition that occurs to an articulated vehicle *(any vehicle with one or more trailing units connected by a hitch, e.g., truck tractor or single-unit truck with one or more trailers, an articulated bus, a car pulling a boat on a trailer, etc.)* while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer yaws from its normal straight-line path behind the power unit.

52 - Guardrail End (since 2004)

This element is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

53 - Mail Box (since 2004)

54 - Motor Vehicle Struck by Falling/Shifting Cargo or Anything Set in Motion by Another Motor Vehicle In Transport (since 2004)

60 - Cargo/Equipment Loss or Shift *(causing injury or damage, since 2004)*

This element should not be used for the vehicle setting the object in motion in a collision crash. Element "60" is only used as a first harmful event for non-collision crashes.

99 - Unknown

This is used when it is not known what the First Harmful Event was. For example, if a series of harmful events occurred, and it's unclear which one was first.

If either first harmful event, HARM_EV, or most harmful event, M_HARM, is used, it is often a good idea to construct a two-way table of harmful events by State and check for consistency. For example, in the 1989 FARS data in the cases where a vehicle fire was identified, that is FIRE_EXP =1, Virginia coded M_HARM as 02 Fire/Explosion for all cases.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

In the same year for the crashes where a vehicle fire was identified, that is FIRE_EXP =1, Connecticut, Delaware, Idaho, Kansas, Mississippi, New Hampshire, Oklahoma, Rhode Island, South Dakota, and Wyoming never coded M_HARM as 02 Fire/Explosion. That is, different states code harmful events differently.

1975 to 1981

Variable = HARM_EV

Element =
- 01 - Overturn
- 02 - Fire/Explosion
- 03 - Immersion
- 04 - Gas Inhalation
- 05 - Fell from Vehicle
- 06 - Injured in Vehicle
- 07 - Other Non-Collision
- 08 - Pedestrian
- 09 - Pedalcycle
- 10 - Railway Train
- 11 - Animal
- 12 - Motor Vehicle in Transport
- 13 - Motor Vehicle in Transport in Other Roadway
- 14 - Parked Motor Vehicle
- 15 - Other Type Nonmotorist
- 16 - Other Object
- 17 - Bridge or Overpass (1975 – 78 only)
- 18 - Building
- 19 - Culvert
- 20 - Curb or Wall
- 21 - Divider
- 22 - Embankment
- 23 - Fence
- 24 - Guard Rail
- 25 - Light Support
- 26 - Sign Post
- 27 - Tree/Shrubbery
- 28 - Utility Pole
- 29 - Other Pole/Support
- 30 - Impact Attenuator
- 31 - Other Fixed Object
- 32 - Bridge or Overpass *[Passing Under]* (1979 – 81 only)
- 33 - Bridge or Overpass *[Passing Over]* (1979 – 81 only)
- 99 - Unknown

Hit-and-Run

1982 and later

Variable = HIT_RUN

This element refers to cases where a vehicle in the crash does not stop to render aid *(this includes drivers who flee the scene on foot)*.

Element = Blank

0 - No Hit and Run

If there is no reason to believe a hit-and-run occurred. This element is also used in cases where the hit-and-run driver is not one of the major involved parties to the crash. For example, in a five-car crash, the fifth car barely hits the fourth vehicle and causes little or no damage to either vehicle, and leaves the scene. If this is the only vehicle of the five that leaves the scene, then no hit-and-run occurred.

1 - Hit Motor Vehicle in Transport

The hit-and-run vehicle hit a motor vehicle in transport.

2 - Hit Pedestrian or Nonmotorist

The hit-and-run vehicle hit a pedestrian or other nonmotorist.

3 - Hit Parked Vehicle, *(Working Vehicle, since 2004)* or Object

The hit-and-run vehicle hit a parked motor vehicle, regardless of whether it contained occupants. This also applies to vehicles that hit objects other than Motor Vehicles in Transport, including working vehicles.

4 - Occupant Is Struck by or Fell From Own Hit-and-Run Vehicle (2002 only)

The driver was cited for leaving the scene when an occupant of that driver's vehicle fell or was struck by that vehicle.

4 - Driver Leaves Scene After Non-Collision Event (since 2003)

The police said the person left the scene when an occupant of that person's vehicle was injured in a non-collision crash. For example, after overturning or fire, the person fell or was struck by its own vehicle.

5 - Hit-and Run, Other Involved Person Left Scene (since 2007)

5 - Other Involved Person, not a driver, left Scene (2005 – 06)

1977 to 1981

Variable = HIT_RUN

Element = 0 - No Hit-and-Run
1 - Hit Motor Vehicle
2 - Hit Nonmotorist
3 - Left Scene

(Continued on Next Page)

Hit-and-Run (Continued)

1975 to 1976

Variable = HIT_RUN

Element = 0 - Not Applicable
1 - With Motor Vehicle
2 - With Nonoccupant

NOTE:
From 1975 to 1981 if no information was known about the Hit-and-Run vehicle and/or driver, the vehicle form and/or driver form were not filled out and were not counted as unknown. Starting in 1982 both a vehicle and a driver form were filled out and the data were identified as unknown. This is why, for example, there were approximately only 20 to 40 drivers with unknown sex listed in the FARS data set from 1975 to 1981 and 700 to 1,000 drivers with unknown sex from 1982 on.

Light Condition

1980 and later

Variable = LGT_COND

Element = Blank
- 1 - Daylight
- 2 - Dark
- 3 - Dark but Lighted
- 4 - Dawn
- 5 - Dusk
- 9 - Unknown

1975 to 1979

Variable = LGT_COND

Element =
- 1 - Daylight
- 2 - Dark
- 3 - Dark but Lighted
- 6 - Dawn or Dusk
- 9 - Unknown

For data from 1975 to 1979, if one needs to separate Dawn from Dusk, use the variable HOUR. LGT_COND EQ 6 and 0 LE HOUR LT 12 gives Dawn, LGT_COND EQ 6 and (12 LE HOUR LE 24) gives Dusk.

If LGT_COND is unknown then check the variable HOUR, i.e., the hour of the day when the crash took place. The general rule, when LGT_COND is unknown, is: if 06 LE HOUR LT 18 then the crash was during the day, if (0 LE HOUR LT 6) OR (18 LT HOUR LE 24) then the crash occurred at night.

Data from 1975 to 1979 do not conform to the original documentation. Dawn or Dusk was originally coded as 4, but has been re-coded as 6.

If one needs to separate night from day and take into account the light conditions the following SAS code, for all years, is suggested.

Sample SAS code:

```
LENGTH TIME_DAY $ 5;
IF LGT_COND EQ 1 THEN TIME_DAY = 'DAY';
ELSE IF (2 LE LGT_COND LE 3) THEN TIME_DAY = 'NIGHT';
ELSE IF (6 LE HOUR LE 18) THEN TIME_DAY = 'DAY';
ELSE IF ((0 LE HOUR LT 6) OR (18 LT HOUR LE 24))
        THEN TIME_DAY = 'NIGHT';
```

Manner of Collision

This is repeated in the Vehicle and Person Files.

See the note at the end of this section, on the change in the interpretation of Manner of Collision from 2001 to 2002

2002 and later

Variable = MAN_COLL

Element = Blanks

00 - Not Collision with Motor Vehicle (*in Transport 2002 – 04 only)*

Starting in 2005 crashes with any vehicle in transport or parked are coded 00.

01 - Front-to-Rear *(Includes Rear-End)*

A rear-end collision is one in which the front end of one vehicle collides with the back of another vehicle, while the two vehicles are traveling in the same direction. Use element 01 for all rear-end crashes and all crashes in which the front of one vehicle comes in contract with the rear of another in the First Harmful Event, regardless of the original direction of travel.

With these crashes a portion of the front bumper, grill, or headlights of one vehicle *(Clockpoint 12)* made contact with a portion of the rear bumper, taillights, or rear of the other vehicle *(Clockpoint 06)* in the First Harmful Event."

02 - Front-to-Front *(Includes Head-On)*

A "head-on" collision is one in which the front end of one vehicle collides with the front end of another vehicle, while the two vehicles are traveling in toward each other.

This element 02 is used for all head-on crashes and all crashes in which the fronts of both vehicles make contact as the First Harmful Event, regardless of the original direction of travel. Since 2002 direction of force is no longer used in determining head-on collisions.

03 - Angle - Front-to-Side, Same Direction

Used for angle crashes where the front of one vehicle makes contact with any point along the side of another in the First Harmful Event and the orientation of the vehicles at impact is in the same direction. This does not include right angles or broadside crashes *(See element 05)*.

04 - Angle - Front-to-Side, Opposite Direction

This element is used for angle crashes where the front of one vehicle makes contact with any point along the side of another in the First Harmful Event and the orientation of the vehicles at impact is in the opposing directions. This does not include right angles or broadside crashes *(See element 05)*.

05 - Angle - Front-to-Side, Right Angle *(Includes Broadside)*

Used for "broadside" or "T-bone" crashes in which front-to-side contact is made, and the vehicles are at a right-angle position. The front of one vehicle can make contact anywhere along the side of the other, not just Clockpoints 03 or 09.

06 - Angle - Front-to-Side/Angle-Direction Not Specified

Used when the police indicate that it is an "angle" crash without providing enough detail in the narrative and diagram to determine the orientation of the vehicles in the First Harmful Events.

07 - Sideswipe - Same Direction

(Continued on Next Page)

Manner of Collision (Continued)

This is repeated in the Vehicle and Person files.

See the note at the end of this section, on the change in the interpretation of Manner of Collision from 2001 to 2002

2002 and later

08 - Sideswipe - Opposite Direction

Sideswipe, elements 07 or 08 is used if the following are true for both vehicles involved in the First Harmful Event.

1 The initial engagement does not overlap the corner of either vehicle by more than four inches, so there is no significant involvement of the front or rear surface areas.

2 There is no pocketing of the impact in the suspension areas. The impact then swipes along the surface of the vehicle parallel to the direction of travel.

3 There is low retardation of the force along the surface of the vehicle.

4 End-swipes are coded as element 11 – Other.

09 - Rear-to-Side

This element is used for crashes where the rear of a vehicle, and not the front, makes contact with the side of another. This happens when a vehicle backs up into the side of another vehicle.

10 - Rear-to-Rear

11 - Other *(End-Swipes and Others)*

This element is used for collisions where one vehicle's end swipes another vehicle instead of their sides swiping. Also, this element is used for any collision between two motor vehicles where the collision is not described by elements 01-10. An example is when one vehicle is airborne and makes contact with its front to the other vehicle's hood or top.

99 - Unknown

(Continued on Next Page)

Manner of Collision (Continued)

This is repeated in the Vehicle and Person files.

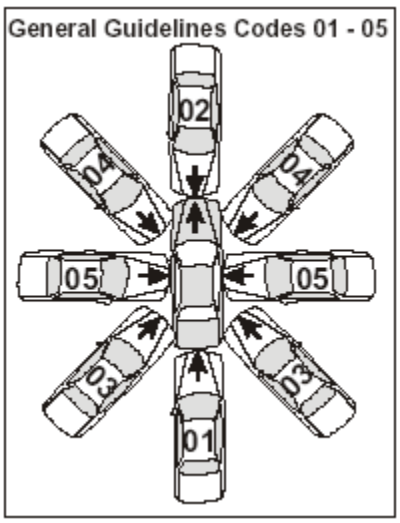
See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

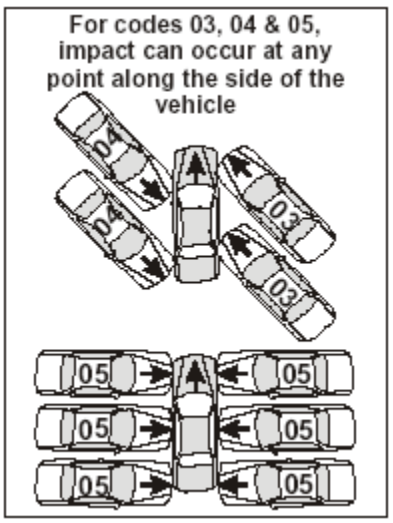
2002 and later

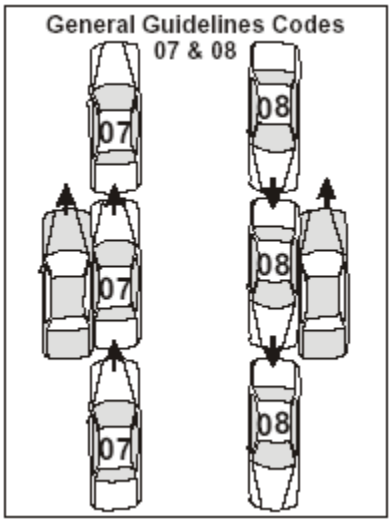
NOTES:

Refers only to crashes in which the FIRST HARMFUL EVENT is a collision between two motor vehicles in transport *(codes 12 and 13)*.

Use the Diagrams below to help determine Manner of Collision codes 01-05, 07-08







Since 2002, this element has been based on the impact location (front, side, or rear) and vehicle orientation (facing in the same or opposite directions) of the contact vehicles in the First Harmful Event. The use of “direction of force” will no longer be used in determining this element. Prior to 2002, the “direction of force” immediately preceding the collision was allowed to be considered, especially in head-on collisions.

(Continued on Next Page)

Manner of Collision (Continued)

This is repeated in the Vehicle and Person files.

See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

1978 to 2001

Variable = MAN_COLL

Element = 0 - Not Collision With Motor Vehicle in Transport
1 - Rear-End
2 - Head-On
3 - Rear-to-Rear
4 - Angle
5 - Sideswipe, Same Direction
6 - Sideswipe, Opposite Direction
9 - Unknown

1975 to 1977

Variable = MAN_COLL

Element = 0 - Not Collision With Motor Vehicle in Transport
1 - Rear-End
2 - Head-On
3 - Rear-to-Rear
4 - Angle
7 - Sideswipe (May either be same or opposite direction)
9 - Unknown

Note in the original files, from 1975 to 1977 sideswipe was coded as 5 but has since been changed to 7. These years are not consistent with the documentation of the time.

(Continued on Next Page)

Manner of Collision (Continued)

This is repeated in the Vehicle and Person files.

See the note below on the change in the interpretation of Manner of Collision from 2001 to 2002

Note: From 1975 to 2001, the manner of collision is totally dependent on the directions of travel of the vehicles involved. The direction of travel of the vehicles is often misunderstood. The direction of a vehicle is determined by the **pre-crash condition** direction of travel, just before the vehicle goes out of control. Example (1): Assume two vehicles are heading toward each other on the same roadway, one going north and the other going south. If the southbound vehicle skids on a patch of ice and turns 180^{O} and immediately is struck in the rear by the vehicle going north, then the manner of collision is

"Head-On," not "Rear-End." Example (2): Had the vehicle going north sideswiped the southbound vehicle, which after the ice skid was pointed north, the manner of collision would be "Sideswipe **Opposite** Direction," even though both vehicles are pointed north at the time of the sideswipe. **The pre-crash condition directions of travel, for both vehicles, determine the outcome.** These examples involve a rotation of a vehicle just before the crash and can account for 20 to 30 percent of the coded cases. See "Impact" in the vehicle section of this guide.

Starting in 2002 and later, the manner of collision is dependent on the geometry of the points of impact. That is, Example (1) above is now coded 01, Front-to-Rear (includes **Rear-End**) and Example (2), is now coded 07 Sideswipe, **Same** Direction. This is a major change in the MAN_COLL variable. Care must be taken when using this variable over a time period that spans 2001 to 2002.

NHTSA'S MANNER OF COLLISION CONVENTION

Classification	Data Year and Code (MAN_COLL)		
	1975-1977	1978-2001	2002 and later
Not Collision with Motor Vehicle in Transport	0	0	00
Rear-End	1	1	01
Head-On	2	2	02
Angle	4	4	03-06
Sideswipe	7	5, 6	07-08
Other	3	3	09-11
Unknown	9	9	99

Milepoint

1982 and later

Variable = MILEPT

Element = Blanks
00000 - None
(Actual to Nearest 0.1 mile, Assumed decimal, e.g., 12345 = 1234.5)
99999 - Unknown

Five digits are always coded.

EXAMPLES:

Milepoint	You Must Code
10	00100
39.89	00399
404	04040
73.1	00731

Data not collected prior to 1982.

Non-Motorists

1991 and later

Variable = PEDS

Element = (Number of Nonmotorists, i.e., any persons who are not occupants of a motor vehicle in transport.)

1975 to 1990 Data not available

Number of Lanes

1980 and later

Variable = NO_LANES

Element = Blank
- 1 - One lane
- 2 - Two lanes
- 3 - Three lanes
- 4 - Four lanes
- 5 - Five lanes
- 6 - Six lanes
- 7 - Seven or more lanes
- 9 - Unknown

1975 to 1979

Variable = NO_LANES

Element = Blank
- 1 - One lane
- 2 - Two lanes
- 3 - Three lanes
- 4 - Four lanes
- 5 - Five lanes
- 6 - Six or more lanes
- 9 - Unknown

The number of lanes refers to the number of lanes of a continuous cross-section of roadway. For example, a local roadway with one lane going north and one lane going south would be coded as two lanes. However, if a trafficway is a divided highway, with two lanes going north, a median, and two lanes going south, then the number of lanes is coded as two. If a trafficway has two lanes going north immediately adjacent to two lanes going south, one continuous cross-section of roadway, then the number of lanes is coded as four. This variable can be used with the trafficway flow variable TRAF_FLO to determine the trafficway geometry. For example:

IF *(NO_LANES EQ 2)* AND *(TRAF_FLO EQ 1)*

then one has a two-lane roadway that is not physically divided, that is what most people think of as a two-lane road, one lane going in each direction.

Person Forms Submitted

2003 and later

Before 2003, the policy was not to submit a Person Level form for occupants of van-based buses. This policy has changed beginning in 2003. Always submit a Person Level forms for all occupants of van-based vehicles, including van-based buses.

Variable = PERSONS

Element = The number of persons involved in the crash, except for uninjured bus and train passengers. A form describing all other persons involved in a crash will be filed, i.e., this variable is a count of the persons in the crash.

1975 to 2002

Variable = PERSONS

Element = The number of persons involved in the crash, except for uninjured bus and train passengers. A form describing all other persons involved in a crash will be filed, i.e., this variable is a count of the persons in the crash.

1982 and later

Note: In the case of a hit-and-run crash, a Vehicle-Driver form and a Person Level form for the driver are filled out. When the information about the vehicle-driver or person is not known -- which is often the case with hit-and-runs -- the values are coded as unknown.

Example: Between 1982 and 1994, the number of drivers coded with unknown sex fluctuated between 700 and 1,000, approximately 1.5 percent of all drivers involved in fatal crashes. Reviewing the 768 persons in the 1994 Annual Report file, all were drivers and 90 percent of them were involved in hit-and-run crashes.

1975 to 1981

In the event of a hit-and-run crash, if the vehicle information was not known, then no vehicle form was filled out. Likewise, if no information was known on the person level, usually the driver of the unknown vehicle, then a Person Level form was not filled out. The result is that the number of unknowns is much smaller for this time period than 1982 and later.

1975 to 1981

Example: From 1975 to 1980, there were 30 to 40 drivers coded with unknown sex, approximately 0.05 percent of all drivers involved in fatal crashes. In 1981 the number of drivers with unknown sex rose to over 300, approximately 0.5 percent of all drivers involved in fatal crashes.

Rail Grade Crossing Identifier

1979 and later

Variable = RAIL

Element = Blanks

0000000	- Not Applicable
nnnnnnA	- Six Digits Followed by One Alphabetic Valid F.R.A. Code
9999999	- Unknown

Related Factors Crash Level

Note: There are also vehicle-level-related factors in the Vehicle file, VEH_CF1 and VEH_CF2 and driver-related factors, also in the Vehicle file, namely DR_CF1, DR_CF2, DR_CF3 and (DR_CF4 since 1997). In addition there are person-related-factors P_CF1, P_CF2, and P_CF3 in the person file.

Note the FARS coder may have used any of the three variables to code a related factor. One must test all three variables to insure that the selected related factor is included.

1982 and later

Variables = CF1 or CF2 or CF3

Element = Blanks

- 00 - None
- 01 - Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls etc.
- 02 - Shoulder-Related (Design or Condition since 2002)
- 03 - Other Construction-Created Condition
- 04 - No or Obscured Pavement Marking
- 05 - Surface Under Water
- 06 - Inadequate Construction or Poor Design of Roadway, Bridge, etc.
- 07 - Surface Washed Out (caved in, road slippage)
- 13 - Aggressive Driving/Road Rage by Non-contact Vehicle Driver (since 2006)
- 14 - Motor Vehicle (in Transport 1983 – 04 only) struck by falling cargo or something that came loose from or something that was set in motion by a vehicle (since 1983)
- 15 - Nonoccupant struck by falling cargo, or something came loose from or some thing that was set in motion by a vehicle (since 1983)
- 16 - Nonoccupant struck vehicle (since 1983)
- 17 - Vehicle set in motion by non-driver (since 1983)
- 18 - Date of Crash and Date of EMS Notification were not the same day (since 1988)
- 19 - Recent previous crash scene nearby (since 1989)
- 20 - Police-Pursuit-Involved (since 1994)
- 21 - Within Designated School Zone (since 1995)
- 22 - Speed Limit Is a Statutory Limit as Recorded or Was Determined as This State's "Basic Rule" (since 1999)
- 23 - Indication of a Stalled/Disabled Vehicle (since 2008)
- 99 - Unknown

(Continued on Next Page)

Related Factors Crash Level (Continued)

1975 to 1981

Except as noted *(values 49 - 51 were added starting in 1979)*

Variables = CF1 or CF2 or CF3

Element = 00 - None

VISION OBSCURED BY:

01 - Rain, Snow, Fog, Smoke, Sand, Dust i.e. weather conditions
02 - Reflected Glare, Bright Sunlight, Headlights
03 - Curve, Hill or Other Design Features *(including Traffic Signs, Embankments)*
04 - Building, Billboard, etc.
05 - Trees, Crops, Vegetation
06 - Moving Vehicle *(including Load)*
07 - Parked Vehicle
08 - Other Object Not Classified Above

SWERVING DUE TO:

20 - Severe Crosswind
21 - Wind From Passing Truck
22 - Slippery Surface
23 - Avoiding Debris or Objects in Road
24 - Ruts, Holes, Bumps, in Road
25 - Avoiding Animals in Road
26 - Avoiding Vehicle in Road
27 - Avoiding Phantom Vehicle
28 - Avoiding Pedestrian, Pedalcyclist, Other Nonmotorist in Road
29 - Avoiding Water, Snow, Oil Slick on Road

ROADWAY FEATURES:

40 - Traffic Controls Not Functioning Properly
41 - Inadequate Warning of Exits, Lanes Narrowing, Traffic Controls, etc.
42 - Uncontrolled Intersection or Railroad Crossing
43 - Shoulder Too Low or High
44 - Shoulders Too Narrow or No Shoulders for Emergency Use
45 - [No Definition]
46 - [No Definition]
47 - Other Construction
48 - No or Obscured Pavement Markings

(Continued on Next Page)

Related Factors Crash Level (Continued)

1975 to 1981

Except as noted *(values 49 - 51 were added starting in 1979)*

ROADWAY FEATURES:

49 - Surface Underwater (since 1979)
50 - Inadequate Construction or Poor Design of Roadway, Bridge, etc. (since 1979)
51 - Surface Washed Out (caved in, road slippage, since 1979)

99 - Unknown

Note: Starting in 1982, many of the Related Factors Crash Level factors, values 01 - 29, are coded as Related Factors - Driver Level, values 61 - 87, in the vehicle section of the data.

Relation to Junction

1991 and later

Variable = REL_JUNC

Element = 00 - None

NON-INTERCHANGE, i.e., all roadways are on the same level

01 - Non-Junction
02 - Intersection
03 - Intersection-Related
04 - Driveway, Alley Access, etc.
05 - Entrance/Exit Ramp-Related
06 - Rail Grade Crossing
07 - In Crossover
08 - Driveway-Access-Related (since 2003)
09 - Unknown - Non-Interchange

INTERCHANGE AREA, i.e., roadways are on different levels such as a cloverleaf

10 - Intersection
11 - Intersection-Related
12 - Driveway Access
13 - Entrance/Exit Ramp-Related
14 - In Crossover
15 - Other Location in Interchange
19 - Unknown, Interchange Area

99 - Unknown

1975 to 1990

Variable = REL_JUNC

Element = 1 - Non-Junction
2 - Intersection
3 - Intersection-Related
4 - Intersection Area
5 - Driveway, Alley, Access, etc.
6 - Entrance/Exit Ramp *(since 1978)*
7 - Rail Grade Crossing *(since 1979)*
8 - In Crossover *(since 1980)*
9 - Unknown

(Continued on Next Page)

Relation to Junction (Continued)

NHTSA'S Relation to Junction		
Classification	Data Year and Code	
	1975-1990 (REL_JUNC)	1991 and later (REL_JUNC)
Non-Intersection	1	1
Intersection	2-3	2-3, 10-11
Non-Intersection	4-8	4-8, 12-15
Unknown	9	9, 19, 99

NHTSA'S Relation to Junction		
Classification	Data Year and Code	
	1975-1990 (REL_JUNC)	1991and later (REL_JUNC)
Non-Junction	1	1
Junction	2-3	2-3, 10-11
Other	4-8	4-8, 12-15, 19
Unknown	9	9, 99

Relation to Trafficway

1998 and later

Variable = REL_ROAD

Element = Blanks

01 - On Roadway

The Roadway is that part of a trafficway designed, improved and ordinarily used for motor vehicle travel or, where various classes of motor vehicles are segregated, that part of a trafficway used by a particular class. Separate roadways may be provided for traffic going in opposite directions, for example northbound and southbound traffic or for trucks and automobiles. The roadway and any shoulder alongside the roadway together make up the roads.

02 - Shoulder

The Shoulder is that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped vehicles and for lateral support of the roadway structure. A shoulder is a design feature of a road and may or may not be paved.

03 - Median

A Median is defined as that area of a divided trafficway between parallel roads separating the travelways for traffic in opposite directions. The principal functions of a median are to provide the desired freedom from interference of opposing traffic, to provide a recovery area for out-of-control vehicles, to provide a stopping area in case of emergencies, to provide for speed change and storage of left-turning and U-turning vehicles, and to minimize headlight glare. Medians may be depressed, raised or flush. Flush medians can be as little as 4-feet wide between roadway edgelines. Painted roadway edgelines 4 feet wide or wider denote medians. Medians of lesser width must have a barrier to be considered a median. Medians do not include “shoulders” and “separators.”

04 - Roadside

The Roadside refers to a location off the roadway, but inside the right-of-way. It is the outermost part of the trafficway, which lay between the outer property line or other barrier and the edge of the first road encountered in the trafficway.

05 - Outside Trafficway/Outside Right-of-way

06 - Off Roadway - Location Unknown

Off Roadway - Location Unknown refers to a location off the roadway, but its relationship to the right-of-way is not known.

07 - In Parking Lane/Zone (since 2007)

07 - In Parking Lane (1998 – 06)

In Parking Lane refers to a strip of road located on the roadway, or next to the roadway, on which parking is permitted. This includes curb-side and edge-of roadway parking (for example, legal residential parking, city street parking, etc.).Sometimes a strip of roadway can be designated for parking at certain hours of the day (parking lane) and for regular travel at other hours (travel lane). This element should not be used during hours when parking is NOT permitted.

(Continued on Next Page)

Relation to Trafficway (Continued)

1998 and later

08 - Gore (See figure on page 49)

A gore is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadways, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or marked pavement if any, between the roadways. The third side is 60 meters *(approximately 200 feet)* from the point of divergence of convergence or, if any other road is within 70 meters *(230 feet)* of that point, a line 10 meters *(33 feet)* from the nearest edge of such road.

Gore Inclusions:

- Areas at rest area entry or exit ramps.
- Areas at truck weight station entry or exit ramps.
- Areas where two main roadways diverge or converge.
- Areas where a ramp and another roadway, or two ramps, diverge or converge.
- Areas where a frontage road and another roadway or two frontage roads, diverge or converge.
- And others.

Gore Exclusions:

- Islands for channelization of vehicle movements.
- Islands for pedestrian refuge.

10 - Separator

A Separator is the area of a trafficway between parallel roads separating travel in the same direction or separating a frontage road from other roads (see Trafficway Diagram in this section). A Separator may be a physical barrier or a depressed, raised, flush, or vegetated area between roads.

11 - Two-way Continuous Left-turn Lane (since 2001)

A Two-Way Continuous Left-Turn Lane *is for left-turning vehicles in both directions of travel.* Vehicles stopped or in motion within a continuous left-turn lane are considered to be in transport, and should be included.

(See Trafficway Flow)

99 - Unknown

1975 to 1997

Variable = REL_ROAD

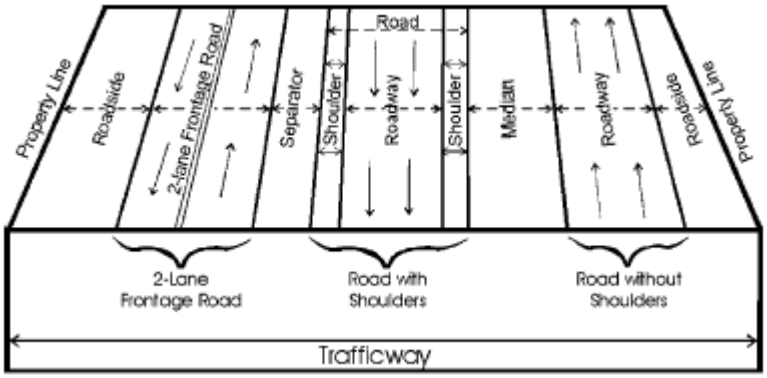
Element =
1 - On Roadway
2 - Shoulder
3 - Median
4 - Roadside
5 - Outside Right-of-way
6 - Off Roadway - Location Unknown
7 - In Parking Lane (since 1980)
8 - Gore (since 1982)
9 - Unknown

(Continued on Next Page)

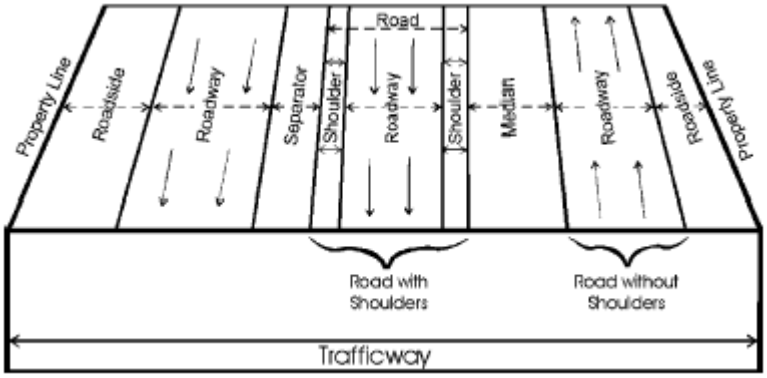
Relation to Trafficway (Continued)

NHTSA'S Relation to Roadway Convention		
Classification	**Data Year and Code (REL_ROAD)**	
	1975-1997	**1998 and later**
On roadway	1	01
Off roadway/shoulder	2	02
Off roadway/median	3	03, 11
Off roadway/other	4-8	04-08, 10
Unknown	9	99

Trafficway with frontage Road



Trafficway with multiple roadways in the same direction



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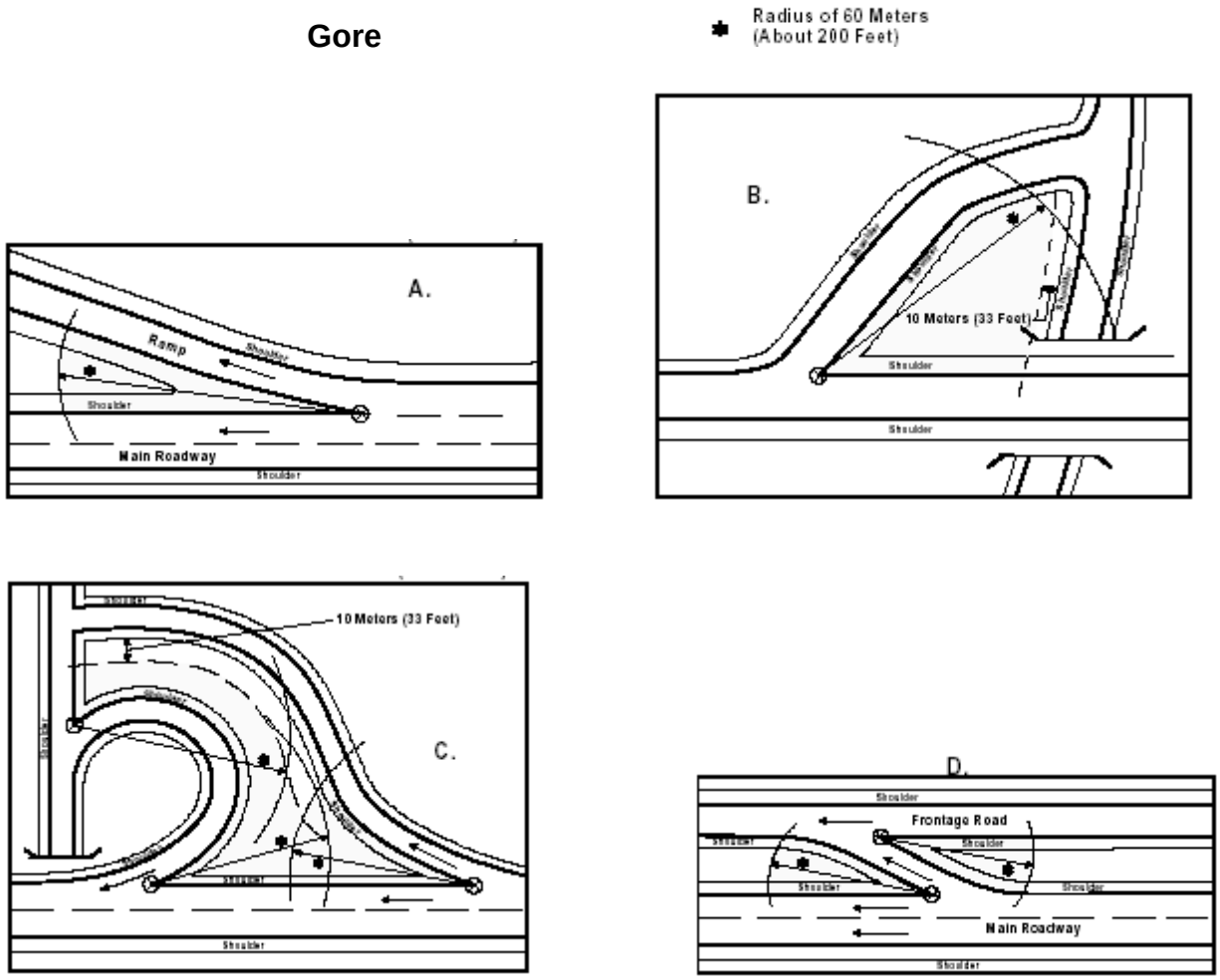
Relation to Trafficway (Continued)

Gore



Roadway Alignment

1975 and later

Variable = ALIGNMNT

Element = Blank
1 - Straight
2 - Curved
9 - Unknown

1975 to 1976

Note for 1975 and 1976 the data were originally coded differently, but the current 1975 and 1976 files use the values above. This is a case where the original coding charts are misleading.

Roadway Function Class

This comes from the Vehicle File.

1987 and later

Variable = ROAD_FNC

Element = Blanks

00 - None
01 - Rural Principal Arterial - Interstate
02 - Rural Principal Arterial - Other
03 - Rural Minor Arterial
04 - Rural Major Collector
05 - Rural Minor Collector
06 - Rural Local Road or Street
09 - Rural Unknown

11 - Urban Principal Arterial - Interstate
12 - Urban Principal Arterial - Other Freeways or Expressways
13 - Urban Other Principal Arterial
14 - Urban Minor Arterial
15 - Urban Collector
16 - Urban Local Road or Street
19 - Urban Unknown

99 - Unknown

1987 and later

Variable = ROUTE

Element = 1 - Interstate
2 - U.S. Highway
3 - State Highway
4 - County Road

LOCAL STREET

5 - Township
6 - Municipality
7 - Frontage Road (since 1994)
8 - Other
9 - Unknown

(Continued on Next Page)

Roadway Function Class (Continued)

This is repeated in the Person File.

1981 to 1986

Variable = ROAD_FNC

Element = 1 - Principal Arterial - Interstate
2 - Principal Arterial - Other Urban Freeways and Expressways
3 - Principal Arterial - Other
4 - Minor Arterial
5 - Urban Collector
6 - Major Rural Collector
7 - Minor Rural Collector
8 - Local Road or Street
9 - Unknown

Variable = LAND_USE

Element = 1 - Urban
2 - Rural
9 - Unknown

1975 to 1980

Variable = ROAD_FNC

Element = This variable is included in the format, but is not initialized. Do not use it.

1982 to 1986

Variable = CL_TWAY (see LAND_USE next page)

Element = 1 - Interstate
2 - Other U.S. Route
3 - Other State Route
4 - County Road
5 - Local Street
8 - Other Road
9 - Unknown

1981

Variable = CL_TWAY

Data were not available for this variable in 1981

(Continued on Next Page)

Roadway Function Class (Continued)

This is repeated in the Person File.

1975 to 1980

Variable = CL_TWAY (see LAND_USE below)

Element =
1 - Interstate
2 - Other Limited Access
3 - Other U.S. Route
4 - Other State Route
5 - Other Major Artery
6 - County Road
7 - Local Street
8 - Other Road
9 - Unknown

1975 to 1980

Variable = LAND_USE

The variable LAND_USE is defined by the Federal Highway Administration and does not necessarily coincide with the U.S. Census Bureau's definition or any other definition of urban or rural. It has been determined there are errors in the 1975 and 1976 data for this variable; consequently, care should be taken when comparing data over several years.

Element =
1 - Urban
2 - Rural
9 - Unknown

An interesting visual of rural and urban roadways can be found at:

http://ntl.bts.gov/lib/23000/23100/23121/09RoadFunction.pdf

(Continued on Next Page)

Roadway Function Class (Continued)

This is repeated in the Person File.

NHTSA'S Roadway Function Class Convention		
Classification	Data Year and Code (ROAD_FNC)	
	1981-1986	1987and later
Interstate, principal arterial	1	01, 11
Freeway and expressway, principal arterial	2	12
Principal arterial, other	3	02, 13
Minor arterial	4	03, 14
Collector	5, 6, 7	04, 05, 15
Local	8	06, 16
Unknown	9	09, 19, 99

NHTSA'S Land Use (Rural/Urban) Convention		
Classification	Data Year and Code	
	1981-1986 (LAND_USE)	1987and later (ROAD_FNC)
Rural	2	01-06, 09
Urban	1	11-16, 19
Unknown	9	99

NHTSA'S Interstate and Non-Interstate Convention			
Classification	Data Year and Code		
	1975-1980 (CL_TWAY)	1981-1986 (ROAD_FNC)	1987and later (ROAD_FNC)
Interstate	1	1	01, 11
Non-Interstate	2-8	2-8	02-06, 12-16
Unknown	9	9	09, 19, 99

See note on the next page about rural and urban crashes.

(Continued on Next Page)

Roadway Function Class (Continued)

This is repeated in the Person File.

Rural/Urban Crashes: There seems to be some inconsistencies with the coding of rural and urban crashes. Note the shaded areas of the chart below. There are no rural crashes in the District of Columbia. Mississippi and Utah have unexplained increases in rural crashes in recent years.

Percent of Rural Crashes by Year and State

State	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Alabama	71.4	70.8	70.2	73.4	68.9	66.0	67.9	62.4	63.6	69.9	69.6	70.0	73.8	66.6	63.3
Alaska	65.2	58.9	76.4	61.4	72.9	64.0	72.2	70.6	63.5	67.1	64.5	58.8	48.7	63.2	65.6
Arizona	58.5	60.9	54.6	52.1	52.7	46.3	49.7	48.7	51.5	50.6	51.0	48.3	50.1	50.9	48.2
Arkansas	73.1	74.5	73.0	79.2	80.9	80.7	80.7	79.1	76.0	77.8	78.4	78.1	76.3	75.0	77.4
California	39.0	39.1	39.0	39.4	39.8	40.8	37.9	39.7	40.4	40.0	36.6	37.7	40.1	38.0	38.8
Colorado	56.5	63.5	56.2	59.5	57.9	59.1	58.0	57.7	60.8	61.8	54.3	61.5	57.0	52.3	58.6
Connecticut	26.5	28.5	29.3	26.5	29.9	27.2	26.7	31.1	26.1	27.4	26.8	26.2	15.9	20.6	24.5
Delaware	52.9	58.9	69.5	51.5	61.0	51.8	50.5	57.5	53.8	50.5	57.8	50.4	63.2	52.6	56.8
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	6.7	3.4	0.0	0.0	0.0
Florida	45.2	42.3	41.9	46.2	44.4	44.4	43.3	44.2	44.8	45.5	46.8	46.3	44.0	48.5	49.1
Georgia	63.0	61.3	55.2	53.5	55.3	57.3	58.3	57.2	59.3	58.3	55.5	56.3	59.9	57.8	51.5
Hawaii	52.3	59.7	43.4	39.3	36.4	33.9	46.3	41.9	42.5	52.2	35.3	46.2	33.0	36.5	42.2
Idaho	83.8	89.1	86.0	91.5	84.0	83.7	82.5	88.2	90.6	85.7	85.1	83.1	80.0	82.4	80.8
Illinois	41.1	45.2	45.4	43.6	47.0	44.9	41.5	42.0	41.2	42.6	38.0	40.9	38.9	44.0	40.8
Indiana	62.4	67.8	64.1	62.3	58.9	58.6	59.2	68.0	68.1	70.2	58.8	78.5	79.8	66.5	63.8

(Continued on Next Page)

Percent of Rural Crashes by Year and State

State	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Iowa	71.8	77.8	76.5	76.6	74.7	78.7	79.8	75.7	76.4	79.2	76.9	75.3	76.9	74.7	84.8
Kansas	72.6	76.3	76.9	72.0	75.9	72.8	76.7	72.1	71.1	72.0	77.8	73.6	75.1	72.8	77.0
Kentucky	78.2	78.1	79.5	77.9	82.5	80.5	75.3	79.8	77.7	80.0	75.6	75.3	75.7	77.3	75.4
Louisiana	66.1	68.6	70.7	71.7	75.6	72.0	69.3	64.1	67.3	69.5	70.7	67.8	66.8	63.2	70.3
Maine	79.6	86.2	84.1	89.3	77.1	79.4	83.4	81.4	81.8	81.5	82.2	85.3	90.9	97.8	96.6
Maryland	44.6	42.8	39.0	40.9	39.4	44.6	39.2	45.9	40.1	39.2	40.0	41.7	40.7	43.1	38.7
Massachusetts	24.4	23.7	24.1	22.7	21.0	19.1	22.7	19.5	25.5	26.2	20.0	19.5	19.6	10.8	22.1
Michigan	56.5	51.0	50.8	49.6	50.4	50.5	53.5	50.4	55.8	49.9	51.1	52.5	56.2	50.4	48.1
Minnesota	64.1	69.7	72.5	70.2	67.0	69.7	68.0	69.9	70.8	73.5	71.1	66.9	72.2	70.2	71.0
Mississippi	77.9	83.8	81.4	84.2	79.7	79.3	83.3	98.8	98.3	99.0	99.6	99.7	99.0	75.6	77.0
Missouri	68.8	67.9	66.0	69.1	69.2	68.5	68.0	67.9	69.3	71.4	69.4	64.6	70.4	70.1	72.6
Montana	92.1	88.4	88.4	89.2	95.6	90.9	89.9	93.3	88.9	90.7	93.1	95.5	92.2	89.5	93.3
Nebraska	78.2	83.5	74.3	78.9	76.9	82.7	77.9	80.8	81.5	83.1	83.9	72.1	81.3	79.0	79.2
Nevada	51.7	58.6	54.2	51.7	51.5	51.3	44.8	44.7	51.7	47.9	39.8	45.3	43.0	37.9	36.1
New Hampshire	72.9	76.3	71.8	47.2	63.8	62.6	62.4	72.5	77.4	66.9	68.4	69.4	71.8	70.7	70.3
New Jersey	25.8	28.9	28.7	26.6	31.5	25.0	21.8	27.9	24.3	26.8	24.0	23.2	23.8	12.8	20.8
New Mexico	69.3	74.9	70.1	71.5	70.6	73.6	69.7	75.8	76.2	75.5	73.1	70.8	67.3	73.0	75.6
New York	33.9	34.3	32.3	33.8	35.5	33.3	40.7	48.1	59.2	55.9	55.9	57.4	43.6	38.1	37.5
North Carolina	74.5	68.2	72.2	70.5	70.4	70.2	69.8	68.3	63.9	60.4	63.2	67.6	72.0	72.6	73.5
North Dakota	78.8	87.2	73.4	81.5	81.6	87.7	88.8	89.9	87.3	89.1	81.3	95.8	86.9	81.1	86.3

(Continued on Next Page)

Percent of Rural Crashes by Year and State

State	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Ohio	56.8	58.6	60.8	61.4	60.0	59.0	58.4	57.4	59.6	62.9	38.9	61.6	65.1	52.0	60.5
Oklahoma	72.4	72.4	72.3	71.9	71.1	72.7	70.1	71.3	71.7	70.8	73.2	71.6	71.7	69.9	70.2
Oregon	72.6	71.6	72.1	70.0	70.2	71.0	71.4	69.9	74.6	71.4	78.1	73.6	77.1	70.2	74.7
Pennsylvania	55.9	56.6	55.3	54.9	55.2	53.9	53.4	54.7	55.8	57.8	60.5	54.4	61.1	64.6	53.7
Rhode Island	24.1	15.5	21.9	21.4	21.0	15.6	18.5	18.2	17.1	15.3	15.1	14.1	19.8	17.7	23.1
South Carolina	78.2	78.3	76.9	80.7	84.1	87.6	91.2	89.3	84.4	85.4	87.1	89.1	89.1	89.6	90.2
South Dakota	88.5	90.0	92.9	90.7	89.4	84.3	85.9	90.6	89.9	86.0	92.0	89.0	89.9	89.0	89.8
Tennessee	62.7	64.8	64.1	63.5	57.3	63.3	60.8	57.6	62.7	63.6	65.3	63.9	62.5	58.1	60.4
Texas	52.9	49.2	52.1	52.9	53.5	52.2	54.9	54.9	54.7	56.1	54.9	53.8	53.9	56.1	54.6
Utah	68.2	62.4	63.0	59.5	62.3	61.8	74.3	80.6	77.9	96.2	94.7	74.0	70.8	74.8	70.4
Vermont	89.3	91.0	85.1	96.0	89.9	88.4	86.5	87.5	83.0	89.0	91.8	91.7	91.3	84.1	84.5
Virginia	65.6	68.6	64.3	63.4	62.9	65.6	61.9	65.3	61.8	63.0	59.8	61.9	60.6	64.1	56.9
Washington	58.3	63.3	59.3	64.6	59.7	58.5	59.4	59.3	53.1	60.1	56.1	59.0	64.8	61.6	63.2
West Virginia	83.3	83.6	86.1	84.1	82.4	81.8	86.3	86.3	82.4	82.2	84.5	85.1	85.8	82.3	86.1
Wisconsin	74.9	79.9	76.5	75.2	75.9	77.2	77.4	76.2	75.9	77.5	75.3	78.2	75.2	66.5	72.2
Wyoming	81.0	83.7	83.8	76.0	84.6	84.8	81.0	88.9	87.6	87.0	95.5	87.7	84.1	80.1	86.6
U.S. Total	**56.3**	**57.1**	**56.6**	**56.9**	**57.0**	**56.9**	**57.1**	**58.4**	**59.4**	**60.0**	**58.1**	**56.8**	**59.1**	**57.2**	**57.4**
Puerto Rico	50.6	51.2	50.4	44.1	37.8	39.2	37.7	37.1	39.1	38.4	41.5	39.4	49.4	47.6	45.6
U.S. & Puerto Rico Total	**56.0**	**56.8**	**56.3**	**56.4**	**56.5**	**56.5**	**56.7**	**57.9**	**59.0**	**59.5**	**57.7**	**58.2**	**58.8**	**56.9**	**57.1**

Roadway Profile

1982 and later

Variable = PROFILE

Element = Blank
- 1 - Level
- 2 - Grade
- 3 - Hill crest
- 4 - Sag
- 9 - Unknown

1975 to 1981

Variable = PROFILE

Element =
- 1 - Level
- 2 - Grade
- 9 - Unknown

Note, for 1975 and 1976, the data were originally coded differently, but the current 1975 and 1976 files use the values above. This is a case where the original coding charts are misleading.

Roadway Surface Condition

2007 and later

Variable = SUR_COND

Element = Blank
- 1 - Dry
- 2 - Wet
- 3 - Snow or Slush
- 4 - Ice/Frost
- 5 - Sand, Dirt, Mud, Gravel
- 6 - Water (Standing or Moving)
- 7 - Oil
- 8 - Other
- 9 - Unknown

1975 and 2006

Variable = SUR_COND

Element = Blank
- 1 - Dry
- 2 - Wet
- 3 - Snow or Slush
- 4 - Ice
- 5 - Sand, Dirt, Oil
- 8 - Other
- 9 - Unknown

Data from 1979 and earlier were originally coded differently but have been converted to the above codes.

1975 and later

Variable = PAVE_TYP

Element = Blank
- 1 - Concrete
- 2 - Blacktop (Bituminous)
- 3 - Brick or Block
- 4 - Slag, Gravel or Stone
- 5 - Dirt
- 8 - Other
- 9 - Unknown

School-Bus-Related

This is repeated in the Person file.

1977 and later

Variable = SCH_BUS

School Bus - refers to a motor vehicle which satisfies the following criteria:

- externally identifiable to other traffic units as a school/pupil transport vehicle;
- operated or owned by a public or private school;
- where the institution's students may range from pre-school through high school;
- whose occupants, if any, are associated with the institution; and,
- the vehicle is in operation at the time of the crash to and from the school or on a school-sponsored activity or trip.

Element = 0 - No

Use this code if it cannot be determined that a school bus or a vehicle functioning as a school bus was involved. Also use this code if the "school bus" was merely a "phantom" vehicle in the crash and was not engaged in activity or movement related to boarding or discharging passengers *(e.g., a motorist claims a school bus ran him off the road but made no contact; a school bus in the left lane blocks the view of a motorist making a right-turn-on-red)*

1 - Yes

Crashes in which a vehicle functioning as a school bus was directly or indirectly involved.

This code applies to crashes in which a school bus or a **vehicle functioning as a school bus** was directly or indirectly involved. A vehicle functioning as a school bus may not be externally identifiable as a school/pupil transport vehicle, but does meet all of the other criteria above and therefore qualifies as a vehicle used as a school bus.

Examples:

1. A transit bus at the time of the crash, used exclusively *(no other passengers except students)* to transport students to/from school or school-related activity.

2. Vans or station wagons used by schools to pick up/drop off students only *(does not include a parent picking up/dropping off students in a private vehicle).*

The "school bus" does not have to be a traffic unit in the crash, but it must have been involved in some school-related activity *(e.g., children boarding or alighting from the bus, bus stopping at or pulling from a location of such activity, etc.)*.

(Continued on Next Page)

School-Bus-Related (Continued)

This is repeated in the Person File.

Note: Also check the variable SPEC_USE in the Vehicle file. When the variable SPEC_USE is set to the value 2 then the vehicle is used as a school bus.

This code applies to crashes in which a vehicle functioning as a school bus was directly or indirectly involved. The "school bus" does not have to be a traffic unit in the crash, but it must have been involved in some school-related activity (e.g., children boarding or alighting from the bus; bus stopping at or pulling from a location of such activity, etc.)

If school-bus-related is yes, then the crash and all fatalities in that crash are school-bus-related.

A school bus crash is (1) a motor vehicle crash in which a school bus, with or without a pupil on board, is involved directly as a contact vehicle, or (2) a motor vehicle crash or an other-road-vehicle crash in which a school bus, with or without a pupil or board, is involved indirectly as a non-contact vehicle.

Additional explanation - inclusions:

> A collision involving a motor vehicle in transport in which one or more than one school bus strikes or *is* struck by another road vehicle *(directly involved).*
>
> A collision involving a pedestrian in which a child approaching or leaving a school bus, stopped and with its red lights flashing, is struck and injured by a motor vehicle *(indirectly involved)*.
>
> A collision crash or non-collision crash involving a motor vehicle in transport passing a school bus stopped and with its red lights flashing *(the school bus is a non-contact vehicle indirectly involved)*.
>
> A collision crash in which a child approaching or leaving a school bus, stopped and with its red light flashing, is struck and injured by a pedalcyclist *(school bus indirectly involved)*.

Additional explanation exclusions:

> A collision crash or non-collision crash involving a motor vehicle which is normally used as a school bus, but is carrying only senior citizens when the collision occurs

Special Jurisdiction

The special jurisdiction code refers to a road which may be under special jurisdiction even though it is patrolled by state, county or local police (e.g., all State highways running through Indian reservations are under the jurisdiction of the Indian reservation.

1975 and later

except as noted

Variable = SP_JUR

Element = Blank
- 0 - No Special Jurisdiction (included National Forests since 2008)
- 1 - National Park Service
- 2 - Military
- 3 - Indian Reservation
- 4 - College/University Campus
- 5 - Other Federal Properties (since 1977)
- 8 - Other (since 1976)
- 9 - Unknown

Speed Limit

1980 and later

Variable = SP_LIMIT

Element = Blanks
- 00 - No Statutory Limit
- 01 – 98 - Speed Limit in Miles per Hour
- 99 - Unknown

1979

Variable = SP_LIMIT

Element =
- 01 – 98 - Speed Limit in Miles per Hour
- 99 - Unknown

1977 to 1978

Variable = SP_LIMIT

Element =
- 01 – 94 - Speed Limit in Miles per Hour
- 95 - Speed Limit Is 95 mph or Greater
- 96 - No Statutory Limit
- 99 - Unknown

1975 to 1976

Variable = SP_LIMIT

Element =
- 01 – 94 - Speed Limit in Miles per Hour
- 95 - Speed Limit Is 95 mph or Greater
- 96 - No Statutory Limit
- 98 - Not Reportable
- 99 - Unknown

Note: TRAV_SP, travel speed, an estimate of the speed of the vehicle involved in the crash is found in the Vehicle file. Travel speed is often an estimate of the actual speed by the investigating officers.

State

This is repeated in the Vehicle and Person files.

1975 and later

Variable = STATE

Element = GSA State codes except for 43, Puerto Rico - This is the State in which the crash occurred. The State in which the vehicle is registered, REG_STAT, is found in the Vehicle file; the coding is the same.

If the object of the analysis is to examine the effects of the environment, then use REG_STAT rather than STATE.

01 - Alabama
02 - Alaska
04 - Arizona
05 - Arkansas
06 - California
08 - Colorado
09 - Connecticut
10 - Delaware
11 - District of Columbia
12 - Florida
13 - Georgia
15 - Hawaii
16 - Idaho
17 - Illinois
18 - Indiana
19 - Iowa
20 - Kansas
21 - Kentucky
22 - Louisiana
23 - Maine
24 - Maryland
25 - Massachusetts
26 - Michigan
27 - Minnesota
28 - Mississippi
29 - Missouri
30 - Montana
31 - Nebraska
32 - Nevada
33 - New Hampshire
34 - New Jersey
35 - New Mexico
36 - New York
37 - North Carolina
38 - North Dakota
39 - Ohio
40 - Oklahoma
41 - Oregon
42 - Pennsylvania
43 - Puerto Rico
44 - Rhode Island
45 - South Carolina
46 - South Dakota
47 - Tennessee
48 - Texas
49 - Utah
50 - Vermont
51 - Virginia
52 - Virgin Islands (since 2004)
53 - Washington
54 - West Virginia
55 - Wisconsin
56 - Wyoming

State Case

1975 and later

Variable = ST_CASE

This variable is in each Accident, Vehicle, and Person record. It is a combination of the GSA State code and an assigned consecutive number. It is a unique identifier for the crash within the year. It is used as the key, when any two of these files from the same year are merged.

This variable is stored as a numeric variable of six characters; the first two characters are the State code, and the next four characters are case number, with leading zeros if necessary.

Also see: VEH_NO, Vehicle Number, in the Vehicle File or Person File

Time

1999 and later

Variables = HOUR
or NOT_HOUR
or ARR_HOUR
or HOSP_HR (since 1987)

Element = 00 – 24 - Valid Military Times
99 - Unknown

99 and MINUTE = 97 Officially Canceled (*Does not apply to NOT_HOUR)*
99 and MINUTE = 98 Unknown Whether Transported
(Does not apply to NOT_HOUR)

Variable = MINUTE
or NOT_MIN
or ARR_MIN
or HOSP_MN (since 1987)

Element = 00 – 59 - The minute of notification/arrival
99 - Unknown

HOUR and MINUTE are the time of the crash, in hours and minutes.

NOT_HOUR and NOT_MIN are the times, in hours and minutes, of the notification of the need for emergency medical service, i.e., the time of the 911 call.

ARR_ HOUR and ARR_MIN are the arrival times, in hours and minutes, of the emergency medical service at the crash scene.

HOSP_HR and HOSP_MIN are the arrival times, in hours and minutes of the emergency medical service at the hospital.

Note that the time of the crash/arrival of the emergency medical service can occur in a different day than the arrival of emergency medical service at the crash scene/hospital. All time is 24-hour military time.

If you need to separate day and night see the variable LGT_COND under the heading Light Condition.

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Time (Continued)

1975 to 1998
(except HOSP_HR and HOSP_MN)

Variables = HOUR
or NOT_HOUR
or ARR_HOUR
or HOSP_HR (since 1987)

Element = 00-24 - Valid Military Times
99 – Unknown
00 and MINUTE = 00, Not Notified/Officially Canceled/Not Transported

Variable = MINUTE
or NOT_MIN
or ARR_MIN
or HOSP_MN (since 1987)

Element = 00 – 59 - The minute of notification/arrival
99 - Unknown

HOUR and MINUTE are the time of the crash, in hours and minutes.

NOT_HOUR and NOT_MIN are the times, in hours and minutes, of the notification of the need for emergency medical service, i.e., the time of the 911 call.

ARR_ HOUR and ARR_MIN are the arrival times, in hours and minutes, of the emergency medical service at the crash scene.

HOSP_HR and HOSP_MIN are the arrival times, in hours and minutes, of the emergency medical service at the hospital.

Note that the time of the crash/arrival of the emergency medical service can occur in a different day than the arrival of emergency medical service at the crash scene/hospital. All time is 24-hour military time.

If you need to separate day and night, see the variable LGT_COND under the heading Light Condition.

Traffic Control Devices

1982 and later

Note: that in 1991 the descriptions of the variables obtained from a PROC CONTENTS changed, but the values did not if agency SAS files are used.

Variable = TRA_CONT

Element = Blanks
00 - No Controls

NOT AT RAILROAD GRADE CROSSINGS

Highway Traffic Signals
01 - Traffic control signal *(on colors)* without pedestrian signal
02 - Traffic control *(on colors)* with pedestrian signal
03 - Traffic control signal *(on colors)* not know if pedestrian signal
04 - Flashing traffic control signal
05 - Flashing beacon
06 - Flashing highway traffic signal, type unknown, or other
07 - Lane use control signal
08 - Other highway traffic signal
09 - Unknown highway traffic signal

Regulatory Signs
20 - Stop sign
21 - Yield sign
28 - Other regulatory sign
29 - Unknown type regulatory sign

School Zone Signs
30 - School speed limit sign
31 - School advance or crossing sign
38 - Other school-related sign
39 - Unknown type school zone sign

Warning Sign
40 - Warning sign
41 - Electronic warning sign (since 2002)

Miscellaneous not at Railroad Crossing
50 - Officer, crossing guard, flagman, etc.

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Traffic Control Devices (Continued)

1982 and later

Variable = TRA_CONT

AT RAILROAD GRADE CROSSINGS

Active Devices

60 - Gates
61 - Flashing lights
62 - Traffic control signal
63 - Wigwags
64 - Bells
68 - Other train-activated device
69 - Active device, type unknown

Passive Devices

70 - Cross bucks
71 - Stop sign
72 - Other railroad crossing sign
73 - Special warning device - watchman, flagged by crew
78 - Other passive device
79 - Passive device, type unknown

Miscellaneous Devices at Railroad Crossing

80 - Grade crossing controlled, type unknown

WHETHER OR NOT AT RAILROAD GRADE CROSSING

98 - Other
99 - Unknown

1975 to 1981

Variable = TRA_CONT

Element = 00 - No Controls
01 - Flashing Traffic Signals
02 - On Colors Traffic Signal
03 - Stop Sign
04 - Yield Sign
05 - Physically Controlled Railroad Crossing
06 - Stop Sign for Railroad Crossing
07 - Other Railroad Crossing
08 - School Zone Sign
09 - Traffic Controls Not Functioning
10 - Pedestrian Signal (since 1978)
98 - Other
99 - Unknown

Original coding manuals are not consistent with the current structure of the data.

(Continued on Next Page)

Traffic Control Devices (Continued)

1982 and later

Variable = T_CONT_F

Element = Blank

0 - No Controls

1 - Device Not Functioning

Device not functioning at all (e.g., signal out, sign knocked down)

2 - Device Functioning - Functioning Improperly

Used when the device was functioning to an extent but not as intended (e.g., red signal lamp burned out, sign twisted or obscured by vegetation)

3 - Device Functioning Properly

Unless specifically noted and TRAFFIC CONTROL DEVICE is not equal to “0,” assume that the device was functioning properly (Element 3).

9 - Unknown

Used if the police crash report notes that it is unknown whether the device was functioning or not

Data not collected prior to 1982

Trafficway Flow

2003 and later

Variable = TRAF_FLO

Element = Blank
- 1 - Not Physically Divided *(Two-Way Trafficway)*
- 2 - Divided Highway, Median Strip *(Without Traffic Barrier)*
- 3 - Divided Highway, Median Strip *(With Traffic Barrier)*
- 4 - One-Way Trafficway
- 5 - Not Physically Divided *(With Two-Way Continuous Left-Turn Lane)*
- 6 - Entrance/Exit Ramp
- 9 - Unknown

1987-2002

Variable = TRAF_FLO

Element =
- 1 - Not Physically Divided *(Two-Way Trafficway)*
- 2 - Divided Highway, Median Strip *(Without Traffic Barrier)*
- 3 - Divided Highway, Median Strip *(With Traffic Barrier)*
- 4 - One-Way Trafficway
- 5 - Divided Highway, Median Strip *(With Two-Way Continuous Left-Turn Lane)* (since 2001) *(See Relation to Trafficway)*
- 9 - Unknown

1982 - 1986

Variable = TWAY_FLO

Values same as TRAF_FLO for 1987 and later namely:

Element =
- 1 - Not Physically Divided *(Two-Way Trafficway)*
- 2 - Divided Highway, Median Strip *(Without Traffic Barrier)*
- 3 - Divided Highway, Median Strip *(With Traffic Barrier)*
- 4 - One-Way Trafficway
- 9 - Unknown

1975 - 1981

Variable = ROAD_FLO

Element =
- 1 - Divided Highway, Median Strip (since 1977)
- 2 - Divided Highway, Guardrail (since 1977)
- 3 - Divided Highway, Other Barrier or Barrier Type Unknown
- 4 - Not Physically Divided
- 5 - One Way Traffic
- 9 - Unknown

Note: In 1975 and 1976 all divided highway traffic is coded as Level Element 3, i.e., divided highway, other barrier or barrier type unknown. There is no distinction made among median strips, guardrails and other barriers for these two years.

Trafficway Identifier

1998 and later

Except as noted

Beginning in 2004, a second trafficway identifier was added to accommodate intersection and intersection-related crashes where the officer provides the identifier for the second trafficway.

Variable = TWAY_ID or (TWAY_ID2 since 2004)

Element = Blank
Actual Posted Number, Assigned Number, or Common Name (if no posted or assigned number) (Maximum number of characters is 20) except:

99999999999999999999 - Unknown

1982 to 1997

Variable = TWAY_ID

Element = Actual Posted Number, Assigned Number, or Common Name (if no posted or assigned number) (Maximum number of characters is 10) except:

9999999999 - Unknown

Before coding this element, be certain of which trafficway is to be coded. If there is any question, refer to the "Remarks" section of ROADWAY FUNCTION CLASS for a hierarchy for selecting the appropriate trafficway to be coded. Code ALL highway elements with regard to this same trafficway.

Enter all alphabetic characters with CAPITAL LETTERS. If less than 20 characters, left-justify and do not zero-fill.

Obtained from the State Highway Department, or if same as that used by the State Highway Department, from the police crash report.

If ROUTE SIGNING is 1 *(Interstate)*, then "I-" is in the first two spaces of TRAFFICWAY IDENTIFIER

If ROUTE SIGNING is 2 *(US Highway)*, then "US-" is in the first three spaces of TRAFFICWAY IDENTIFIER

If ROUTE SIGNING is 3 *(State Highway)*, then "SR-" is in the first three spaces of TRAFFICWAY IDENTIFIER

If Route Signing is other than "1, 2 or 3," the route name or identifier is *left-justified. (Example: County Route 10 would be just "10," and "Front Street" would be "Front Street.")*

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Trafficway Identifier (Continued)

Immediately after the route designation *(I-, US- or SR-)*, the corresponding highway number appears. For example, Interstate 70 should be coded as "I-70" and US 66 should be coded as "US-66." A dash is used in the highway designation between the capital letters and the number.

If one trafficway is not only a State Highway but also an Interstate Highway, ROUTE SIGNING must always be coded "1-Interstate."

(a) If the TRAFFICWAY IDENTIFIER and MILEPOINT are available for only the State Highway then the ROUTE SIGNING is coded as "1-Interstate." "I-" is in the first two spaces of TRAFFICWAY IDENTIFIER followed by the full State Highway Identifier as normal (including any letters.) If California business loop *(CA215)* is also Interstate 15, then TRAFFICWAY IDENTIFIER is code as "I-SR215" or "I-CA215."

(b) If the TRAFFICWAY IDENTIFIER and MILEPOINT are available for both the State Highway and the Interstate Highway, then "I-" appears in the first two spaces of TRAFFICWAY IDENTIFIER followed by the Interstate number. The Interstate MILEPOINT is coded. E.g., "I-15" *(SR215)* or "I-15" *(CA215)*

Similarly, if a State Highway is also a U.S. Highway, then the ROUTE SIGNING is coded as "2-US Highway."

(a) If the TRAFFICWAY IDENTIFIER and MILEPOINT are available only for the State Highway, then the ROUTE SIGNING is coded as "2-US Highway." "US-" appears in the first three spaces of TRAFFICWAY IDENTIFIER followed by the full State Highway Identifier as normal *(including any letters)*. The State Highway MILEPOINT is coded. E.g.; If Florida Route 25 is also US Route 27, then code "US-SR25" or "US-FL25."

(b) If the TRAFFICWAY IDENTIFIER and MILEPOINT are available for both the U.S. Highway and the State Highway, then "US-" is in the first three spaces of TRAFFICWAY IDENTIFIER followed by the U.S. route number. The State Highway Identifier appears anywhere after the US route number. The US Route MILEPOINT is coded. E.g., "US-27" (SR25) or "US-27" (FL25)

Vehicle Forms Submitted (Number of)

This is repeated in the Vehicle and Person files.

1982 and later

Variable = VE_FORMS

Element = 01 – 99

This count the number of vehicles in transport involved in the crash. Legally parked vehicles are not included.

Note: In the case of a hit-and-run crash, a Vehicle-Driver form and a Person Level form for the driver are filled out. When the information about the vehicle-driver or person is not known -- which is often the case with hit-and-runs -- the values are coded as unknown.

1976 to 1981

Variable = VE_FORMS

Element = 00 – 99

This counts the Vehicle forms submitted, see note on vehicles below. It is unlikely that the number of vehicles involved in the crash is greater than the Number of Vehicle Forms plus two.

Note: In the event of a hit-and-run crash, if the vehicle information was not known, then **no** vehicle form was filled out. Likewise, if no information was known on the person level, usually the driver of the unknown vehicle, then a Person Level form was **not** filled out. The result is that the number of unknowns is much smaller for this time period than 1982 and later.

1976 to 1981

Variable = VEHICLES

Element = 01 – 99

This count the number of vehicles in transport involved in the crash. Legally parked vehicles are not included.

Notes:

The count includes only motor vehicles in transport. Motor vehicles are considered to be "in transport" when they are in motion on the trafficway or on the roadway. **Do not include legally parked vehicles.** Be careful; the police officer may incorrectly refer to a vehicle stopped or left on the roadway as "parked."

The count must be the number of motor vehicles involved in the crash; that is, a Vehicle Level form must be submitted for all motor vehicles involved in the crash regardless of whether the motor vehicle was a hit-and-run vehicle, an involved motor vehicle that had left the scene of the crash, etc. Refer to the instructions under HIT-AND-RUN.

(Continued on Next Page)

Vehicle Forms Submitted (Number of) (Continued)

This is repeated in the Vehicle and Person files.

2005 and later

Variable = VE_TOTAL

Element = 01 – 99

This counts the all of vehicles in the crash. This includes the vehicles in transport which are documented in the Vehicle File and the vehicles not in transport which are documented in the Vehnit File. This variable only appears in the Accident File. The Vehnit File does not exist prior to 2005.

THE

VEHICLE and VEHNIT (since 2005)

FILES

Understanding the difference between the Vehicle File and the Vehnit file

The Vehnit file was created for the 2005 FARS data and documents vehicles in a crash that are not in transport. Prior to 2005 vehicles not in transport were not included in the FARS files.

The Vehicle File and the Vehnit file have the same variables and structure. Vehicles in transport are documented in the Vehicle file, as they have been since the inception of FARS.

Vehicles in transport, which are coded in the Vehicle file have a value of "1" for the variable UNITTYPE, motor vehicle in transport, see, UNIT TYPE, page V-92. Vehicles not in transport, which are coded in the Vehnit File have values of 2, 3, or 4 for the variable UNITTYPE.

Vehicle File X-Ref

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Variable (Bold)	**Heading**	**Page #**	**Name**		**Page**
Alcohol	Driver Drinking	V-18			
Ambulance	Body Type (39 & 45) 1975-1981, Special Use (since 1980)	V-6, V-82			
AVOID (1975 to 1990 – no data collection) (1991 and later)	Crash Avoidance Maneuver,	V-16	V18	Crash Avoidance Maneuver	305
AXLES (1975 to 1990 – no data collection) (1991 to 1994) (1995 to 2007)	Axles	V-1			
BODY_TYP (1975 to 1981) (1982 to 1990) (1991 and later)	Body Type	V-2, P-7	V10	Body Type	269
Buses & trucks	Body Type or Cargo Body Type or Special Use or Vehicle Configuration	V-2, V-12, V-82, V-92			
BUS_USE (1975 to 1999 – no data collection) (2000 and later)	Bus Use	V-11	V13	Bus Use	289
CARGO_BT (1975 to 1990 – no data collection) (1991 to 1994) (1995 to 2000) (2001 and later)	Cargo Body Type	V-12	V30	Cargo Body Type	351
Cars	Body Type	V-2			
CDL_STAT (1975 to 1990 – no data collection) (1991 to 1992) (1993 and later)	Driver License Status	V-22	D8	Commercial Motor Vehicle License Status	423
CHAS_TR (1975 to 1981) (1982 and later – no data collection)	VIN Chassis-Truck	V-188			
Damage (vehicle)	Extent of Deformation	V-31			
DEATHS (1975 and later)	Fatalities in Vehicle (number)	V-32			
DEFORMED (1975 and later)	Extent of Deformation	V-31	V24	Extent of Deformation	327

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SAS Contents	1975-2008 Reference Guide			2008 Coding and Validation Manual	
Variable (Bold)	**Heading**	**Page #**	**Name**		**Page**
L_TYPE (1975 to 2003 – no data collection) (2004 and later)	Driver License Status/Type	V-25			
MAKE (1975 to 1990) (1991 and later)	Vehicle Make	V-99, P-86	V8	Vehicle Make	177
MAK_MOD (1975 to 1981) (1982 to 1986) (1987 to 1990) (1991 an later)	Vehicle Make/Vehicle Model	V-106			
MAN_COLL (1975 to 1977) (1978 to 2001) (2002 and later)	Manner of Collision	V-59, P-44, A-31	A18	Manner of Collision	77
MCARR_ID (1975 to 1997 – no data collection) (1998 and later)	Motor Carrier ID	V-66	V26	Motor Carrier Identification Number	331
MCYCL_DS (1975 and later)	Motorcycle Data	V-68, P-50			
MCYCL_TY (1975 to 1981) (1982 and later – no data collection)	Motorcycle Data	V-68			
Merging files	State Case and/or Vehicle Number	V-86, V-183			
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MODEL (1975 to 1981) (1982 to 1986) (1987 to 1990) (1991 an later)	Use MAK_MOD see Vehicle Make/Vehicle Model	V-106	V9	Vehicle Model	177
MOD_YEAR (1975 to 1997) (1998 and later)	Model Year	V-65, P-49	V11	Model Year	273
MONTH (1975 to 1993 – no data collection) (1994 and later)	Date	V-17, P-17, A-4	A8	Accident Date	31
Motorcycle	Body Type	V-3			
Motorcycle Displacement	Motorcycle Data	V-68			
Motorcycle Type	Motorcycle Data	V-68			
M_HARM (1975 to 1981) (1982 to 2003) (2004 and later)	Harmful Event	V-35	V33	Most Harmful Event	379
OCUPANTS (1975 and later)	Occupants	V-69	V4	Number of Occupants	159
Override	Impact	V-54			

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Variable (Bold)	**Heading**	**Page**	**#**		**Name**	**Page**
VIN_2 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
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VIN_4 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_5 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_6 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_7 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_8 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_9 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_10 (1975 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_11 (1975 to 1993 – no data collection) (1994 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_12 (1975 to 1993 – no data collection) (1994 and later)	Vehicle Identification Number		V-96	V12	Vehicle Identification Number	275
VIN_BT (1975 to 1981) (1982 and later)	VIN Body Type		V-185, P-94			
VIN_LNGT (1975 and later)	Vehicle Identification Number		V-98	V12	Vehicle Identification Number	275
VIN_WGT (1975 and later)	Weight (Auto)		V-195, P-99			
VIOL_CHG (1975 to 1981) (1982 to 1996) (1997 and later – see VIOLCHG1, VIOLCHG2, and VIOLCHG3)	Violations Charged		V-194			
VIOLCHG1 (1975 to 1996 – see VIOL_CHG) (1997 and later)	Violations Charged		V-191			

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Year	AVOID	AXLES	BODY_TYP	BUS_USE	CARGO_BT	CDL_STAT	CHAS_TR	DEATHS	DEFORMED	DR_CF1	DR_CF2
1975	-	-	A	-	-	-	A	A	-	A	A
1976	-	-	A	-	-	-	A	A	-	A	A
1977	-	-	A	-	-	-	A	A	-	A	A
1978	-	-	A	-	-	-	A	A	A	B	B
1979	-	-	A	-	-	-	A	A	A	C	C
1980	-	-	A	-	-	-	A	A	A	C	C
1981	-	-	A	-	-	-	A	A	A	C	C
1982	-	-	B	-	-	-	-	A	A	D	D
1983	-	-	B	-	-	-	-	A	A	D	D
1984	-	-	B	-	-	-	-	A	A	D	D
1985	-	-	B	-	-	-	-	A	A	D	D
1986	-	-	B	-	-	-	-	A	A	E	E
1987	-	-	B	-	-	-	-	A	A	E	E
1988	-	-	B	-	-	-	-	A	A	E	E
1989	-	-	B	-	-	-	-	A	A	E	E
1990	-	-	B	-	-	-	-	A	A	E	E
1991	A	A	C	-	A	A	-	A	A	F	F
1992	A	A	C	-	A	A	-	A	A	F	F
1993	A	A	D	-	A	B	-	A	A	F	F
1994	A	A	D	-	A	B	-	A	A	G	G
1995	A	B	D	-	B	B	-	A	A	H	H
1996	A	B	D	-	B	B	-	A	A	H	H
1997	A	B	D	-	B	B	-	A	A	H	H
1998	A	B	D	-	B	B	-	A	A	H	H
1999	A	B	D	-	B	B	-	A	A	H	H
2000	A	B	D	-	B	B	-	A	A	I	I
2001	A	B	D	A	C	B	-	A	A	J	J
2002	A	B	D	A	C	B	-	A	A	K	K
2003	A	B	D	A	D	B	-	A	A	K	K
2004	A	B	D	A	D	B	-	A	A	L	L
2005	A	B	D	A	D	B	-	A	A	L	L
2006	A	B	D	A	D	B	-	A	A	L	L
2007	A	B	D	A	E	B	-	A	A	L	L
2008	A	-	D	A	E	B	-	A	A	M	M

Year	DR_CF3	DR_CF4	DR_DRIANK	DR_HGT	DR_PRES	DR_TRAIN	DR_WGT	DR_ZIP	EMER_USE	FIRE_EXP	FIRST_MO
1975	A	-	A	-	A	A	-	-	-	A	A
1976	A	-	A	-	A	A	-	-	-	A	A
1977	A	-	A	-	B	A	-	-	A	A	A
1978	B	-	A	-	B	A	-	-	A	A	A
1979	C	-	A	-	B	A	-	-	A	A	A
1980	C	-	A	-	B	A	-	-	A	A	A
1981	C	-	A	-	B	A	-	-	A	A	A
1982	D	-	A	-	B	A	-	-	A	A	A
1983	D	-	A	-	B	A	-	-	A	A	A
1984	D	-	A	-	B	A	-	-	A	A	A
1985	D	-	A	-	B	A	-	-	A	A	A
1986	E	-	A	-	B	A	-	-	A	A	A
1987	E	-	A	-	B	-	-	A	A	A	A
1988	E	-	A	-	B	-	-	A	A	A	A
1989	E	-	A	-	B	-	-	A	A	A	A
1990	E	-	A	-	B	-	-	A	A	A	A
1991	F	-	A	-	B	-	-	A	A	A	A
1992	F	-	A	-	B	-	-	A	A	A	A
1993	F	-	A	-	B	-	-	A	A	A	A
1994	G	-	A	-	B		-	A	A	A	A
1995	H	-	A	-	B	-	-	A	A	A	A
1996	H	-	A	-	B	-	-	A	A	A	A
1997	H	H	A	-	B	-	-	A	A	A	A
1998	H	H	A	A	B	-	A	A	A	A	A
1999	H	H	A	A	B	-	A	A	A	A	A
2000	I	I	A	A	B	-	A	A	A	A	A
2001	J	J	A	A	B	-	A	A	A	A	A
2002	K	K	A	B	B	-	A	A	A	A	A
2003	K	K	A	B	B	-	A	A	A	A	A
2004	L	L	A	B	B	-	A	A	A	A	A
2005	L	L	A	B	B	-	A	A	A	A	A
2006	L	L	A	B	C	-	A	A	A	A	A
2007	L	L	A	B	C	-	A	A	A	A	A
2008	M	M	A	B	C	-	A	A	A	B	A

Year	FIRST_YR	FLDCD_TR	GWVR	HARM_EV	HAZ_CARG	HAZ_INV	HAZ_PLAC	HAZ_ID	HAZ_CNO	HAZ_REL	HIT_RUN
1975	A	A	-	A	-	-	-	-	-	-	A
1976	A	A	-	A	-	-	-	-	-	-	A
1977	A	A	-	A	-	-	-	-	-	-	B
1978	A	A	-	A	-	-	-	-	-	-	B
1979	A	A	-	A	-	-	-	-	-	-	B
1980	A	A	-	A	-	-	-	-	-	-	B
1981	A	A	-	A	-	-	-	-	-	-	B
1982	A	A	-	B	A	-	-	-	-	-	C
1983	A	A	-	B	A	-	-	-	-	-	C
1984	A	A	-	B	A	-	-	-	-	-	C
1985	A	A	-	B	A	-	-	-	-	-	C
1986	A	A	-	B	A	-	-	-	-	-	C
1987	A	A	-	B	A	-	-	-	-	-	C
1988	A	A	-	B	A	-	-	-	-	-	C
1989	A	A	-	B	A	-	-	-	-	-	C
1990	A	A	-	B	A	-	-	-	-	-	C
1991	A	A	-	B	B	-	-	-	-	-	C
1992	A	A	-	B	B	-	-	-	-	-	C
1993	A	A	-	C	B	-	-	-	-	-	C
1994	A	A	-	D	B	-	-	-	-	-	C
1995	A	A	-	D	B	-	-	-	-	-	C
1996	A	A	-	D	B	-	-	-	-	-	C
1997	A	A	-	E	B	-	-	-	-	-	C
1998	B	A	-	F	B	-	-	-	-	-	C
1999	B	A	-	F	B	-	-	-	-	-	C
2000	B	A	-	F	B	-	-	-	-	-	C
2001	B	A	A	F	B	-	-	-	-	-	C
2002	B	A	A	F	B	-	-	-	-	-	C
2003	B	A	A	F	B	-	-	-	-	-	C
2004	B	A	A	G	B	-	-	-	-	-	C
2005	B	A	A	H	B	-	-	-	-	-	C
2006	B	A	A	H	B	-	-	-	-	-	C
2007	B	A	A	H	-	A	A	A	A	A	C
2008	B	A	A	H	-	A	A	A	B	A	C

Year	IMPACT1	IMPACT2	IMPACTS	J_KNIFE	LAST_MO	LAST_YR	L_CL_VEH	L_COMPL	L_ENDORS	L_RESTRI	L_STATE
1975	A	A	A	-	A	A	-	-	-	A	A
1976	A	A	A	-	A	A	-	-	-	A	A
1977	A	A	A	-	A	A	-	-	-	A	A
1978	A	A	A	-	A	A	-	-	-	A	A
1979	A	A	A		A	A	-	-	-	A	A
1980	A	A	A	A	A	A	-	-	-	A	A
1981	A	A	A	A	A	A	-	-	-	A	A
1982	A	A	A	B	A	A	A	-	-	A	A
1983	A	A	A	B	A	A	A	-	-	A	A
1984	A	A	A	B	A	A	A	-	-	A	A
1985	A	A	A	B	A	A	A	-	-	A	A
1986	A	A	A	B	A	A	A	-	-	A	A
1987	A	A	A	B	A	A	-	A	-	A	A
1988	A	A	A	B	A	A	-	A	-	A	A
1989	A	A	A	B	A	A	-	A	-	A	A
1990	A	A	A	B	A	A	-	A	-	A	A
1991	A	A	A	B	A	A	-	A	A	A	A
1992	A	A	A	B	A	A	-	A	A	A	A
1993	A	A	A	B	A	A	-	B	A	A	A
1994	B	B	A	B	A	A	-	B	A	A	A
1995	B	B	A	B	A	A	-	B	A	A	A
1996	B	B	A	B	A	A	-	B	A	A	A
1997	B	B	A	B	A	A	-	B	A	A	A
1998	B	B	A	B	A	B	-	B	A	A	A
1999	B	B	A	B	A	B	-	B	A	A	A
2000	B	B	A	B	A	B	-	B	A	A	A
2001	B	B	A	B	A	B	-	B	A	A	A
2002	B	B	A	B	A	B	-	B	A	A	A
2003	B	B	A	B	A	B		B	A	A	A
2004	C	C	A	B	A	B		B	A	A	A
2005	C	C	A	B	A	B	-	B	A	A	A
2006	C	C	A	B	A	B	-	B	A	A	A
2007	C	C	A	B	A	B	-	B	A	A	B
2008	C	C	A	B	A	B	-	B	A	A	B

Year	L_STATUS	L_TYPE	MAKE	MAN_MOD	MAN_COLL	MCARR_ID	MCYCL_DS	MCYCL_TY	MODEL	MOD_YEAR	MONTH
1975	A	-	A	A	A	-	A	A	-	A	-
1976	A	-	A	A	A	-	A	A	-	A	-
1977	A	-	A	A	A	-	A	A	-	A	-
1978	A	-	A	A	B	-	A	A	-	A	-
1979	A	-	A	A	B	-	A	A	-	A	-
1980	A	-	A	A	B	-	A	A	-	A	-
1981	A	-	A	A	B	-	A	A	-	A	-
1982	B	-	B	B	B	-	A	-	-	A	-
1983	B	-	B	B	B	-	A	-	-	A	-
1984	B	-	B	B	B	-	A	-	-	A	-
1985	B	-	B	B	B	-	A	-	-	A	-
1986	B	-	B	B	B	-	A	-	-	A	-
1987	C	-	C	C	B	-	A	-	-	A	-
1988	C	-	C	C	B	-	A	-	-	A	-
1989	C	-	C	C	B	-	A	-	-	A	-
1990	C	-	D	C	B	-	A	-	-	A	-
1991	C	-	E	D	B	-	A	-	-	A	-
1992	C	-	E	D	B	-	A	-	-	A	-
1993	D	-	E	D	B	-	A	-	-	A	-
1994	D	-	E	D	B	-	A	-	-	A	-
1995	D	-	E	D	B	-	A	-	-	A	A
1996	D	-	E	D	B	-	A	-	-	A	A
1997	D	-	E	D	B	-	A	-	-	A	A
1998	D	-	E	D	B	A	A	-	-	B	A
1999	D	-	E	D	B	A	A	-	-	B	A
2000	D	-	E	D	B	A	A	-	-	B	A
2001	D	-	E	D	B	A	A	-	-	B	A
2002	D	-	E	D	C	A	A	-	-	B	A
2003	D	-	E	D	C	A	A	-	-	B	A
2004	E	A	E	D	C	A	A	-	-	B	A
2005	E	A	E	D	C	A	A	-	-	B	A
2006	E	A	E	D	C	A	A	-	-	B	A
2007	E	A	E	D	C	B	A	-	-	B	A
2008	E	A	E	D	C	B	A	-	-	B	A

Year	M_HARM	OCUPANTS	OWNER	PREV_ACC	PREV_DWI	PREV_OTH	PREV_SPD	PREV_SUS	REG_STAT	ROLLOVER	SEQ1
1975	A	A	-	A	A	A	A	A	A	-	-
1976	A	A	-	A	A	A	A	A	A	-	-
1977	A	A	-	A	A	A	A	A	A	-	-
1978	A	A	-	A	A	A	A	A	A	A	-
1979	A	A	-	A	A	A	A	A	A	A	-
1980	A	A	-	A	A	A	A	A	A	A	-
1981	A	A	-	A	A	A	A	A	A	A	-
1982	B	A	-	A	A	A	A	A	A	A	-
1983	B	A	-	A	A	A	A	A	A	A	-
1984	B	A	-	A	A	A	A	A	A	A	-
1985	B	A	-	A	A	A	A	A	A	A	-
1986	B	A	-	A	A	A	A	A	A	A	-
1987	B	A	-	A	A	A	A	A	A	A	-
1988	B	A	-	A	A	A	A	A	A	A	-
1989	B	A	-	A	A	A	A	A	A	A	-
1990	B	A	-	A	A	A	A	A	A	A	-
1991	B	A	A	A	A	A	A	A	A	A	-
1992	B	A	A	A	A	A	A	A	A	A	-
1993	C	A	A	A	A	A	A	A	A	A	-
1994	D	A	A	B	B	B	B	B	A	A	-
1995	D	A	A	B	B	B	B	B	A	A	-
1996	D	A	A	B	B	B	B	B	A	A	-
1997	E	A	A	B	B	B	B	B	A	A	-
1998	F	A	A	B	B	B	B	B	A	A	-
1999	F	A	A	B	B	B	B	B	A	A	-
2000	F	A	A	B	B	B	B	B	A	A	-
2001	F	A	A	B	B	B	B	B	A	A	-
2002	F	A	A	B	B	B	B	B	A	A	-
2003	F	A	A	B	B	B	B	B	A	A	-
2004	G	A	A	B	B	B	B	B	A	A	A
2005	G	A	A	B	B	B	B	B	A	A	B
2006	G	A	A	B	B	B	B	B	A	A	B
2007	G	A	A	B	B	B	B	B	A	A	B
2008	H	A	A	B	B	B	B	B	B	A	C

Year	SEQ2	SEQ3	SEQ4	SEQ5	SEQ6	SER_TR	SPEC_USE	STATE	ST_CASE	TOWAWAY	TOW_VEH
1975	-	-	-	-	-	A	A	A	A	A	A
1976	-	-	-	-	-	A	A	A	A	B	A
1977	-	-	-	-	-	A	A	A	A	B	A
1978	-	-	-	-	-	A	A	A	A	B	A
1979	-	-	-	-	-	A	A	A	A	B	A
1980	-	-	-	-	-	A	A	A	A	B	A
1981	-	-	-	-	-	A	A	A	A	B	A
1982	-	-	-	-	-	A	A	A	A	B	B
1983	-	-	-	-	-	A	A	A	A	B	C
1984	-	-	-	-	-	A	A	A	A	B	C
1985	-	-	-	-	-	A	A	A	A	B	C
1986	-	-	-	-	-	A	A	A	A	B	C
1987	-	-	-	-	-	A	A	A	A	B	C
1988	-	-	-	-	-	A	A	A	A	B	C
1989	-	-	-	-	-	A	A	A	A	B	C
1990	-	-	-	-	-	A	A	A	A	B	C
1991	-	-	-	-	-	A	A	A	A	B	C
1992	-	-	-	-	-	A	A	A	A	B	C
1993	-	-	-	-	-	A	A	A	A	B	C
1994	-	-	-	-	-	A	A	A	A	B	C
1995	-	-	-	-	-	A	A	A	A	B	C
1996	-	-	-	-	-	A	A	A	A	B	C
1997	-	-	-	-	-	A	A	A	A	B	C
1998	-	-	-	-	-	A	A	A	A	B	C
1999	-	-	-	-	-	A	A	A	A	B	C
2000	-	-	-	-	-	A	A	A	A	B	C
2001	-	-	-	-	-	A	A	A	A	B	C
2002	-	-	-	-	-	A	A	A	A	B	C
2003	-	-	-	-	-	A	A	A	A	B	C
2004	A	A	A	A	A	A	A	A	A	B	D
2005	B	B	B	B	B	A	A	A	A	B	D
2006	B	B	B	B	B	A	A	A	A	B	D
2007	B	B	B	B	B	A	A	A	A	B	D
2008	C	C	C	C	C	A	A	A	A	B	D

Year	TRAV_SP	UNDERIDE	UNITTYPE	VEH_CF1	VEH_CF2	VEH_MAN	VEH_NO	VE_FORMS	VIN	VINA_MOD	VIN_1
1975	A	-	-	A	A	-	A		A	A	A
1976	A	-	-	A	A	-	A	A	A	A	A
1977	A	-	-	A	A	-	A	A	A	A	A
1978	A	-	-	A	A	-	A	A	A	A	A
1979	A	-	-	A	A	-	A	A	A	A	A
1980	-	-	-	A	A	-	A	A	A	A	A
1981	-	-	-	A	A	-	A	A	A	A	A
1982	A	-	-	B	B	A	A	B	A	A	A
1983	A	-	-	B	B	A	A	B	A	A	A
1984	A	-	-	B	B	A	A	B	A	A	A
1985	A	-	-	B	B	A	A	B	A	A	A
1986	A	-	-	B	B	A	A	B	A	A	A
1987	A	-	-	B	B	A	A	B	A	A	A
1988	A	-	-	B	B	A	A	B	A	A	A
1989	A	-	-	B	B	A	A	B	A	A	A
1990	A	-	-	B	B	A	A	B	A	A	A
1991	A	-	-	B	B	A	A	B	A	A	A
1992	A	-	-	B	B	A	A	B	A	A	A
1993	A	-	-	B	B	A	A	B	A	A	A
1994	A	A	-	B	B	A	A	B	A	A	A
1995	A	A	-	B	B	A	A	B	A	A	A
1996	A	A	-	B	B	A	A	B	A	A	A
1997	A	A	-	B	B	A	A	B	A	A	A
1998	A	A	-	C	C	A	A	B	A	A	A
1999	A	A	-	D	D	A	A	B	A	A	A
2000	A	A	-	E	E	A	A	B	A	A	A
2001	A	A	-	F	F	A	A	B	A	A	A
2002	A	A	-	G	G	A	A	B	A	A	A
2003	A	A	-	G	G	A	A	B	A	A	A
2004	A	A	-	H	H	A	A	B	A	A	A
2005	A	A	A	I	I	A	A	B	A	A	A
2006	A	A	A	I	I	A	A	B	A	A	A
2007	A	A	A	J	J	A	A	B	A	A	A
2008	A	A	A	J	J	A	A	B	A	A	A

Year	VIN_2	VIN_3	VIN_4	VIN_5	VIN_6	VIN_7	VIN_8	VIN_9	VIN_10	VIN_11	VIN_12
1975	A	A	A	A	A	A	A	A	A	-	-
1976	A	A	A	A	A	A	A	A	A	-	-
1977	A	A	A	A	A	A	A	A	A	-	-
1978	A	A	A	A	A	A	A	A	A	-	-
1979	A	A	A	A	A	A	A	A	A	-	-
1980	A	A	A	A	A	A	A	A	A	-	-
1981	A	A	A	A	A	A	A	A	A	-	-
1982	A	A	A	A	A	A	A	A	A	-	-
1983	A	A	A	A	A	A	A	A	A	-	-
1984	A	A	A	A	A	A	A	A	A	-	-
1985	A	A	A	A	A	A	A	A	A	-	-
1986	A	A	A	A	A	A	A	A	A	-	-
1987	A	A	A	A	A	A	A	A	A	-	-
1988	A	A	A	A	A	A	A	A	A	-	-
1989	A	A	A	A	A	A	A	A	A	-	-
1990	A	A	A	A	A	A	A	A	A	-	-
1991	A	A	A	A	A	A	A	A	A	-	-
1992	A	A	A	A	A	A	A	A	A	-	-
1993	A	A	A	A	A	A	A	A	A	-	-
1994	A	A	A	A	A	A	A	A	A	A	A
1995	A	A	A	A	A	A	A	A	A	A	A
1996	A	A	A	A	A	A	A	A	A	A	A
1997	A	A	A	A	A	A	A	A	A	A	A
1998	A	A	A	A	A	A	A	A	A	A	A
1999	A	A	A	A	A	A	A	A	A	A	A
2000	A	A	A	A	A	A	A	A	A	A	A
2001	A	A	A	A	A	A	A	A	A	A	A
2002	A	A	A	A	A	A	A	A	A	A	A
2003	A	A	A	A	A	A	A	A	A	A	A
2004	A	A	A	A	A	A	A	A	A	A	A
2005	A	A	A	A	A	A	A	A	A	A	A
2006	A	A	A	A	A	A	A	A	A	A	A
2007	A	A	A	A	A	A	A	A	A	A	A
2008	A	A	A	A	A	A	A	A	A	A	A

Year	VIN_BT	VIN_LNGT	VIN_WGT	VIOLCHG1	VIOLCHG2	VIOLCHG3	VIOL_CHG	V_CONFIG	WGTCD_TR	WHLBS_LG	WHLBS_SH
1975	-	A	A	-	-	-	A	-	A	A	A
1976	-	A	A	-	-	-	A	-	A	A	A
1977	-	A	A	-	-	-	A	-	A	A	A
1978	-	A	A	-	-	-	A	-	A	A	A
1979	-	A	A	-	-	-	A	-	A	A	A
1980	-	A	A	-	-	-	A	-	A	A	A
1981	-	A	A	-	-	-	A	-	A	A	A
1982	A	A	A	-	-	-	B	-	A	A	A
1983	A	A	A	-	-	-	B	-	A	A	A
1984	A	A	A	-	-	-	B	-	A	A	A
1985	A	A	A	-	-	-	B	-	A	A	A
1986	A	A	A	-	-	-	B	-	A	A	A
1987	A	A	A	-	-	-	B	-	A	A	A
1988	A	A	A	-	-	-	B	-	A	A	A
1989	A	A	A	-	-	-	B	-	A	A	A
1990	A	A	A	-	-	-	B	-	A	A	A
1991	A	A	A	-	-	-	B	A	A	A	A
1992	A	A	A	-	-	-	B	A	A	A	A
1993	A	A	A	-	-	-	B	A	A	A	A
1994	A	A	A	-	-	-	B	A	A	A	A
1995	A	A	A	-	-	-	B	B	A	A	A
1996	A	A	A	-	-	-	B	B	A	A	A
1997	A	A	A	A	A	A	-	B	A	A	A
1998	A	A	A	A	A	A	-	B	A	A	A
1999	A	A	A	A	A	A	-	B	A	A	A
2000	A	A	A	A	A	A	-	B	A	A	A
2001	A	A	A	A	A	A	-	C	A	A	A
2002	A	A	A	A	A	A	-	C	A	A	A
2003	A	A	A	A	A	A	-	C	A	A	A
2004	A	A	A	A	A	A	-	C	A	A	A
2005	A	A	A	A	A	A	-	C	A	A	A
2006	A	A	A	A	A	A	-	C	A	A	A
2007	A	A	A	A	A	A	-	C	A	A	A
2008	A	A	A	A	A	A	-	C	A	A	A

Axles

1995 to 2007

Number of *(Counts the total number of axles on the **vehicle** for the vehicle including trailing units.)*

(The major change in this variable from 1994 to 1995 is the count of axles on the vehicle rather than the deployed axles on the ground)

Variable = AXLES

Element =	00	- Not Applicable, not a Medium/Heavy Truck or Bus
	02 – 97	- Number of Axles
	98	- Medium/Heavy Truck or Bus, Number of Axles Unknown
	99	- Unknown if Light or Medium/Heavy Truck or Bus

1991 to 1994

Number of *(Counts the total number of deployed axles on the **ground** for the vehicle including trailing units.)*

Variable = AXLES

Element =	00	- Not Applicable, Not a Truck or Bus
	02 – 97	- Number of Axles
	98	- Medium/Heavy Truck or Bus, Number of Axles Unknown
	99	- Unknown Vehicle Type

Note: This element has been removed from FARS since 2008.

Body Type

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1991 and later

Except as noted
By numerical order

Variable = BODY_TYP

Element =
01 - Convertible (excludes sunroof, T-bar)
02 - 2-Door Sedan/Hardtop/Coupe
03 - 3-Door/2-Door Hatchback
04 - 4-Door Sedan/Hardtop
05 - 5-Door/4-Door Hatchback
06 - Station Wagon (excluding van and truck-based)
07 - Hatchback, number of doors unknown
08 - Other auto (1991 – 93 only)
08 - Sedan/Hardtop, number of doors unknown (since 1994)
09 - Unknown auto type (1991 – 93 only)
09 - Other or Unknown automobile type (since 1994)
10 - Auto-Based Pickup
11 - Auto-Based Panel (cargo station wagon, auto-based ambulance or hearse)
12 - Large Limousine - more than four side doors or stretch chassis
13 - Three-Wheel Automobile or Automobile Derivative
14 - Compact Utility (ANSI D-16 Utility Vehicle Categories “Small” and “Midsize”)
15 - Large Utility (ANSI D-16 Utility Vehicle Categories “Full Size” and “Large”)
16 - Utility Station Wagon
19 - Utility Unknown Body
20 - Minivan
21 - Large Van – Includes van-based buses
22 - Step Van or Walk-In Van
23 - Van Motorhome (deleted in 2003 and later)
24 - Van-Based School Bus (1993 – 02 only)
25 - Van-Based Transit Bus (1993 – 02 only)
28 - Other Van Type (Hi-Cube Van)
29 - Unknown Van Type
30 - Compact Pickup (Gross Vehicle Weight, GVWR, < 4,500 lbs)
31 - Standard Pickup (4,500 lbs □GVWR < 10,000 lbs)
32 - Pickup with Slide-In Camper
33 - Convertible Pickup

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1991 and later

Except as noted
By numerical order

39 - Unknown (pickup style) Light Conventional Truck Type
40 - Cab Chassis-Based (includes light stake, light dump, light tow, rescue vehicles)
41 - Truck-Based Panel
42 - Light-Truck-Based motorhome (chassis mounted)
45 - Other Light Conventional Truck Type (includes stretched suburban limousine)
48 - Unknown Light-Truck Type (not a pickup)
49 - Unknown Light-Vehicle Type (automobile, utility vehicle, van or light truck)
50 - School Bus
51 - Cross-Country/Intercity Bus (i.e., Greyhound)
52 - Transit Bus (city Bus)
58 - Other Bus Type
59 - Unknown Bus Type
60 - Step Van
61 - Single-Unit Straight Truck (10,000 lbs<GVWR< or =19,500 lbs.)
62 - Single-Unit Straight Truck (19,500 lbs<GVWR< or =26,000 lbs.)
63 - Single-Unit Straight Truck (GVWR>26,000 lbs)
64 - Single-Unit Straight Truck (GVWR unknown)
65 - Medium/Heavy Truck-Based Motorhome
66 - Truck/Tractor (cab only, or with any number of trailing units: any weight)
67 - Medium/Heavy Pickup (GVWR > 10,000 lbs, since 2001)
71 - Unknown if single-unit or combination-unit Medium Truck (10,000 lbs < GVWR < 26,000 lbs)
72 - Unknown if single-unit or combination-unit Heavy Truck (GVWR>26,000 lbs.)
73 - Camper or Motorhome, Unknown Truck Type
78 - Unknown Medium/Heavy Truck Type
79 - Unknown Truck Type
80 - Motorcycle
81 - Moped (motorized bicycle)
82 - Three-Wheel Motorcycle/Moped - Not All-Terrain Vehicle

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1991 and later

Except as noted
By numerical order

83 - Off-Road Motorcycle (2-wheel, since 1993)
88 - Other Motored Cycle Type (mini-bikes, motor scooters, pocket motorcycles, pocket bikes. since 2008)
88 - Other Motored Cycle Type (mini-bikes, motor scooters, 1991 – 07)
89 - Unknown Motored Cycle Type
90 - ATV (All-Terrain Vehicle; includes 3 or 4 wheels)
91 - Snowmobile
92 - Farm Equipment Other Than Trucks
93 - Construction Equipment Other Than Trucks (includes graders)
94 - Motorized Wheel Chair (since 1997)
97 - Other Vehicle Type (includes go-cart, fork-lift, city street sweeper, dune/swamp buggy, golf cart)
99 - Unknown Body Type

1982 to 1990

By numerical order

Variable = BODY_TYP

Element =
01 - Convertible
02 - 2-Door Sedan/HT/Coupe
03 - 3-Door/2-Door Hatchback
04 - 4-Door Sedan/HT
05 - 5-Door/4-Door Hatchback
06 - Station Wagon
07 - Hatchback/number of doors unknown
08 - Other Auto
09 - Unknown Auto Type
10 - Auto Pickup
11 - Auto Panel
12 - Short Utility/Not Truck-Based
13 - Large Limousine
14 - 3-Wheel vehicle unknown body type
20 - Motorcycle
21 - Moped
27 - 3-Wheel Motorcycle or Moped
28 - Other Cycle
29 - Unknown Cycle

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1982 to 1990

By numerical order

30 - School Bus
31 - Cross-Country/Intercity
32 - Transit Bus
38 - Other Bus
39 - Unknown Bus
40 - Van
41 - Van Commercial Cutaway
42 - Van Motorhome
48 - Other Van type
49 - Unknown Van type
50 - Pickup
51 - Pickup w/Slide-In Camper
52 - Pickup-Based Motorhome
53 - Cab Chassis Based
54 - Truck-Based Panel
55 - Truck-Based SW
56 - Truck-Based Utility
58 - Other Light Conventional Truck
59 - Unknown Light Convent Truck
67 - Utility, Base Body Unknown
69 - Unknown Light Truck
70 - Straight Truck, low GVW
71 - Straight Truck, medium GVW
72 - Straight Truck, high GVW
73 - Medium/Heavy Truck Motorhome
74 - Truck/Tractor
75 - Unknown Medium Truck
76 - Unknown Heavy Truck
77 - Camper/Motorhome
78 - Single Unit Straight Truck GVW Unknown
79 - Unknown Truck Type
80 - Snowmobile
81 - Farm Equipment/Not Trucks
82 - ATV, Dune/Swamp Buggy
83 - Construction Equipment/Not Trucks
88 - Other
89 - Unknown Other Vehicle
90 - 3-Wheel Vehicle Unknown Body Type
99 - Unknown Body Type

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1975 to 1981

By numerical order

Variable = BODY_TYP

Element =
01 - Convertible
02 - 2-Door Sedan HT/Coupe
03 - 4-Door Sedan HT
04 - Hatchback
05 - Car-Pickup Body
06 - Station Wagon
07 - On/Off Road Vehicle – Jeep CJ-S, Bronco, Blazer, Scout, etc. (1975 – 79)
08 - Other Auto
09 - Unknown Auto Type
15 - Motorcycle
16 - Moped
17 - Other Cycle
18 - Unknown Cycle
25 - School Bus
26 - Cross-County
27 - Transit Bus
28 - Other Bus
29 - Unknown Bus
35 - Snowmobile
36 - Farm Equipment
37 - Dune/Swamp Buggy
38 - Construction Equipment
39 - Ambulance/Hearse Type
40 - Large Limousine
41 - Camper/Motorhome
42 - Fire Truck
43 - On/Off-Road Vehicle – Jeep CJ-S, Bronco, Blazer, Scout, etc. (1980 – 81)
44 - Other Special Vehicle
45 - Ambulance EMS
50 - Pickup
51 - Van
52 - Truck-Based Station Wagon
53 - Straight Truck, Low GVW
54 - Straight Truck, Medium GVW

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1975 to 1981

By numerical order

55 - Straight Truck, High GVW
56 - Straight Truck, Unknown GVW
57 - Two-Unit Truck
58 - Multi-Unit Truck
59 - Truck-Tractor
60 - Unknown Type Truck
99 - Unknown

Vehicle (Body Type) Classification

Variable = BODY_TYP by NHTSA vehicle category

NHTSA has precise definitions for several vehicle categories, such as passenger cars, pickups, buses, etc. For some categories, one will also need the variable TOW_VEH.

LE is less than or equal
EQ is equal

Vehicle Body Type Classification	Data Year and Code		
	1975-1981 (BODY_TYP)	1982-1990 (BODY_TYP)	1991 and later (BODY_TYP)
Passenger Cars	01 LE BODY_TYP LE 09	01 LE BODY_TYP LE 11 OR BODY_TYP EQ 67	01 LE BODY_TYP LE 11
Light Trucks	BODY_TYP EQ 43 OR BODY_TYP EQ 50 OR BODY_TYP EQ 52 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 0)	BODY_TYP EQ 12 OR 50 LE BODY_TYP LE 51 OR 53 LE BODY_TYP LE 56 OR 58 LE BODY_TYP LE 59 OR 68 LE BODY_TYP LE 69 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])	14 LE BODY_TYP LE 19 OR 30 LE BODY_TYP LE 41 OR 45 LE BODY_TYP LE 49 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])
Utility Vehicles Note that utility vehicles are also part of the light-truck category	BODY_TYP EQ 43	14 LE BODY_TYP LE 19 BODY_TYP EQ 12 OR BODY_TYP EQ 56 OR BODY_TYP EQ 68	14 LE BODY_TYP LE 19

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

Vehicle (Body Type) Classification

Variable = BODY_TYP BY NHTSA vehicle category

Vehicle Body Type Classification	Data Year and Code		
	1975-1981 (BODY_TYP)	1982-1990 (BODY_TYP)	1991 and later (BODY_TYP)
Pickups	BODY_TYP EQ 50	50 LE BODY_TYP LE 51	30 LE BODY_TYP LE 39 {See BODY_TYP value 67 from 2001}
Vans	BODY_TYP EQ 51	40 LE BODY_TYP LE 41 OR 48 LE BODY_TYP LE 49	20 LE BODY_TYP LE 22 OR 28 LE BODY_TYP LE 29 {OR 24 LE BODY_TYP LE 25 since 1993}
Light Trucks & Vans	BODY_TYP EQ 43 OR 50 LE BODY_TYP LE 52 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 0)	BODY_TYP EQ 12 OR 40 LE BODY_TYP LE 41 OR 48 LE BODY_TYP LE 51 OR 53 LE BODY_TYP LE 56 OR 58 LE BODY_TYP LE 59 OR 68 LE BODY_TYP LE 69 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])	14 LE BODY_TYP LE 22 OR 28 LE BODY_TYP LE 41 OR 45 LE BODY_TYP LE 49 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9]) {OR 24 LE BODY_TYP LE 25 since 1993}
Passenger Vehicles	01 LE BODY_TYP LE 09 OR BODY_TYP EQ 43 OR 50 LE BODY_TYP LE 52 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 0)	01 LE BODY_TYP LE 12 OR 40 LE BODY_TYP LE 41 OR 48 LE BODY_TYP LE 51 OR 53 LE BODY_TYP LE 56 OR 58 LE BODY_TYP LE 59 OR 67 LE BODY_TYP LE 69 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])	01 LE BODY_TYP LE 11 OR 14 LE BODY_TYP LE 22 OR 28 LE BODY_TYP LE 41 OR 45 LE BODY_TYP LE 49 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9]) {OR 24 LE BODY_TYP LE 25 since 1993}
Medium Trucks	53 LE BODY_TYP LE 54 OR BODY_TYP EQ 56	70 LE BODY_TYP LE 71 OR BODY_TYP EQ 75 OR BODY_TYP EQ 78	60 LE BODY_TYP LE 62 OR BODY_TYP EQ 64 OR BODY_TYPEQ 67 BODY_TYP EQ 71

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

Vehicle (Body Type) Classification

Variable = BODY_TYP BY NHTSA vehicle category

Vehicle Body Type Classification	Data Year and Code		
	1975-1981 (BODY_TYP)	1982-1990 (BODY_TYP)	1991 and later (BODY_TYP)
Heavy Trucks	BODY_TYP EQ 55 OR 57 LE BODY_TYP LE 59 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 1)	BODY_TYP EQ 72 OR BODY_TYP EQ 74 OR BODY_TYP EQ 76 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])	BODY_TYP EQ 63 OR BODY_TYP EQ 66 OR BODY_TYP EQ 72 OR BODY_TYP EQ 78 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])
Large Trucks	53 LE BODY_TYP LE 59 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 1)	70 LE BODY_TYP LE 72 OR 74 LE BODY_TYP LE 76 OR BODY_TYP EQ 78 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])	60 LE BODY_TYP LE 64 OR 66 LE BODY_TYP LE 67 OR 71 LE BODY_TYP LE 72 OR BODY_TYP EQ 78 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])
Combination Trucks	([53 LE BODY_TYP LE 56] AND TOW_VEH EQ 1) OR 57 LE BODY_TYP LE 59 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 1)	(70 LE BODY_TYP LE 72) AND [1 LE TOW_VEH LE 4]) OR BODY_TYP EQ 74 OR (75 LE BODY_TYP LE 76) AND [1 LE TOW_VEH LE 4]) OR (78 LE BODY_TYP LE 79) AND [1 LE TOW_VEH LE 4])	(60 LE BODY_TYP LE 64 AND [1 LE TOW_VEH LE 4]) OR (71 LE BODY_TYP LE 72 AND [1 LE TOW_VEH LE 4]) OR (78 LE BODY_TYP LE 79 AND [1 LE TOW_VEH LE 4]) OR BODY_TYP EQ 66
Single Unit Trucks		[70 LE BODY_TYP LE 72 OR 75 LE BODY_TYP LE 76 OR BODY_TYP EQ 78] AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9]	[60 LE BODY_TYP LE 64 OR 71 LE BODY_TYP LE 72 OR BODY_TYP EQ 78 OR BODY_TYP EQ 67] AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9] *See V_CONFIG*
Motorcycles	15 LE BODY_TYP LE 18	20 LE BODY_TYP LE 29	80 LE BODY_TYP LE 89
Buses	25 LE BODY_TYP LE 29	30 LE BODY_TYP LE 39	50 LE BODY_TYP LE 59 *See V_CONFIG*

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person File.
Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1991 and later

* Within the yearly NHTSA publication Traffic Safety Facts, the term "Light Trucks" includes Vans.

Note BODY_TYP 12, large limousines and BODY_TYP 13, three-wheel automobiles or automobile derivatives, are not included as part of Passenger Cars or Passenger Vehicles.

When defining **School Buses** 1993 and later be sure to include the **new** body type **24 (van-based school bus)**. However, body type 24 is not part of Buses.

When defining **Transit Buses** 1993 and later be sure to include the **new** body type **25 (van-based transit bus)**. However, body type 25 is not part of Buses.

Note: A single-unit truck that tows another vehicle, or a bobtail, is considered a combination truck.

1982 to 1990

* Within the yearly NHTSA report Fatal Accident Report System, the term “Light Truck” includes Vans. Utility vehicles are also part of the light-truck category.

Note: BODY_TYP 13, large limousines and BODY_TYP 14, three-wheel automobiles or automobile derivatives, are not included as part of Passenger Cars or Passenger Vehicles.

Note: A single-unit truck that tows another vehicle, or a bobtail by itself, is considered a combination truck.

1975 to 1981

* Within the yearly NHTSA report Fatal Accident Reporting System, the term "Light Trucks" includes Vans.

** Note that utility vehicles are also part of the light truck category

The body type data do not track with the original documentation. For example, the documentation states that BODY_TYP EQ 7 is for utility vehicles. However, when the files are examined one sees that BODY_TYP EQ 43 is the value that will provide the desired result. The files have been modified to make the early years for this variable compatible with 1981.

Note: BODY_TYP 40, large limousines, are not included as part of Passenger Cars or Passenger Vehicles.

Bus Use

2000 and later

Variable = BUS_USE

Element = 0 - Not used as a Bus

This element is used for vehicles that do not have a bus body type AND were not being used as a bus in the crash. It is also used for vehicles with bus body types that were not in service at the time of the crash, for example, a school bus or intercity bus without occupant's enroute to a bus service facility that is involved in a fatal event.

1 - Used as a Public School Bus

2 - Used as a Private School Bus

3 - Used as a School Bus, Public or Private Unknown

These elements (1-3) are for vehicles used to transport groups of school children *(up to the 12th grade)* to/from school or any other school function or activity. These can include school-sponsored chartered tours and trips to school athletic events in school or chartered buses. This can involve school-sponsored Head Start Programs *(also see RELATED FACTORS-VEHICLE LEVEL element 37-Head Start/Day Care").*

4 - Used as a Scheduled Service Bus

This element is used for regular municipal transit service and cross-country or intercity scheduled service, for example, scheduled Greyhound bus service between major cities. It also includes scheduled inter-city mass transit bus service.

5 - Used as a Tour Bus

Is used for any tour for sightseeing, pleasure trips, etc. These tours are typically in large chartered buses, but can be in van-based buses as well. This does not include school-sponsored functions or activities (see elements "1-3")

6 - Used as a Commuter Bus

Is used for:

- Commuting between home and work or school (beyond 12th grade; e.g., college commute).
- Direct point-to-point service (e.g., parking lot or pickup location near home to drop-off location near work.

These commuter buses can be large chartered buses and van-based buses.

7 - Used as a Shuttle Bus

Is used when the vehicle was used to shuttle people other than for commuting *(element 6)*, school *(elements 1-3)*, tours *(element 5)*, or scheduled interstate/intercity/intra-city travel *(element 4)*. Examples are shuttles from airport, hotels, churches, community-sponsored Head Start/day care, rental cars, to/from parking lots at sporting events, business facility-to-facility, prison or military and other governmental shuttling, etc. *(For community-sponsored Head Start/day care, also see RELATED FACTORS – VEHICLE LEVEL, element 37-Transporting Children to/from Head Start/Day Care.)*

8 - Modified for Personal/Private Use

Is used for a bus body type that has been modified for personal or private use. For example, a bus with seats removed and exterior altered to allow for personal/private hauling of cargo (instead of passengers). Also includes musical groups in cross-country bus with interior remodeled with home-like conveniences.

9 - Unknown Bus Use

Cargo Body Type

See V_CONFIG and BODY_TYP

2001 and later

Variable = CARGO_BT

Element = Blanks

00 - Not Applicable Not a Medium/Heavy Truck or Bus

This element is used for automobiles, motorcycles, small buses (with less than 9 seats, including driver) and small trucks or vans *(10,000 lbs. or less)*, not carrying hazardous cargo.

01 - Van/Enclosed Box

This element is used for all enclosed trailers and enclosed cargo vans. This is the most frequently used element for medium/heavy trucks.

02 - Cargo Tank

03 - Flatbed

04 - Dump

05 - Concrete Mixer

06 - Auto Transporter

This body type is a unit capable of transporting fully assembled automobiles.

07 - Garbage/Refuse

08 - Grain, Chips, Gravel

09 - Pole

A Pole Trailer is used to carry logs or other long objects. The unloaded trailer resembles an extended pole with no flat surface as with a flatbed trailer.

10 - Log (since 2007)

11 – Intermodal Chassis (since 2007)

12 – Vehicle Towing Another Motor Vehicle (since 2007)

20 - Bus *(seats 9-15 people, including driver)*

21 - Bus *(seats for 16 or more people, including driver,* since 2007*)*

21 - Bus *(seats more than 15 people, including driver,* 2001 – 06*)*

96 - No Cargo Body Type

This element is used for any medium or heavy truck with no cargo- carrying capability (bobtail); a truck chassis with a cab only *(stripped chassis)*; and light trucks *(Vehicle Configuration equals* element *70)* and passenger vehicles *(Vehicle Configuration equals* element *80)* displaying a hazardous materials placard.

97 - Medium/Heavy Truck, or Bus, Other Cargo Body Type *(not* element*s 01-12, 20-21)*

This element is used when the cargo body type is other than the body types listed in elements 01-09, 20-21. A Stake Truck has side rails, but is neither an enclosed box nor a flatbed. Element 97 would apply to this vehicle.

(Continued on Next Page)

Cargo Body Type (Continued)

See V_CONFIG and BODY_TYP

2001 and later

98 - Medium/Heavy Truck, or Bus, Unknown Cargo Body Type

This element is used when the cargo body type is not known or when there is not enough information to distinguish one cargo body type from another. An example would be contradictory data on whether the truck is a van/enclosed box or a flatbed.

99 - Unknown if Light/Medium/Heavy Truck or Bus

This element is used when there is not enough information to determine if the vehicle meets the definition of a medium/heavy truck but there is reason to suspect that it may qualify.

1995 to 2000

Variable = CARGO_BT

Element = 00 - Not Applicable Not a Truck or Bus
01 - Van/Enclosed Box
02 - Cargo Tank
03 - Flatbed
04 - Dump
05 - Concrete Mixer
06 - Auto Transporter
07 - Garbage/Refuse
08 - Bus
97 - Medium/Heavy Truck, Other Cargo Body Type
98 - Medium/Heavy Truck, Unknown Cargo Body Type
99 - Unknown if Light or Medium/Heavy Truck/Bus

1991 to 1994

Variable = CARGO_BT

Element = 00 - Not Applicable Not a Truck or Bus
01 - Van/Enclosed Box
02 - Cargo Tank
03 - Flatbed
04 - Dump
05 - Concrete Mixer
06 - Auto Transporter
07 - Garbage/Refuse
08 - Medium/Heavy Truck, Other Body Type
09 - Bus
99 - Unknown Vehicle Type

Compliance with License Endorsements

1991 and later

Variable = L_ENDORS

Element = Blank
- 0 - No Endorsements required for this vehicle
- 1 - Endorsement*(s)* required, complied with
- 2 - Endorsement*(s)* required, not complied with
- 3 - Endorsement*(s)* required, compliance unknown
- 9 - Unknown, if required

Data not collected prior to 1991

Compliance with License Restrictions

1975 and later

Variable = L_RESTRI

Element = Blank
- 0 - No Restrictions or Not Applicable *(i.e., license is suspended, revoked, expired or not for this type of vehicle)*
- 1 - Restrictions Complied With
- 2 - Restrictions Not Complied With
- 3 - Restrictions, Compliance Unknown
- 9 - Unknown

Crash Avoidance Maneuver

1991 and later

Variable = AVOID

Element = Blank
- 0 - No Avoidance Maneuver Reported
- 1 - Braking *(skid marks evident)*
- 2 - Braking *(no skid marks; driver stated)*
- 3 - Braking *(other reported evidence)*
- 4 - Steering *(evidence or stated)*
- 5 - Steering and Braking *(evidence or stated)*
- 6 - Other Avoidance Maneuver
- 8 - Not Reported / *(Inconclusive - since 1999, by police)*

AVOID is the maneuver that the driver executed to attempt to avoid the crash. See VEH_MAN, Vehicle Maneuver, for the maneuver the driver was executing just prior to entering a crash situation

Date

Month:

1975 and later

Variables = FIRST_MO
LAST_MO

Element = Blanks
00 - No Record
01 – 12 - Actual Month *(1 = January, 12 = December)*
99 - Unknown

1995 and later

Variable = MONTH
From the Accident file

Element = 01 – 12 - *The Month of the Crash (1 = January, 12 = December)*
99 - Unknown (since 2008)

Year:

1998 and later

Variables = FIRST_YR
LAST_YR

Element = Blanks
0000 - No Record *(4-digit field, e.g., 1998)*
All 4 Digits of Actual Year
9999 - Unknown

1975 to 1997

Variables = FIRST_YR
LAST_YR

Element = 00 - No Record
01 – 97 - 1901 to 1997
99 - Unknown

FIRST_MO and FIRST_YR are the month and year of the driver's first crash, suspension, or conviction.
LAST_MO and LAST_YR are the month and year of the driver's most recent crash, suspension, or conviction.

Driver Drinking

1975 and later

Variable = DR_DRINK

Element = 0 - No Drinking
1 - Drinking
9 - Unknown (1975 – 81, about 0.6 percent)

This is a derived variable. Data from the Vehicle file are analyzed and if there is "sufficient information" to conclude that a driver was drinking, i.e., positive BAC data or police-reported alcohol involvement, then a driver is classified as drinking. Note that alcohol data is often missing. For that reason this variable may under-count the actual number of drinking drivers. For detailed analysis of alcohol involvement, the Alcohol files should be used.

A driver who is charged with an alcohol violation does not by itself make the driver a "drinking driver" by this definition.

Driver Height Weight

Driver Height:

2002 and later

Variable = DR_HGT

Element =	24 – 96	- Actual Inches
	98	- Other
	99	- Unknown

1998 to 2001

Variable = DR_HGT

Element =	24 – 107	- Actual inches
	998	- Other
	999	- Unknown

Minimum height 2 feet = 24 inches, Maximum height 8 feet 11 inches = 107 inches

Driver Weight:

1998 and later

Variable = DR_WGT

Element =	Blanks	
	40 – 700	- Actual weight in pounds
	998	- Other
	999	- Unknown

Driver License Type Compliance

1993 and later

License Compliance with Class of Vehicle *(since 2004)*

Variable = L_COMPL

Element =
- Blank - Driver not present
- 0 - Not Licensed
- 1 - No License Required for This Class Vehicle
- 2 - No Valid License for This Class Vehicle
- 3 - Valid License for This Class Vehicle
- 8 - Unknown if Commercial Driver's License and/or CDL Endorsement Required for This Vehicle
- 9 - Unknown

1987 to 1992

Variable = L_COMPL

Element =
- 0 - Not Licensed
- 1 - No License Required for This Class Vehicle
- 2 - No Valid License for This Class Vehicle
- 3 - Valid License for This Class Vehicle
- 9 - Unknown

1982 to 1986

Variable = L_CL_VEH

Element =
- 0 - No License Required
- 1 - No License, License Required
- 2 - Valid License for This Class Vehicle Only
- 3 - One Valid License, but Not for This Class Vehicle
- 4 - Multiple Class Licenses, Valid License for This Class Vehicle
- 5 - Multiple Class Licenses, Not Valid License for This Class Vehicle
- 9 - Unknown

Before 1982

Data not available

(Continued on Next Page)

Driver License Type Compliance (Continued)

NHTSA'S Driver License Type Compliance			
Classification	Data Year and Element		
	1982-1986 (L_CL_VEH)	1987-1992 (L_COMPL)	1992 and later (L_COMPL)
Valid	0, 2, 4	1, 3	1, 3
Invalid	1, 3, 5	0, 2	0, 2
Unknown	9	9	8, 9

Driver License Status/Type

1993 and later

Commercial Motor Vehicle License Status

Variable = CDL_STAT

Element = Blank
- 0 - No Commercial Driver's License *(CDL)*
- 1 - Suspended
- 2 - Revoked
- 3 - Expired
- 4 - Cancelled or Denied
- 5 - Disqualified
- 6 - Valid
- 7 - Learner's Permit
- 8 - Other Not-Valid
- 9 - Unknown CDL

1991 to 1992

Commercial Motor Vehicle License Status

Variable = CDL_STAT

Element =
- 0 - No Commercial Driver's License *(CDL not required)*
- 1 - No CDL *(CDL Required)*
- 2 - No CDL *(Unknown if CDL Required)*
- 3 - CDL *(CDL not required)*
- 4 - CDL *(CDL REQUIRED)*
- 5 - CDL *(Unknown if CDL required)*
- 6 - Unknown CDL *(CDL not required)*
- 7 - Unknown CDL *(CDL required)*
- 9 - Unknown CDL *(Unknown if CDL required)*

(Continued on Next Page)

Driver License Status/Type (Continued)

2004 and later

NON-Commercial Motor Vehicle License Status

Variable = L_STATUS

Element =	Blanks	- Driver not present
	0	- Not Licensed
	1	- Suspended
	2	- Revoked
	3	- Expired
	4	- Cancelled or Denied
	6	- Valid
	7	- Learner's Permit
	9	- Unknown License Status

1993 to 2003

NON-Commercial Motor Vehicle License Status

Variable = L_STATUS

Element = Blank - Driver not present

Not valid license

	0	- Not Licensed
	1	- Suspended
	2	- Revoked
	3	- Expired
	4	- Cancelled or Denied

Valid license

	6	- Valid
	7	- Learner's Permit/Restricted
	8	- Temporary
	9	- Unknown

Note values 6, 7, and 8 are valid license categories.

(Continued on Next Page)

Driver License Status/Type (Continued)

1987 to 1992

Non-Commercial Motor Vehicle License Status

Variable = L_STATUS

Element =
0 - Not Licensed
1 - Suspended
2 - Revoked
3 - Expired
4 - Cancelled or Denied
5 - Single-Class License
6 - Multiple- Class License
7 - Learner's Permit
8 - Temporary
9 - Unknown

Note: values 5 and 6, single-class license and multiple-class licenses, with 7 and 8 make up the valid license category. These four values are combined to make the valid license category for 1987-1992.

1982 to 1986

Non-Commercial Motor Vehicle License Status

Variable = L_STATUS

Element =
0 - None Required
1 - None
2 - Valid
3 - Suspended
4 - Revoked
5 - Expired
6 - Cancelled or Denied
7 - Learner's Permit
8 - Temporary
9 - Unknown

Values 2, 7, and 8 are all valid license categories.

(Continued on Next Page)

Driver License Status/Type (Continued)

1975 to 1981

Variable = L_STATUS
NON-Commercial Motor Vehicle License Status

Element = 0 - None Required
1 - No License, License Required
2 - Licensed, But Not for This Type Vehicle
3 - Valid License for This Type Vehicle
4 - Suspended License
5 - Revoked License
6 - Expired License
7 - Learner's Permit
9 - Unknown

Values 3 and 7 make up the valid license category.

2004 and later

Variable = L_TYPE

NON-Commercial Motor Vehicle License Type

Element = 0 - Not Licensed
1 - Full Driver License
2 - Intermediate Driver License
7 - Learner's Permit
8 - Temporary License
9 - Unknown License Type

NHTSA'S Driver License Status & Non-CDL Status				
Classification	Data Year and Element			
	1975-1981 (L_STATUS)	1982-1986 (L_STATUS)	1987-1992 (L_STATUS)	1993 and later (L_STATUS)
Valid	0, 3, 7	0, 2, 7-8	5-6, 7-8	6-8
Invalid	1-2, 4-6	1, 3-6	0-4	0-4
Unknown	9	9	9	9

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Driver License Status/Type (Continued)

Licensing for Motorcycle Operators

Sample SAS code:

```
                    /* MOTORCYCLE OPERATORS INVOLVED IN FATAL CRASHES */

VALUE LICFMT
          1='Properly Licensed'
          2='Improperly Licensed'
          3='Unknown';
RUN;

DATA FAT01;
     MERGE FARS01.VEHICLE (KEEP=ST_CASE VEH_NO L_STATUS L_COMPL VE_FORMS)
                FARS01.PERSON (KEEP=ST_CASE VEH_NO STATE INJ_SEV PER_TYP MCYCL_DS
                           BODY_TYP AGE REST_USE SEX);
          BY ST_CASE VEH_NO;
          YEAR=2001;

          IF PER_TYP=1 and 80<=BODY_TYP<=89;

                                          /* PROPERLY LICENSED */
          IF L_COMPL=1 OR (L_COMPL=3 and L_STATUS IN (5 6 7 8)) THEN LIC=1;

                                                /* UNKNOWN */
          ELSE IF L_COMPL=9 OR L_STATUS=9 THEN LIC=3;

                                          /* IMPROPERLY LICENSED */
          ELSE LIC=2;
RUN;
```

Driver Presence

1978 and later

Variable = DR_PRES

Element =
- 1 - Driver Operated Vehicle
- 2 - Driverless (No Driver)
- 3 - Driver Left Scene
- 4 - Motor Vehicle not In-Transport (Parked/Stopped Off Roadway/Working/ In Motion Outside Trafficway, 2005 – 07)
- 4 - Motor Vehicle not In-Transport (Parked/Stopped Off Roadway/Working Motor Vehicle/In Motion Outside Trafficway, since 2008)
- 9 - Unknown

1975 to 1977

Variable = DR_PRES

Element =
- 1 - Driver Operated Vehicle
- 2 - No Driver
- 9 - Unknown

Driver Training

1975 to 1986

Variable = DR_TRAIN

Element =
- 0 - None
- 1 - High School
- 2 - Commercial
- 3 - School Bus
- 4 - Traffic School
- 5 - Two or More Types
- 6 - Training, Type Unknown (since 1977)
- 9 - Unknown

Driver Zip Code

1987 and later

Variable = DR_ZIP

Element = Blanks

00000	- Not Resident of U. S. or Territories
NNNNN	- Five Numeric, Actual Values
99999	- Unknown

Emergency Use

1977 and later

Variable = EMER_USE

Element = Blank
0 - No
1 - Yes (*Only if the vehicle was being used as an emergency vehicle at the time of the crash*)

Extent of Deformation

1975 and later

Variable = DEFORMED

Element = Blank
- 0 - None
- 2 - Other (*Minor*)
- 4 - Functional (*Moderate*)
- 6 - Disabling (*Severe*)
- 9 - Unknown

The data on “8 Not Reportable” collected in 1976 are no longer contained in the file. The data for that year are not consistent with the documentation of the time.

Fatalities in Vehicle (*Number*)

1975 and later

Variable = DEATHS

Element = The number of fatalities that *occurred in the vehicle*.

This is a derived variable and is not coded on the form directly. In 1976 this value is always set to 0.

Note that the variable FATALS in the Accident file, under the heading Fatalities, provides the number of deaths for the entire crash.

Fire Occurrence

2008 and later

Variable = FIRE_EXP

Element = Blanks
- 0 - No Fire
- 1 - Fire Occurred in This Vehicle during Crash
- 2 - Fire Occurred in This Vehicle and Initiated Fire/Explosion in Another Vehicle

1975 and 2007

Variable = FIRE_EXP

Element = Blanks
- 0 - No Fire
- 1 - Fire Occurred in Vehicle during Crash

From 1975 to 1979 if an explosion occurred in the vehicle, with or without a fire, this variable would also be set to 1.

GVWR/GCWR

This is repeated in the Person File.

Gross Vehicle Weight Rating (GVWR)

Gross Combination Weight Rating (GCWR)

1975 and later

Variable = WGTCD_TR (for model year 1966 and newer trucks)

Element =
1 - 6,000 lbs or less
2 - 6,001-10,000 lbs
3 - 10,001-14,000 lbs
4 - 14,001-16,000 lbs
5 - 16,001-19,500 lbs
6 - 19,501-26,000 lbs
7 - 26,001-33,000 lbs
8 - 33,001 and up
9 - Unknown

WGTCD_TR is often coded as 9 for buses.

2000 and later

Variable = GVWR

Element =
0 - Not Applicable
1 - 10,000 lbs or less
2 - 10,000 lbs – 26,000 lbs
3 - 26,000 lbs or more
9 - Unknown

The Gross Vehicle Weight Rating (*GVWR*) or Gross Combination Weight Rating (GCWR) is a value specified by the manufacturer for a single-unit truck, truck tractor, or trailer. In the absence of a gross vehicle weight rating, an estimate of the gross weight of a fully loaded unit can be substituted.

In 2000 was the GVWR was the sum of the weight of the power unit and its trailers

Since 2001 this element is the gross vehicle weight of the Power Unit **only**. The weight of trailers is not added.

Harmful Event/Sequence of Events

HARM_EV is from the Accident Files and is repeated here

2004 and later

Variable = HARM_EV — First harmful event applies to the crash. The most harmful event variable M_HARM applies to the vehicle. Harmful events are judgment calls of the FARS analysts based on the data within the police crash report. Note that Most Harmful Event M_HARM was not collected prior to 1979.

M_HARM — Most harmful event applies to the vehicle. This variable has the same values as does HARM_EV but is at the vehicle level rather that the crash level. Therefore different vehicles in a crash will have the same first harmful event but may have different most harmful events. Note in particular, that M_HARM describes a vehicle, not a person. Therefore, one cannot assume that the most harmful event for a vehicle was the cause of any death or injury for any specific individual within the vehicle.

SEQ1 or SEQ2 or SEQ3 or SEQ4 or SEQ5 or SEQ6

Starting in 2004 the HARM_EV, M_HARM and the sequence of event variables, (SEQi,

$1 \leq i \leq 6$) have the same values from 01 to 60. The harmful event values were modified to be consistent with the sequence of event variables.

Element = 00 - No Event (since 2006) this only applies to SEQi

Starting in 2006 none of the six SEQ variables should be left blank. In the event that there are less than six events to be coded, the remaining SEQ variables are coded 00.

01 - Overturn/Rollover

This element is used if a vehicle rotates 90^{o} or more, side-to-side or end-to-end, producing the first damage or injury. For motorcycles, laying the motorcycle down on its side is sufficient to code overturn if damage or injury is produced.

02 - Fire/Explosion

03 - Immersion

04 - Gas Inhalation

This element includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

05 - Fell/Jumped from Vehicle

The element is used when falling or jumping (not suicide) from the vehicle is the first event causing damage or injury. For example, a passenger of a motor vehicle in transport leans against the car door, it opens and the passenger falls out and is injured by the fall.

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

06 - Injured in Vehicle

Use where an occupant is injured during an unstabilized situation without a collision. Examples: a pickup truck stops short and its load crashes through the passenger compartment, injuring or killing the driver, or a part of the engine comes loose and bounces back into its own vehicle.

07 - Other Non-Collision

As an example, driving off a cliff where damage is not the result of an overturn or collision with an object.

08 - Pedestrian

09 - Pedalcycle

10 - Railway Train

11 - Animal

This element is used for collisions with animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device. See element 49 for ridden animals and animals drawing transport devices. **See Driver Level-Related Factor. - 83 – Live Animal in Road to determine if it applies.**

12 - Motor Vehicle in Transport on Same Roadway

Use this element when one motor vehicle collides with another motor vehicle on an undivided highway or the same side of a divided highway.

13 - Motor Vehicle in Transport on Other Roadway

This element differs from Element 12 in that it applies to events where a vehicle leaves one roadway and enters a different roadway, having a collision with a motor vehicle in transport in a different roadway. Example: one vehicle travels across the median of a divided highway, enters oncoming traffic, and is struck; or, when a vehicle traveling on an overpass, leaves the trafficway and strikes or is stuck by vehicle traveling on a trafficway below.

Element 13 should not be used in an “at intersection crash” (where the First Harmful Event occurs in the intersection).

14 - Parked Motor Vehicle *(not In Transport)*

This element refers to the collision of a motor vehicle in transport with a motor vehicle not in transport. Parked motor vehicle includes vehicles parked outside the roadway and those parked in the roadway in lanes not designed for travel at the time of crash. *(Do not include Vehicle/Driver Level information for the parked vehicle. Do include Person Level information if there were occupants in the vehicle.)*. Occupants of parked motor vehicles are coded Non-motorists.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

15 - Nonmotorist on Personal Conveyance

A personal conveyance is (1) a human-powered, non-motorized device not propelled by pedaling, (2) such devices even when motorized. Includes rideable *toys (roller skates, inline skates, skateboards, skates, baby carriages, scooters, toy wagons)*, motorized rideable toys *(motorized skateboard, motorized scooter, motorized toy car)*, devices for personal mobility *assistance (Segway-style devices, motorized and non-motorized wheelchairs, handicapped scooters)*.

Exclusions: Golf carts, low-speed vehicles *(LSV)*, go-carts, mini-bikes are excluded because they are motor vehicles *(see Collision with Motor Vehicle Elements.)*

16 - Thrown or Falling Object

This element is a non-collision event and, unless there is another collision during the crash, IMPACT POINTS for the vehicle involved must be coded 00 Examples: falling tree/rock, dropping/throwing something off bridge, throwing a snowball. However, it does not have to come from above. Excludes cataclysms.

17 - Boulder

This element is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

18 - Other Object *(not fixed)*

This element is used for fallen trees, already lying in roadway; construction cones or barrels on road *(temporary)*.

See Element 45- Working Construction, Maintenance or Utility Vehicles for transport devices used as equipment *(i.e., cherry picker at work, paint striper at work, etc.)*.

19 - Building

20 - Impact Attenuator/Crash Cushion

This element is used if a device for controlling the absorption of energy is released during vehicle collision *("crash cushions")*. Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

21 - Bridge Pier or Abutment

This element refers to support structures most likely to be struck by vehicles passing under bridges *(see element 43-Other Fixed Object for vehicles striking the bottom of a bridge while traveling on a trafficway underneath it).* If the vehicle first strikes a concrete barrier protecting a bridge pier or abutment, use element 25-Concrete Traffic Barrier.

Bridge Pier – a square or round column of stone, concrete, brick, steel or wood for supporting a bridge between abutments.

Bridge Abutment – wall supporting the ends of a bridge generally retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood. *(Includes wing-walls.)*

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

22 - Bridge Parapet End

This element is used for components of the upper portion of bridges. The end of a low wall which runs along the outer most edge of the roadway or sidewalk on the bridge and usually composed of brick, stone, or concrete. The term "balustrade" is often used synonymously with "parapet".

23 - Bridge Rail

This element is for components of the upper portion of bridges. A wooden, brick, stone, concrete, or metal fence-like wall which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet.

d) A bridge does not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

e) See bridge components diagram for bridge elements 21, 22 and 23.

f) Barriers as in elements 24, 25 and 26 refer to a physical structure such as a guardrail, a concrete safety barrier or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

Element 50 *(Bridge Overhead Structure)* is used when striking the bottom of a bridge while traveling on a trafficway underneath it.

24 - Guardrail Face

This element represents a low barrier running along the edge of a road shoulder either on the right or the left and which has the primary longitudinal structure composed of metal *(plates, cable, mesh, box beam, etc.)*. A guardrail is differentiated from element 25-Concrete Traffic Barrier by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, these are metal whereas in concrete barriers these are concrete *(including concrete rails)*.

Guardrails that serve as bridge rails should be coded 23 - Bridge Rail.

25 - Concrete Traffic Barrier

Refers to the longitudinal traffic barriers constructed of concrete and located on the outside of the road surface, in a median, or in gore areas. This includes all temporary concrete barriers regardless of location *(i.e., temporary Jersey barrier on a bridge being used to control traffic during bridge repair/construction)*. Concrete walls (vertical side surfaces) do not apply here; see element 39-Wall.

When a vehicle is traveling under a bridge and strikes a concrete barrier used to protect the bridge pier or abutment use element 25.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

26 - Other Traffic Barrier

This element is used for all other longitudinal barriers such as wood or rock and unknown barrier composition types.

27 - Highway/Traffic Sign Post

This element is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in transport. Includes mile markers. *(See element 46 for traffic signal supports.)*

28 - Overhead Sign Support/Sign

This element is used when the sign supported is above the highway. The difference between elements 27 and 28 is the location of the sign *(overhead or the side of the road)*.

29 - Luminary/Light Support

This element refers to supports for highway lighting systems, not including other private lighting systems *(e.g., parking lot lights)*. Support does not include other fixed objects to which lighting is affixed *(e.g., telephone poles)*.

30 - Utility Pole

Electrical, telephone, cable and other utility pole supports.

31 - Other Post, Other Pole, or Other Support

This element is used for posts other than highway signs. (e.g., reflectors on poles along side of roadway, parking meters, flag poles, etc.). (For mailbox posts, use element 53 – Mail Box (since 2004))

32 - Culvert

This element is any structure entirely under the roadway *(driveway or entranceway)* and less than 20 feet in span measured along the center line of the roadway.

33 - Curb

This element is a concrete or asphalt structure up to 12 inches in height, which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Be careful that the PAR provides some indication that damage has occurred when a vehicle strikes a curb.

34 - Ditch

35 - Embankment - Earth

36 - Embankment - Rock, Stone, or Concrete

37 - Embankment - Material Type Unknown

Element 35-37 *(Embankments) are raised structures to hold back water, to carry a roadway, or the result of excavation or washout (including erosion)* that may be faced with earth *(element 35)* or rock *(sometimes called a berm)*, stone or concrete *(element 36)*. An embankment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions; such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

In crashes involving a field approach or crossing, if in doubt about when to use elements 32, 34 (*Culvert/Ditch)* or elements 35-37 *(Embankment)* use these criteria:

g) Use element 32, 34 if the driver would not have been able to recover from the ditch even if there had been no field approach *(crossing)*.

h) Use element 35, 36, 37 if the driver would have been able to recover from the ditch, but struck the field approach *(crossing)* prior to doing so.

i) Use element 35, 36, 37 if it is not known whether or not the driver would have been able to recover from the ditch and a field approach *(crossing)* is involved.

38 - Fence

This element includes the fence posts. A fence can be made of wood, chain link, stone, etc. *(not shrub hedges serving as containment for property).*

39 - Wall

This element is a primarily vertical *(± 15 degrees from vertical)* structure composed of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas but not for containment as in the primary function of a fence. Also not included as walls are wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls should be coded as element 21.

40 - Fire Hydrant

41 - Shrubbery

42 - Tree (Standing Tree Only)

This element is used when a vehicle strikes a standing tree. If a vehicle strikes a tree lying in the roadway, use element 18 – Other Object (Not Fixed). If a tree falls on a vehicle as it is passing by, use element 16 – Thrown or Falling Object.

43 - Other Fixed Object

This is used when the object is fixed *(considered a permanent structure)* and is not described by any of the other fixed object elements. Includes utility wires and guy wires attached to utility poles.

44 - Pavement Surface Irregularity

Potholes, grooves, and grates are examples.

45 - Working Construction, Maintenance, or Utility Vehicles

This element is used when the motor vehicle in transport strikes a construction, maintenance, or utility vehicle, which is working and not “in transport.” Examples: cherry picker working on the telephone lines, a paint striper vehicle painting lines on the road, a tractor mowing grass on trafficway, a county/state snow plow plowing snow, a highway dump truck dumping asphalt for a new travel lane, etc.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

Note: Before 2004, this element was called "Transport Device Used as Equipment." It included other working activities in addition to construction, maintenance, and utility work on trafficways. From 2004 forward, element 45 excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, police vehicles at a construction work site, etc.). Use Related Factors Vehicle Level element 42-Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) to identify these vehicles.

A question may arise when a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, as traffic control, or at a construction/maintenance site. The question becomes, "Has its function changed from being a motor vehicle in transport to a working vehicle?" The answer is "No." These situations are treated as motor vehicles in transport striking another motor vehicle in transport (elements 12 or 13 are used.) Use Related Factors – Vehicle Level element 41 – Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities to identify that this vehicle was struck while performing these work activities.

Taxis/limousines and commercial buses are always considered to be "in transport" because their primary work function is to transport persons from one place to another. *(See elements 12, 13, or 14).*

46 - Traffic Signal Support/Signal

47 - Vehicle Occupant Struck or Run Over by Own Vehicle (since 1997)

Use this element when an occupant falls or comes out of a vehicle and is struck or run over by that vehicle. This does not apply to occupants ejected during overturns.

48 - Collision With Snow Bank

Used when snow fall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

49 - Ridden Animal or Animal-Drawn Conveyance

This element is used for collisions with animals being used as transportation. This includes ridden animals and animals (or teams of animals) drawing a transport device *(e.g., a horse drawing a sleigh, a team of horses drawing a stage coach, etc.)*.

50 - Bridge Overhead Structure

This element is used when a vehicle strikes the bottom of a bridge while traveling on a trafficway underneath the bridge.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

51 - Jackknife

This element applies to a condition that occurs to an articulated vehicle, *(any vehicle with a trailing unit(s) connected by a hitch, e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.)* while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer*(s)* yaws from its normal straight-line path behind the power unit.

52 - Guardrail End

This element is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

53 - Mail Box

54 - Motor Vehicle Struck by Falling/Shifting Cargo or Anything Set in Motion by Another Motor Vehicle in Transport

55 - Other Not in-Transport Motor Vehicle (2005 – 07)

55 - Motor Vehicle in Motion Ouside the Trafficway (since 2008)

57 - Cable Barrier (since 2008)

60 - Cargo/Equipment Loss or Shift

This element should not be used for the vehicle setting the object in motion in a collision crash. Element 60 is only used as a first harmful event for non-collision crashes.

99 - Unknown

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

Variables = HARM_EV and M_HARM

Element = 01 - Overturn/Rollover

This element is used if a vehicle rotates 90 degrees or more, side-to-side or end-to-end, producing the first damage or injury. For motorcycles, laying the motorcycle down on its side is sufficient to code overturn if damage or injury is produced.

02 - Fire/Explosion

03 - Immersion

04 - Gas Inhalation

This element includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

05 - Fell from Vehicle *(Other Than Cargo/Equipment Loss or Shift)*

The element is used when falling or jumping (not suicide) from the vehicle is the first event causing damage or injury. For example, a passenger of a motor vehicle in transport leans against the car door, it opens, and the passenger falls out, and is injured by the fall.

06 - Injured in Vehicle *(Other Than Cargo/Equipment Loss or Shift)*

Use where an occupant is injured during an un-stabilized situation without a collision, Examples: a pickup truck stops short and its load crashes through passenger compartment, injuring or killing the driver, or a part of the engine comes loose and bounces back into its own vehicle.

07 - Other Non-Collision

As an example, driving off a cliff where damage is not the result of an overturn or collision with an object

08 - Pedestrian

09 - Pedalcycle

10 - Railway Train

11 - Animal

This element is used for collisions with animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device. See element 49 for ridden animals and animals drawing transport devices. **See Driver Level-Related Factor. - 83 – Live Animal in Road to determine if it applies.**

12 - Motor Vehicle in Transport on Same Roadway

Use this element when one motor vehicle collides with another motor vehicle on an undivided highway or the same side of a divided highway.

13 - Motor Vehicle in Transport on Other Roadway

This element differs from element 12 in that it applies to events where a vehicle leaves one roadway and enters a different roadway, having a collision with a motor vehicle in transport in a different roadway. Example: One vehicle travels across the median of a divided highway, enters oncoming traffic and is struck; or, when a vehicle traveling on an overpass, leaves the trafficway and strikes or is stuck by a vehicle traveling on a trafficway below.

Element 13 should not be used in an “at intersection crash” (where the First Harmful Event occurs in the intersection).

14 - Parked Motor Vehicle *(Not in Transport)*

This element refers to the collision of a motor vehicle in transport with a motor vehicle not in transport. Parked motor vehicles include vehicles parked outside the roadway and those parked in the roadway in lanes not designed for travel at the time of crash. *(Do not include Vehicle/Driver Level information for the parked vehicle. Do include Person Level information if there were occupants in the vehicle.)* Occupants of parked motor vehicles are coded “Nonmotorists.”

15 - Other Type Nonmotorist

Wheelchair occupants, skateboarders, human-propelled sled riders, as an example.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

16 - Thrown or Falling Object

This element is a non-collision event and, unless there is another collision during the crash, IMPACT POINTS for the vehicle involved must be coded "00" Examples: Falling tree/rock, dropping/throwing something off bridge, throwing a snowball. However, it does not have to come from above. Excludes Cataclysms

17 - Boulder

This element is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

18 - Other Object *(not fixed)*

This element e.g., fallen tree, already laying in roadway; construction cones or barrels on road *(temporary)*. See element 45- Working Construction, Maintenance or Utility Vehicles for transport devices used as equipment *(i.e., cherry picker at work, paint striper at work, etc.)*.

19 - Building

20 - Impact Attenuator/Crash Cushion

This element is used if a device for controlling the absorption of energy is released during vehicle collision *("crash cushions")*. Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

21 - Bridge Pier or Abutment

This element refers to support structures most likely to be struck by vehicles passing under bridges *(see element 43-Other Fixed Object for vehicles striking the bottom of a bridge while traveling on a trafficway underneath it).* If the vehicle first strikes a concrete barrier protecting a bridge pier or abutment, use element 25-Concrete Traffic Barrier.

Bridge Pier – a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments

Bridge Abutment – wall supporting the ends of a bridge generally retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood, *(Includes wing-walls.)*

22 - Bridge Parapet End

This element is used for components of the upper portion of bridges. The end of a low wall which runs along the outer most edge of the roadway or sidewalk on the bridge and usually composed of brick, stone, or concrete. The term "balustrade" is often used synonymously with "parapet."

23 - Bridge Rail

This element is for components of the upper portion of bridges. A wooden, brick, stone, concrete, or metal fence-like wall which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet.

d) A Bridge does not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

e) See bridge components diagram for bridge elements 21, 22 and 23.

f) Barriers as in elements 24, 25 and 26 refer to a physical structure such as a guardrail, a concrete safety barrier or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

Element 50 *(Bridge Overhead Structure)* is used when striking the bottom of a bridge while traveling on a trafficway underneath it.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

24 - Guardrail Face

This element represents a low barrier running along the edge of a road shoulder either on the right or the left and which has the primary longitudinal structure composed of metal *(plates, cable, mesh, box beam, etc.)*. A guardrail is differentiated from element 25-Concrete Traffic Barrier by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete *(including concrete rails)*.
Guardrails, which serve as bridge rails, should be coded 23 – Bridge Rail.

25 - Concrete Traffic Barrier

Refers to the longitudinal traffic barriers constructed of concrete and located on the outside of the road surface, in a median, or in gore areas. This includes all temporary concrete barriers regardless of location *(i.e., temporary Jersey barrier on a bridge being used to control traffic during bridge repair/construction)*. Concrete walls (vertical side surfaces) do not apply here; see element 39-Wall.
When a vehicle is traveling under a bridge and strikes a concrete barrier used to protect the bridge pier or abutment, use element 25.

26 - Other Traffic Barrier

This element is used for all other longitudinal barriers such as wood or rock and unknown barrier composition types.

27 - Highway/Traffic Sign Post

This element is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in transport, includes mile markers. *(See Element 46 for traffic signal supports.)*

28 - Overhead Sign Support/Sign

This element is used when the sign supported is above the highway. The difference between elements 27 and 28 is the location of the sign *(overhead or the side of the road)*.

29 - Luminary/Light Support

This element refers to supports for highway lighting systems, not including other private lighting systems *(e.g., parking lot lights)*. Support does not include other fixed objects to which lighting is affixed *(e.g., telephone poles)*.

30 - Utility Pole

Electrical, telephone, cable and other utility pole supports.

31 - Other Post, Other Pole, or Other Support

This element is used for posts other than highway signs (e.g., reflectors on poles along side of roadway, parking meters, flag poles, etc.). (For mailbox posts, use element 53 – Mail Box (since 2004).)

32 - Culvert

This element is any structure entirely under the roadway *(driveway or entranceway)* and less than 20 feet in span measured along the centerline of the roadway.

33 - Curb

This element is a concrete or asphalt structure up to 12 inches in height, which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Be careful that the PAR provides some indication that damage has occurred when a vehicle strikes a curb.

34 - Ditch

35 - Embankment - Earth

36 - Embankment - Rock, Stone, or Concrete

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

37 - Embankment - Material Type Unknown

Element 35-37 *(Embankments are raised structures to hold back water, to carry a roadway, or the result of excavation or washout (including erosion)* that may be faced with earth *(element 35)* or rock *(sometimes called a berm)*, stone or concrete *(element 36)*. An embankment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions; such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

In crashes involving a field approach or crossing, if in doubt about when to use elements 32, 34 *(Culvert/Ditch)* or elements 35-37 *(Embankment)* then use these criteria:

j) Use element 32, 34 if the driver would not have been able to recover from the ditch even if there had been no field approach *(crossing)*.

k) Use element 35, 36, 37 if the driver would have been able to recover from the ditch, but struck the field approach *(crossing)* prior to doing so.

l) Use element 35, 36, 37 if it is not known whether the driver would have been able to recover from the ditch and a field approach *(crossing)* is involved.

38 - Fence

This element includes the fence posts. A fence can be made of wood, chain link, stone, etc. *(not shrub hedges serving as containment for property).*

39 - Wall

This element is a primarily vertical *(± 15 degrees from vertical)* structure composed of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas but not for containment as in the primary function of a fence, also not included as walls are wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls should be coded as element 21.

40 - Fire Hydrant

41 - Shrubbery

42 - Tree (Standing Tree Only)

This element is used when a vehicle strikes a standing tree. If a vehicle strikes a tree lying in the roadway, use element 18 – Other Object (Not Fixed). If a tree falls on a vehicle as it is passing by, use element 16 – Thrown or Falling Object.

43 - Other Fixed Object

This is used when the object is fixed *(considered a permanent structure)* and is not described by any of the other fixed object elements, includes utility wires and guy wires attached to utility poles.

44 - Pavement Surface Irregularity (1993 only)

Potholes, grooves, and grates, are examples.

45 - Transport Device Used as Equipment (1993 – 03)

This element includes a cherry picker at work, a paint striper vehicle striping road, tractor mowing grass on trafficway, snow plow plowing snow, etc.

45 - Working Construction, Maintenance or Utility Vehicles (since 2004)

This element is used when the motor vehicle in transport strikes a construction, maintenance or utility vehicle, which is working and not "in transport." Examples: cherry picker working on the telephone lines, a paint striper vehicle painting lines on the road, a tractor mowing grass on trafficway, a county/state snow plow plowing snow, a highway dump truck dumping asphalt for a new travel lane, etc.

Note: Before 2004, this element was called "Transport Device Used as Equipment." It included other working activities in addition to construction, maintenance and utility work on trafficways. From 2004 forward, element 45 excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, police vehicles at a construction work site, etc.).

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

Use Related Factors Vehicle Level element 42-Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) to identify these vehicles.

If a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of an crash, at a traffic stop, as traffic control, or at a construction/maintenance site the question becomes, "Has its function changed from being a motor vehicle in transport to a working vehicle?" The answer is "No." These situations are treated as motor vehicles in transport striking another motor vehicle in transport (elements 12 or 13 are used.) Use Related Factors – Vehicle Level element 41 – Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities to identify that this vehicle was stuck while performing these work activities.

Taxis/limousines and commercial buses, etc, are always considered to be "in transport" because their primary work function is to transport persons from one place to another. *(See elements 12, 13, or 14).*

46 - Traffic Signal Support/Signal

47 - Vehicle Occupant Struck or Run Over by Own Vehicle (since 1997)

Use this element when an occupant falls or comes out of a vehicle and is struck or run over by that vehicle. This does not apply to occupants ejected during overturns.

48 - Collision With Snow Bank (since 1997)

Used when snow fall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

49 - Ridden Animal or Animal-Drawn Conveyance (since 1998)

This element is used for collisions with animals being used as transportation. This includes ridden animals and animals (or teams of animals) drawing a transport device *(e.g., a horse drawing a sleigh, a team of horses drawing a stage coach, etc.)*.

50 - Bridge Overhead Structure

This element is used when a vehicle strikes the bottom of a bridge while traveling on a trafficway underneath the bridge.

51 - Jackknife *(causing injury or damage)* (since 2004)

This element applies to a condition that occurs to an articulated vehicle *(any vehicle with one or more trailing units connected by a hitch, e.g., truck tractor or single-unit truck with one or more trailers, an articulated bus, a car pulling a boat on a trailer, etc.)* while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer yaws from its normal straight-line path behind the power unit.

52 - Guardrail End (since 2004)

This element is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

53 - Mail Box (since 2004)

54 - Motor Vehicle Struck by Falling/Shifting Cargo or Anything Set in Motion by Another Motor Vehicle In Transport (since 2004)

60 - Cargo/Equipment Loss or Shift *(causing injury or damage, since 2004)*

This element should not be used for the vehicle setting the object in motion in a collision crash. Element "60" is only used as a first harmful event for non-collision crashes.

99 - Unknown

This is used when it is not known what the First Harmful Event was. For example, if a series of harmful events occurred, and it's unclear which one was first.

If either first harmful event, HARM_EV, or most harmful event, M_HARM, is used, it is often a good idea to construct a two-way table of harmful events by State and check for consistency. For example, in the 1989 FARS data in the cases where a vehicle fire was identified, that is FIRE_EXP =1, Virginia coded M_HARM as 02 Fire/Explosion for all cases.

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

In the same year for the crashes where a vehicle fire was identified, that is FIRE_EXP =1, Connecticut, Delaware, Idaho, Kansas, Mississippi, New Hampshire, Oklahoma, Rhode Island, South Dakota, and Wyoming never coded M_HARM as 02 Fire/Explosion. That is, different states code harmful events differently.

1975 to 1981

Variables = HARM_EV and M_HARM (since 1979)

Element =
- 01 - Overturn
- 02 - Fire/Explosion
- 03 - Immersion
- 04 - Gas Inhalation
- 05 - Fell from Vehicle
- 06 - Injured in Vehicle
- 07 - Other Non-Collision
- 08 - Pedestrian
- 09 - Pedalcycle
- 10 - Railway Train
- 11 - Animal
- 12 - Motor Vehicle in Transport
- 13 - Motor Vehicle in Transport in Other Roadway
- 14 - Parked Motor Vehicle
- 15 - Other Type Nonmotorist
- 16 - Other Object
- 17 - Bridge or Overpass (1975 – 78 only)
- 18 - Building
- 19 - Culvert
- 20 - Curb or Wall
- 21 - Divider
- 22 - Embankment
- 23 - Fence
- 24 - Guard Rail
- 25 - Light Support
- 26 - Sign Post
- 27 - Tree/Shrubbery
- 28 - Utility Pole
- 29 - Other Pole/Support
- 30 - Impact Attenuator
- 31 - Other Fixed Object
- 32 - Bridge or Overpass *[Passing Under]* (1979 – 81 only)
- 33 - Bridge or Overpass *[Passing Over]* (1979 – 81 only)
- 99 - Unknown

Hazardous Material Involvement/Placard

2007 and later

The variable HAZ_CARG is no longer in FARS. It has been replaced with the following five variables HAZ_INV, HAZ_PLAC, HAZ_ID, HAZ_CNO, and HAZ_REL.

Variable = HAZ_INV (1- Digit Hazardous Material Involvement)

Element = Blank
1 - No
2 - Yes

Variable = HAZ_PLAC (1 - Digit Placard)

Element = Blank
0 - Not Applicable
1 - No
2 - Yes
8 - Not Reported

Variable = HAZ_ID (4 - Digit Hazardous Material Identification Number)

Element = Blanks
0000 - Not Applicable
Actual 4-digit number
8888 - Not Reported

Variable = HAZ_CNO (1 - Digit Hazardous Material Class Number, 2007 only)

Element = Blank
0 - Not Applicable
1 – 7 or 9 - Actual 1-digit number
8 - Not Reported

Variable = HAZ_CNO (2 - Digit Hazardous Material Class Number, since 2008)

Element = Blank
00 - Not Applicable
01 – 09 - Actual 1-digit number (with leading zero)
88 - Not Reported

Variable = HAZ_REL (1- Digit Release of Hazardous Material from the Cargo Compartment)

Element = Blank
0 - Not Applicable
1 - No
2 - Yes
8 - Not Reported

(Continued on Next Page)

Hazardous Material Involvement (Continued)

1991 to 2006

Variable = HAZ_CARG

Element = Blank
- 0 - No
- 1 - Yes, Placarded
- 2 - Yes, Not Placarded
- 3 - Yes, Unknown if Placarded
- 9 - Unknown

1982 to 1990

Variable = HAZ_CARG

Element =
- 0 - No
- 1 - Yes
- 9 - Unknown

Hit-and-Run

This is from and is repeated in the Accident Files.

1982 and later

Variable = HIT_RUN

Element = Blank

0 - No Hit-and-Run

If there is no reason to believe a hit-and-run occurred. Use this element in cases where the hit-and-run driver is not one of the major involved parties to the crash. For example, in a five-car crash, the fifth car barely hits the fourth vehicle and causes little or no damage to either vehicle, and leaves the scene. If this is the only vehicle of the five that leaves the scene, then no hit-and-run occurred.

1 - Hit Motor Vehicle in Transport

The hit-and-run vehicle hit a motor vehicle in transport.

2 - Hit Pedestrian or Nonmotorist

The hit-and-run vehicle hits a pedestrian or a nonmotorist.

3 - Hit Parked Vehicle, *(Working Vehicle-since 2004)* or Object

3 - Hit Parked Vehicle, *(Working Vehicle-since 2004)* or Object

The hit-and-run vehicle hit a parked motor vehicle, regardless of whether it contained occupants. This also applies to vehicles that hit objects other than Motor Vehicles in Transport, including working vehicles.

4 - Occupant Is Struck by or Fell From Own Hit-and-Run Vehicle (2002 only)

If a driver is cited for leaving the scene when an occupant of his/her vehicle falls or is struck by that vehicle.

4 - Driver Leaves Scene after Non-Collision Event (since 2004)

If police state the driver left the scene when an occupant of his/her vehicle is injured in a non-collision crash, For example, overturning, fire, person fell out of the vehicle or was struck by his/her own vehicle.

5 - Driver/Occupant Leaves Scene after a Non-Collision Event (2003 only)

If police states that the driver left the scene when an occupant of his/her vehicle is injured in a non-collision crash. For example, overturning, fire, person fell out of the vehicle or was struck by his/her own vehicle.

5 - Other Involved Person, not a driver, left Scene (2005 – 06)

5 - Hit-and-Run, Other Involved Person Left Scene (since 2007)

1977 to 1981

Variable = HIT_RUN

Element = 0 - No Hit-and-Run

1 - Hit Motor Vehicle

2 - Hit Nonmotorist

3 - Left Scene

(Continued on Next Page)

Hit-and-Run *(Continued)*

This is from and is repeated in the Accident Files.

1975 to 1976

Variable = HIT_RUN

Element = 0 - Not Applicable
1 - With Motor Vehicle
2 - With Nonoccupant

NOTE: From 1975 to 1981 if no information was known about the hit-and-run vehicle and/or driver, the vehicle form and/or driver form were not filled out and were not counted as unknown. Starting in 1982 both a vehicle and a driver form were filled out and the data were identified as unknown. This is why, for example, there were approximately only 20 to 40 drivers with unknown sex listed in the FARS data set from 1975 to 1981 and 700 to 1,000 drivers with unknown sex from 1982 on.

Impact

1994 and later

Variables = IMPACT1 Initial (or first) impact point
IMPACT2 Principal impact point

Element = Blanks
00 - Non-Collision
01 – 12 - Clock Points (*See coding manual*)
13 - Top
14 - Undercarriage
18 - This Vehicle Set Something in Motion Causing Injury or Damage (Not a Clock Point, since 2004)

A vehicle that **propels part of its load or** has set something in motion striking another vehicle, person, or property and causing injury or damage may not have a normal impact point: **only the load has made contact with the person or other property**. However, a **value** must be coded. **Use Impact Point element 18 for these set-in-motion conditions.**

99 - Unknown

Note: The striking vehicle, not the vehicle struck, determines the underride/override condition. After the crash, in the case of an override or underride one vehicle is over the other. If the striking vehicle is over the other, then the crash is an override. If the striking vehicle is under the other, the crash is an underride. See Vehicle Role variable = IMPACTS.

See the note on the page about using and interpreting the variable UNDERIDE.

1975 to 1993

Variables = IMPACT1 Initial (*or first*) impact point
IMPACT2 Principal impact point

Element = 00 - Non-Collision
01-12 - Clock points (*See coding manual*)
13 - Top
14 - Undercarriage
15 - Underride (*1980 – 93 only*)
16 - Override (*1982 – 93 only*)
99 - Unknown

(Continued on Next Page)

Impact (Continued)

Note the striking vehicle, not the vehicle struck, determines the underride/override condition. From 1975 to 1993 both the initial and principal impacts were counted. In the event and only in the event, that the initial or principal impact point was an underride/override were the variable IMPACT1 or IMPACT2 flagged/counted as such. However, all other underrides/overrides were not counted, nor should they have been counted. IMPACTS WERE COUNTED, NOT UNDERRIDES! Therefore, the variable UNDERIDE was added to the FARS system in 1994.

The variable UNDERIDE, like all FARS variables, is dependent on the data contained in police crash reports. The NASS/CDS system is based on the efforts of professional crash investigators performing detailed analysis of approximately 5,000 crashes a year. An analysis of the 1994-1996 FARS and NASS/CDS data systems and the 1997 Trucks in Fatal Accident file revealed that underrides and overrides are generally not identified on the police crash reports.

1994 and later

Variable = UNDERIDE

Element = 0 - No Underride or Override

WITH MOTOR VEHICLE IN TRANSPORT

1 - Underride *(Compartment Intrusion)*
2 - Underride *(No Compartment Intrusion)*
3 - Underride *(Compartment Intrusion Unknown)*

WITH OTHER VEHICLE

4 - Underride *(Compartment Intrusion)*
5 - Underride *(No Compartment Intrusion)*
6 - Underride *(Compartment Intrusion Unknown)*
7 - Override, Motor Vehicle in Transport

This element is used when a motor vehicle overrides another motor vehicle in transport.

8 - Override, Other Vehicle

This element is used when a motor vehicle overrides a parked motor vehicle or a transport device in use as equipment.

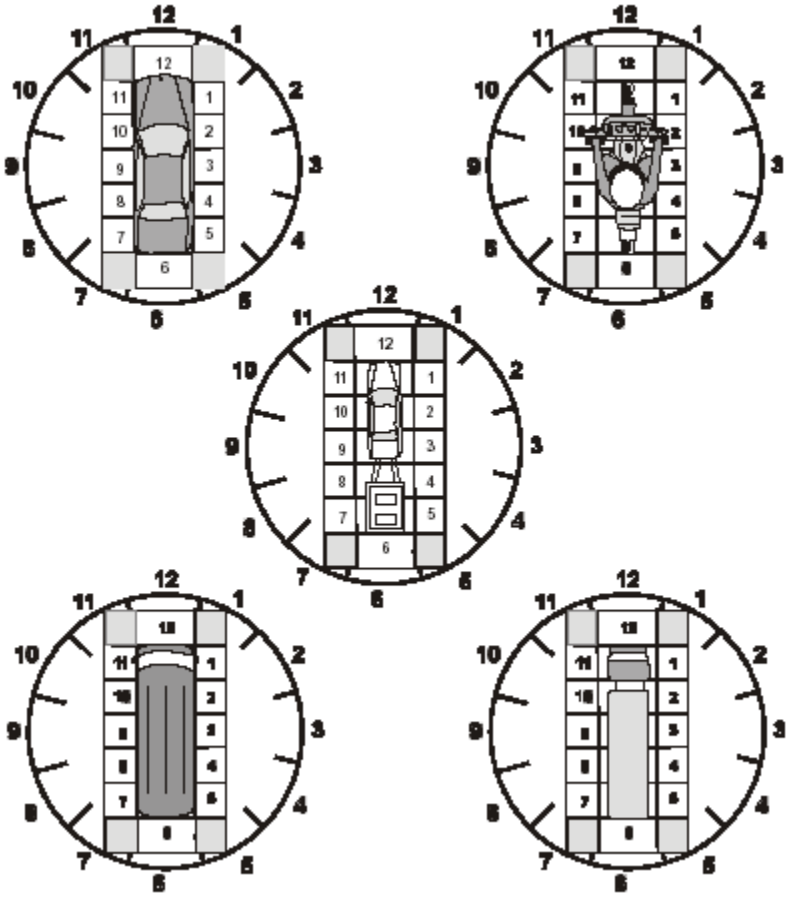
9 - Unknown if Underride or Override

(Continued on Next Page)

Impact (Continued)

NHTSA'S Impact Initial Impact Point (IMPACT1) AND Principal Impact Point (IMPACT2)		
Classification	Data Year and Element	
	1975-1993 (IMPACT1) OR (IMPACT2)	1994 and later (IMPACT1) OR (IMPACT2)
Non-Collision	00	00
Front	01, 11-12	01, 11-12
Right Side/Side	02-04	02-04
Left Side/Side	08-10	08-10
Rear	05-07	05-07
Other	13-16	13-14
Unknown	99	99

CLOCKPOINT DIAGRAM



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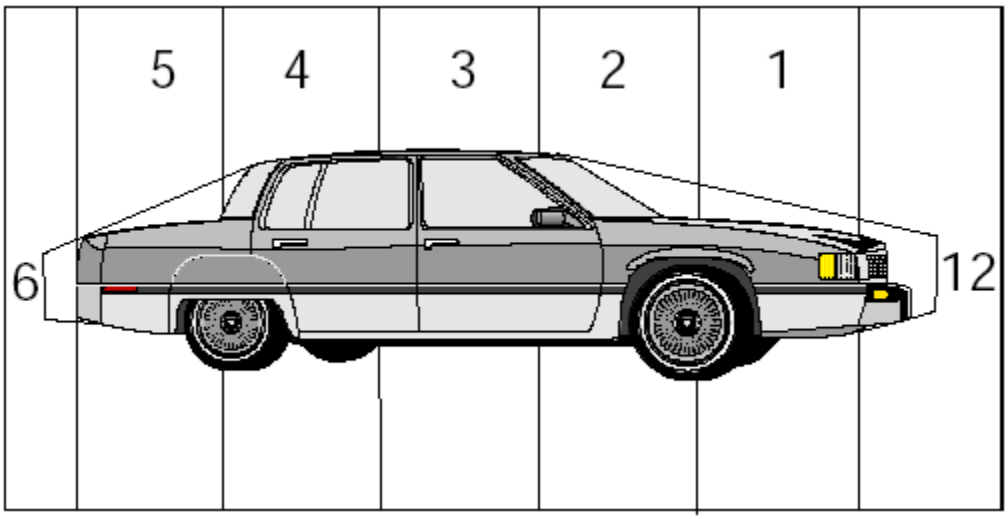
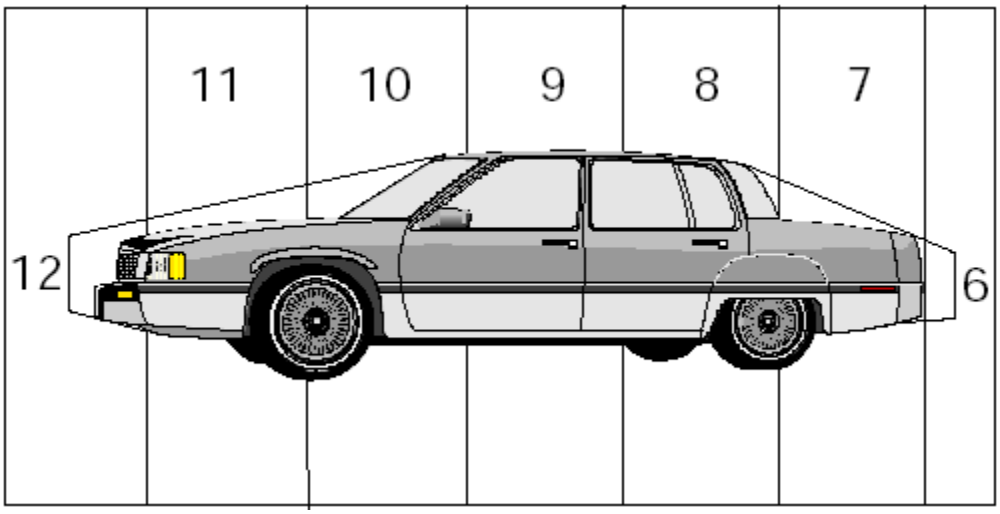
Impact (Continued)

IMPACT POINTS



Right Side



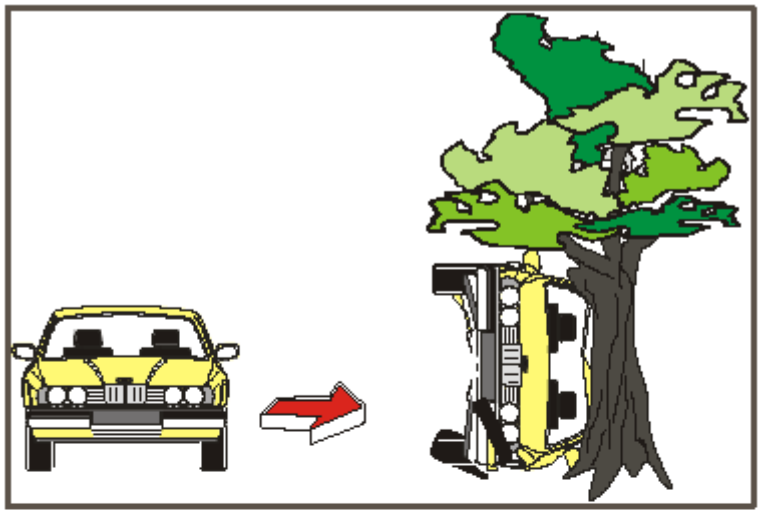
Left Side

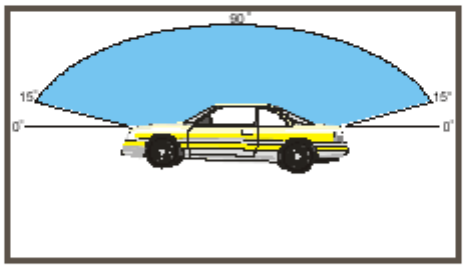
Source: FARS Coding Manual

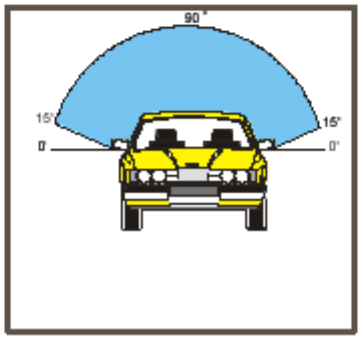
(Continued on Next Page)

Impact (Continued)

Element 13 Examples







Jackknife

The JACK KNIFE field applies to a condition which occurs to a "semi" truck *(i.e., cab and one or more trailers)* while in motion. The condition reflects a loss of control of the truck by the driver in which there trailer yaws more than 15 degrees from its normal straight line path behind the cab. If the final resting configuration of the vehicle is in the jack knife position, it does not necessarily mean that the vehicle has jackknifed *(such as, a crash occurring while the vehicle is backing up or parking).*

1982 and later

Variable = J_KNIFE

Element = Blank
- 0 - Not an Articulated Vehicle
- 1 - No
- 2 - First Event
- 3 - Subsequent Event

1980 to 1981

Variable = J_KNIFE

Element =
- 0 - Not an Articulated Vehicle
- 1 - No
- 2 - Yes

There is a note in old documentation that suggests that the field for 1980 and perhaps 1981 may be a dummy field, but these data seem reasonable and useable.

1975 to 1979

The variable exists in the data sets but has not been initialized. These data were not collected.

Manner of Collision

This comes from the Accident file and is repeated in the Person File.

See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

2002 and later

Variable = MAN_COLL

Element = Blanks

00 - Not Collision with Motor Vehicle (*in Transport 2002 – 04 only)*

Starting in 2005 crashes with any vehicle in transport or parked are coded 00.

01 - Front-to-Rear *(Includes Rear-End)*

A rear-end collision is one in which the front end of one vehicle collides with the back of another vehicle, while the two vehicles are traveling in the same direction. Use element 01 for all rear-end crashes and all crashes in which the front of one vehicle comes in contract with the rear of another in the First Harmful Event, regardless of the original direction of travel.

With these crashes a portion of the front bumper, grill, or headlights of one vehicle *(Clockpoint 12)* made contact with a portion of the rear bumper, taillights, or rear of the other vehicle *(Clockpoint 06)* in the First Harmful Event."

02 - Front-to-Front *(Includes Head-On)*

A "head-on" collision is one in which the front end of one vehicle collides with the front end of another vehicle, while the two vehicles are traveling in toward each other.

This element 02 is used for all head-on crashes and all crashes in which the fronts of both vehicles make contact as the First Harmful Event, regardless of the original direction of travel. Since 2002 direction of force is no longer used in determining head-on collisions.

03 - Angle - Front-to-Side, Same Direction

Used for angle crashes where the front of one vehicle makes contact with any point along the side of another in the First Harmful Event and the orientation of the vehicles at impact is in the same direction. This does not include right angles or broadside crashes *(See element 05)*.

04 - Angle - Front-to-Side, Opposite Direction

This element is used for angle crashes where the front of one vehicle makes contact with any point along the side of another in the First Harmful Event and the orientation of the vehicles at impact is in the opposing directions. This does not include right angles or broadside crashes *(See element 05)*.

05 - Angle - Front-to-Side, Right Angle *(Includes Broadside)*

Used for "broadside" or "T-bone" crashes in which front-to-side contact is made, and the vehicles are at a right-angle position. The front of one vehicle can make contact anywhere along the side of the other, not just Clockpoints 03 or 09.

06 - Angle - Front-to-Side/Angle-Direction Not Specified

Used when the police indicate that it is an "angle" crash without providing enough detail in the narrative and diagram to determine the orientation of the vehicles in the First Harmful Events.

07 - Sideswipe - Same Direction

(Continued on Next Page)

Manner of Collision (Continued)

This comes from the Accident file and is repeated in the Person File.

See the note at the end of this section, on the change in the interpretation of Manner of Collision from 2001 to 2002

2002 and later

08 - Sideswipe - Opposite Direction

Sideswipe, elements 07 or 08 is used if the following are true for both vehicles involved in the First Harmful Event.

5 The initial engagement does not overlap the corner of either vehicle by more than four inches, so there is no significant involvement of the front or rear surface areas.

6 There is no pocketing of the impact in the suspension areas. The impact then swipes along the surface of the vehicle parallel to the direction of travel.

7 There is low retardation of the force along the surface of the vehicle.

8 End-swipes are coded as element 11 – Other.

09 - Rear-to-Side

This element is used for crashes where the rear of a vehicle, and not the front, makes contact with the side of another. This happens when a vehicle backs up into the side of another vehicle.

10 - Rear-to-Rear

11 - Other *(End-Swipes and Others)*

This element is used for collisions where one vehicle's end swipes another vehicle instead of their sides swiping. Also, this element is used for any collision between two motor vehicles where the collision is not described by elements 01-10. An example is when one vehicle is airborne and makes contact with its front to the other vehicle's hood or top.

99 - Unknown

(Continued on Next Page)

Manner of Collision (Continued)

This comes from the Accident file and is repeated in the Person File.

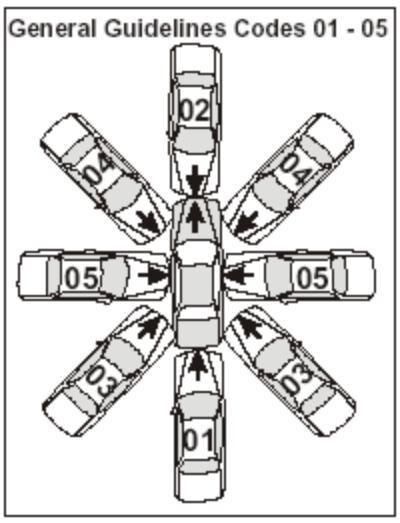
See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

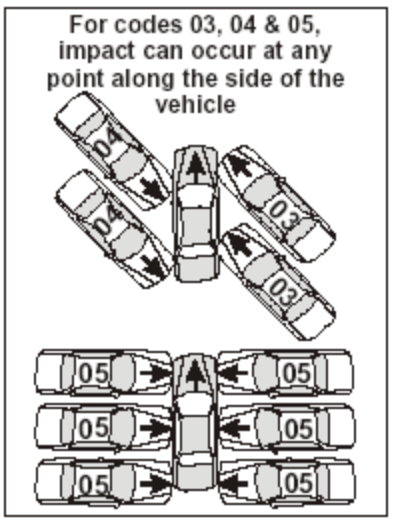
2002 and later

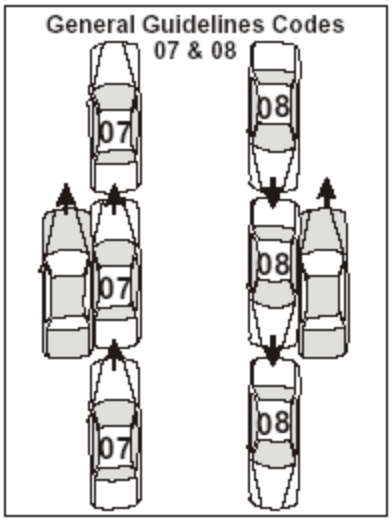
NOTES:

Refers only to crashes in which the FIRST HARMFUL EVENT is a collision between two motor vehicles in transport *(elements 12 and 13)*.

Use the Diagrams below to help determine Manner of Collision elements 01-05, 07-08







Beginning in 2002, this element will be based on the impact location (*i.e., front, side or rear*) and vehicle orientation (*i.e., facing in the same or opposite directions*) of the contact vehicles in the First Harmful Event. The use of "direction of force" will no longer be used in determining this element. Prior to 2002, the "direction of force" immediately preceding the collision was allowed to be considered, especially in head-on collisions.

(Continued on Next Page)

Manner of Collision (Continued)

This comes from the Accident file and is repeated in the Person File.

See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

1978 to 2001

Variable = MAN_COLL

Element = 0 - Not Collision With Motor Vehicle in Transport
1 - Rear-End
2 - Head-On
3 - Rear-to-Rear
4 - Angle
5 - Sideswipe, Same Direction
6 - Sideswipe, Opposite Direction
9 - Unknown

1975 to 1977

Variable = MAN_COLL

Element = 0 - Not Collision With Motor Vehicle in Transport
1 - Rear-End
2 - Head-On
3 - Rear-to-Rear
4 - Angle
7 - Sideswipe (May either be same or opposite direction)
9 - Unknown

Note in the original files, from 1975 to 1977 sideswipe was coded as 5 but has since been changed to 7. These years are not consistent with the documentation of the time.

(Continued on Next Page)

Manner of Collision (Continued)

This comes from the Accident file and is repeated in the Person File.

See the note below on the change in the interpretation of Manner of Collision from 2001 to 2002

Note: From 1975 to 2001, the manner of collision is totally dependent on the directions of travel of the vehicles involved. The directions of travel of the vehicles are often misunderstood. The direction of a vehicle is determined by the **pre-crash condition** direction of travel. That is just before the vehicle goes out of control. Example (1): Assume two vehicles are heading toward each other on the same roadway, one going north and the other going south. If the south-bound vehicle skids on a patch of ice and turns 180^{O} and immediately is struck in the rear by the vehicle going north then the manner of collision is head-on, not rear-end. Example (2): Had the vehicle going north sideswiped the south-bound vehicle, which after the ice skid was pointed north, the manner of collision would be sideswipe **opposite** direction, even though both vehicles are pointed north at the time of the sideswipe. **The pre-crash condition directions of travel, for both vehicles, determine the outcome.** These examples involve a rotation of a vehicle just before the crash and can account for 20 percent to 30 percent of the coded cases. See "Impact" in the vehicle section of this guide.

Starting in 2002 and later the manner of collision is dependent on the geometry of the points of impact. That is Example (1) above is now coded 01, Front-to-Rear (Includes **Rear-End**) and Example (2), is now coded 07, Sideswipe - **Same** Direction. This is a major change in the MAN_COLL variable. Care must be taken when using this variable over a time period that spans 2001 to 2002.

NHTSA'S MANNER OF COLLISION CONVENTION

Classification	Data Year and Element (MAN_COLL)		
	1975-1977	1978-2001	2002 and later
Not Collision with Motor Vehicle in Transport	0	0	00
Rear-End	1	1	01
Head-On	2	2	02
Angle	4	4	03-06
Sideswipe	7	5, 6	07-08
Other	3	3	09-11
Unknown	9	9	99

Manner of Leaving Scene

1976 and later

Variable = TOWAWAY

Element = Blank
1 - Driven
2 - Towed Away
3 - Abandoned/Left Scene
9 - Unknown

1975 only

Variable = TOWAWAY

Element = 2 - Towed Away
4 - Not Towed Away
9 - Unknown

Note: The early years are not consistent with the documentation of the time.

Model Year

This is repeated in the Person File.

1998 and later

Variable = MOD_YEAR

Element = 0000 - 9998 (A 4 Digit Field)
9999 - Unknown

A vehicle manufactured as a 1985 model is coded as 1985.

1975 to 1997

Variable = MOD_YEAR

Element = 00 - 98
99 - Unknown

A vehicle manufactured as a 1985 model is coded as 85.

Motor Carrier ID

2007 and later

Variable = MCARR_ID (is a derivate variable. It is the combination of two variables MCARR_I1 and MCARR_I2 since 2007.)

Element = NNNNNNNNNNN or NNAAAAAAAAA

Variable = MCARR_I1 (2- Digit Issuing Authority)

Element =
- 00 - Not Applicable
- 01 – 56 - FARS State Code
- 57 - US DOT
- 58 - MC/MX (ICC)
- 95 - Canada
- 96 - Mexico
- 88 - None
- 99 - Unknown

Variable = MCARR_I2 (9 – Digit Identification Number)

Element = Actual Number
- 000000000 - Not Applicable
- 888888888 - None
- 999999999 - Unknown

1998 to 2006

Variable = MCARR_ID

Element = NNNNNNNNNNN or NNAAAAAAAAA

Issuing Authority:

Where NN =
- 00 - Not Applicable
- 01 – 56 - FARS State Code
- 57 - US DOT
- 58 - ICC
- 95 - Canada
- 96 - Mexico
- 88 - None
- 99 - Unknown

Identification Number:

Where NNNNNNNNN or AAAAAAAAA = Actual Number Except:
- 000000000 - Not Applicable
- 888888888 - None
- 999999999 - Unknown

(Continued on Next Page)

Motor Carrier ID (Continued)

Note: This variable is only applicable for the following vehicles:

1. Medium/Heavy Trucks: vehicles with two axles/six tires and/or gross weight greater than 10,000 pounds.
2. Buses with 16 or more seats (*including the driver*)
3. Trucks and Vans of any size carrying hazardous cargo.
4. Light commercial trucks pulling a trailer with gross combination weight rating (GCWR) greater than 10,000 pounds.

Motorcycle Data

1975 and later

Variable = MCYCL_DS - This variable is repeated in the Person File.

Element = Motorcycle Displacement - this is the piston bore measured in cubic centimeters. This is a numeric value (*example, Honda 160 cc engine*). This field is 4 positions long.

1975 to 1981

Variable = MCYCL_TY

Element = Motorcycle Type (*or Bike Type*). This is the VINA Body Type (*example, Dirt Bike*). This information is in the VINA documentation.

Occupants

1975 and later

Variable = OCUPANTS

Element = The actual number of occupants in the vehicle, except as listed below.
96 – 96 or more occupants in the vehicle.
97 - Unknown - Only Injured Reported
99 - Unknown

All, some, or none of the individuals may have died in the crash.

Police Pursuits

1982 and later

A pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop (*either through the use of visual or audible emergency signals or a combination of emergency devices*) to a motorist who the officer is attempting to apprehend and that motorist fails to comply with the signal by either maintaining speed, increasing speed or taking other evasive action to elude the officer's continued attempts to stop the motorist.

NHTSA'S Driver-Related Factor		
Classification	Data Year and Element	
	1982-1996 (DR_CF1, DR_CF2, DR_CF3)	1997 and later (DR_CF1, DR_CF2, DR_CF3, DR_CF4)
High speed chase with police in pursuit	37	37

If at least one driver in a crash has a "*Driver-Related Factor*" of *high speed chase with police in pursuit* (37) then that crash is considered a police pursuit crash and all fatalities in that crash are considered "fatalities in crashes involving police in pursuit."

DR_CF1=37 or DR_CF2=37 or DR_CF3 or DR_CF4=37

Specific fatality types in a "police pursuit" crash can be identified as follows:

1. *occupant of police vehicle* - all occupants (*PER_TYP IN (1,2,9)*) of special use vehicle police (*SPEC_USE=5*)
2. *occupant of chased vehicle* - all occupants (*PER_TYP IN (1, 2, 9)*) of vehicle with a driver having a "driver-related factor" of high speed chase with police in pursuit (*DR_CF1=37 OR DR_CF2=37 OR DR_CF3=37*)
3. *occupant of other vehicle* - all other occupants (*PER_TYP IN (1, 2, 9)*) - excludes occupant of police vehicle and chased vehicle
4. *nonoccupant* - pedestrians, pedalcyclists, and other nonmotorists (*PER_TYP IN (3, 4, 5, 6, 7, 8)*)

Examination of the 1998 file shows that there were a total of 64 drivers out of 56,865 that had one or more driver distractions coded in FARS, i.e., $93 \leq$ DR_CFi ≤ 98. Thirty-three of the 64 drivers were in Oklahoma. Thirty-one of the 50 States and the

District of Columbia did not report any driver distractions on their police crash reports and therefore are not identified in FARS. When using Related Factors, it is suggested that the variable be examined by State.

Note: Related Factors - Driver Level, variables DR_CF1 -. DR_CF4 are concerned with speeding, e.g., Value = 44, Driving Too Fast for Conditions or in Excess of Posted Speed Limit and since 1998 Value = 46 Racing.

Previous Records - Driver Level

1994 and later

Variables = PREV_ACC Previous Recorded Crash (*Crashes*)
PREV_DWI Previous Recorded DWI Convictions
PREV_OTH Previous Recorded Other Moving Violations Convict
PREV_SPD Previous Recorded Speeding Convictions
PREV_SUS Previous Recorded Suspensions and Revocations

Counts only events occurring within three years of the accident (*crash*), Speeding violations count going too slow, as well as going too fast.

Element = Blanks
00 - None
01 – 97 - Actual Value
98 - Crashes/Accidents Not Reported on Driving Record
99 - Unknown

If a driver has been disqualified for a CDL this event is recorded in Previous Recorded Suspensions and Revocations.

The current crash is not included in any of the counters.

1975 to 1993

Variables = PREV_ACC Previous Recorded Accidents (*Crashes*)
PREV_DWI Previous Recorded DWI Convictions
PREV_OTH Previous Recorded Other Moving Violations Convict
PREV_SPD Previous Recorded Speeding Convictions
PREV_SUS Previous Recorded Suspensions and Revocations

Counts only events occurring within three years of the crash, Speeding violations count going too slow, as well as going too fast.

Element = 00 - None
01 – 97 - Actual Value
98 - CDL Disqualified
99 - Unknown

The current crash is not included in any of the counters.

Registered Vehicle Owner

1991 and later

Variable = OWNER

Element =
0 - Not Applicable, Vehicle Not Registered
1 - Driver (*of This Vehicle*) Was Registered Owner
2 - Driver (**of This Vehicle**) Not Registered Owner (*other private owner*)
3 - Vehicle Registered as Business/Company/Government Vehicle
4 - Vehicle Registered as Rental Vehicle
5 - Vehicle Was Stolen (*reported by police*)
6 - Driverless/Motor Vehicle Parked/Stopped Off Roadway (since 2008)
6 - Driverless Vehicle (1991 – 07)
9 - Unknown

Related Factors - Driver Level

Note: There are also crash-level-related factors in the Accident File, CF1, CF2, and CF3; vehicle-related-factors, namely VEH_CF1 and VEH_CF2 and person-related-factors, P_CF1, P_CF2, and P_CF3.

Note the FARS coder may have used any of the three variables to code a related factor. One must test all three variables to insure that the selected related factor is included.

The person-related-factors P_CF1, P_CF2, and P_CF3 are all set to 0 for drivers.

1982 and later

Except as noted

Variables = DR_CF1 or DR_CF2 or DR_CF3 (*or DR_CF4 since 1997*)

Element = Blanks

00 - None

PHYSICAL/MENTAL CONDITION

01 - Drowsy, Sleepy, Asleep, Fatigued
02 - Ill, Passed Out/Blackout
03 - Emotional (*e.g., Depression, Angry, Disturbed*)
04 - Drugs - Medication
05 - Other Drugs (*Marijuana, Cocaine, etc.,* 1982 – 94*)*
05 - Under the Influence of Alcohol, Drugs, or Medication (since 2003)
06 - Inattentive/Careless (*Talking, Eating, Car Phones, etc.*)
07 - Restricted to Wheelchair
08 - Paraplegic (1982 – 94 only, see element 11)
08 - Road Rage/Aggressive Driving (since 2004)
09 - Impaired Due to Previous Injury
10 - Deaf (1982 – 94)
11 - Other Physical Impairment (*includes Paraplegic since 1995*)
12 - Mother of Dead Fetus
13 - Mentally Challenged (since 1995)
14 - Failure to Take Drugs/Medication (since 1995)
15 - Seat Back Not in Normal Position, Seat Back Reclined (*since 2002)*
16 - Police of Law Enforcement Officer (since 2002)

MISCELLANEOUS FACTORS

17 - Running off Road (2000 – 03 only)
18 - Traveling on Prohibited Trafficways (since 1995)
19 - Legally Driving on Suspended or Revoked License
20 - Leaving Vehicle Unattended with Engine Running; Leaving Vehicle Unattended in Roadway
21 - Overloading or Improper Loading of Vehicle with Passenger or Cargo

(Continued on Next Page)

Related Factors - Driver Level (Continued)

1982 and later

Except as noted

MISCELLANEOUS FACTORS

22 - Towing or Pushing Vehicle Improperly
23 - Failing to Dim Lights or to Have Lights on When Required
24 - Operating Without Required Equipment
25 - Creating Unlawful Noise or Using Equipment Prohibited by Law
26 - Following Improperly
27 - Improper or Erratic Lane Changing
28 - Failure to Keep in Proper Lane or Running off Road (1982 – 99)
28 - Failure to Keep in Proper Lane (since 2000)
29 - Illegal Driving on Road Shoulder, in Ditch, or Sidewalk, or on Median
30 - Making Improper Entry to or Exit from Trafficway
31 - Starting or Backing Improperly
32 - Opening Vehicle Closure into Moving Traffic or Vehicle is in Motion
33 - Passing Where Prohibited by Posted Signs, Pavement Markings, Hill or Curve, or School Bus Displaying Warning Not to Pass
34 - Passing on Wrong Side
35 - Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle
36 - Operating the Vehicle in an Erratic, Reckless, Careless or Negligent Manner or Operating at Erratic or Suddenly Changing Speeds
37 - High-Speed Chase with Police in Pursuit (s*ee Police Pursuit Note*)
38 - Failure to Yield Right of Way
39 - Failure to Obey Traffic Actual Signs, Traffic Control Devices or Traffic Officers, Failure to Observe Safety Zone Traffic Laws
40 - Passing Through or Around Barrier
41 - Failure to Observe Warnings or Instructions on Vehicle Displaying Them
42 - Failure to Signal Intentions
43 - Driving too Fast for Conditions (since 2008)
44 - Driving too Fast for Conditions or in Excess of Posted Speed Limit (1982 – 07)
44 - Driving in Excess of Posted Speed Limit (since 2008)
45 - Driving Less Than Posted Maximum
46 - Operating at Erratic or Suddenly Changing Speeds (1982 – 94)

(Continued on Next Page)

Related Factors - Driver Level (Continued)

1982 and later

Except as noted

MISCELLANEOUS FACTORS

46 - *Not Used* (1995 – 97)
46 - Racing (since 1998)
47 - Making Right Turn from Left-Turn Lane or Making Left Turn from Right-Turn Lane
48 - Making Improper Turn
49 - Failure to Comply With Physical Restrictions of License
50 - Driving Wrong Way on One-Way Trafficway
51 - Driving on Wrong Side of Road (*Intentionally or Unintentionally*)
52 - Operator Inexperience
53 - Unfamiliar With Roadway
54 - Stopping in Roadway (*Vehicle Not Abandoned*)
55 - Underriding a Parked Truck
56 - Improper Tire Pressure
57 - Locked Wheel
58 - Over Correcting
59 - Getting Off/Out of or On/In to Moving Vehicle
60 - Getting Off/Out of or On/In to Non-Moving Vehicle

VISION OBSCURED BY
[*1975 to 1981 see related factors crash level, CF1...CF3*]

61 - Rain, Snow, Fog, Smoke, Sand, Dust
62 - Reflected Glare, Bright Sunlight, Headlights
63 - Curve, Hill, or Other Design Features (*including traffic signs, embankment*)
64 - Building, Billboard, etc.
65 - Trees, Crops, Vegetation
66 - Motor Vehicle (*including load*)
67 - Parked Vehicle
68 - Splash or Spray or Passing Vehicle
69 - Inadequate Defrost or Defog System
70 - Inadequate Lighting System
71 - Obstructing Angles on Vehicle
72 - Mirrors - Rear View
73 - Mirrors - Other (1982 – 01 only)
73 - Driver Has Not Complied with Learners Permit or Intermediate Driver License Restrictions (GDL Restrictions, since 2004)

(Continued on Next Page)

Related Factors - Driver Level (Continued)

1982 and later
Except as noted

VISION OBSCURED BY
[*1975 to 1981 see related factors crash level, CF1...CF3*]

74 - Head Restraints (1982 – 01 only)
74 - Driver Has Not Complied with Physical or Other Imposed Restrictions (since 2004)
75 - Broken or Improperly Cleaned Windshield
76 - Other Obstruction

AVOIDING, SWERVING, OR SLIDING DUE TO
[*1975 to 1981 see related factors crash level, CF1...CF3*]

77 - Severe Crosswind
78 - Wind from Passing Truck
79 - Slippery or Loose Surface
80 - Tire Blow-Out or Flat [*See VEH_CFx (01) tires*]
81 - Debris or Objects in Road
82 - Ruts, Holes, Bumps in Road
83 - Live Animals in Road
84 - Vehicle in Road
85 - Phantom Vehicle
86 - Pedestrian, Pedalcyclist, or Other Nonmotorist in Road
87 - Ice, Water, Snow, Slush, Sand, Dirt, Oil, Wet Leaves on Road
88 - Trailer Fishtailing or Swaying (since 2001)

OTHER MISCELLANEOUS FACTORS

89 - Carrying Hazardous Cargo Improperly (since 1994)
90 - Hit-and-Run Vehicle Driver
91 - Non-Traffic Violation Charged - Manslaughter or Homicide or Other Assault (since 1986)
92 - Other Non-Moving Traffic Violation (since 1986)

POSSIBLE DISTRACTIONS INSIDE VEHICLE

93 - Cellular Telephone (since 1991)
94 - Fax Machine (1991 – 01)
94 - Cellular Telephone in Use in Vehicle (since 2002)
95 - Computer (since 1991 – 01)
95 - Computer Fax Machines/Printers (since 2002)
96 - On-Board Navigation System (since 1991)
97 - Two-Way Radio (since 1991)
98 - Head-Up Display (since 1991)
99 - Unknown

(Continued on Next Page)

Related Factors - Driver Level (Continued)

1975 to 1981

Early files are not consistent with the documentation of the **time**. The following interpretation is suggested for current/future analysis.

Variables = DR_CF1 or DR_CF2 or DR_CF3

Element = 00 - None

PHYSICAL/MENTAL CONDITION

01 - Drowsy, Sleepy, Asleep, Fatigued
02 - Ill, Blackout
03 - Depression
04 - Reaction to Drugs - Medication
05 - Other Drugs (*Marijuana, Cocaine, etc.*)
06 - Inattentive (*Talking, Eating, etc.*)
07 - Physical Impairments
08 - Died Prior to Crash

MISCELLANEOUS CAUSES

20 - Leaving Vehicle Unattended with Engine Running Leaving Vehicle Unattended in Roadway
21 - Overloading or Improper Loading of Vehicle with Passengers or Cargo
22 - Towing or Pushing Vehicle Improperly
23 - Failing to Dim Lights or to Have Lights on When Required
24 - Operating Without Required Equipment
25 - Creating Unlawful Noise or using Equipment Prohibited by Law
26 - Following Improperly
27 - Improper or Erratic Lane Changing
28 - Failure to Keep in Proper Lane or Running off Road
29 - Illegal Driving on Road Shoulder, in Ditch or Sidewalk or on Median
30 - Making Improper Entry to or Exit from Trafficway
31 - Starting or Backing Improperly
32 - Opening Vehicle Closure into Moving Traffic or Vehicle is in Motion
33 - Passing Where Prohibited by Posted Signs, Pavement Markings, Hill or Curve, or School Bus Displaying Warning Not to Pass
34 - Passing on Wrong Side

(Continued on Next Page)

Related Factors - Driver Level (Continued)

1975 to 1981

MISCELLANEOUS CAUSES

35 - Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle
36 - Operating the Vehicle in an Erratic, Reckless, Careless, or Negligent Manner
37 - High-Speed Chase with Police in Pursuit (since 1978)
38 - Failure to Yield Right of Way
39 - Failure to Obey Traffic Signs, Traffic Control Devices or Traffic Officers, Failure to Observe Safety Zone
40 - Passing Through or Around Barrier
41 - Failure to Observe Warnings or Instructions on Vehicle Displaying Them
42 - Failure to Signal Intentions
43 - Giving Wrong Signal
44 - Driving Too Fast for Conditions or in Excess of Posted Speed Limit
45 - Driving Less Than Posted Maximum
46 - Operating at Erratic or Suddenly Changing Speeds
47 - Making Right Turn from Left Turn-Lane; Making Left-Turn from Right-Turn Lane
48 - Making Improper Turn
49 - Failure to Comply With Physical Restrictions of License
50 - Driving Wrong Way on One-Way Trafficway
51 - Driving on Wrong Side of Road
52 - Operator Inexperience
53 - Unfamiliar With Roadway
54 - Stopping in Roadway (since 1979)
99 - Unknown

Note: A police pursuit is an event that is initiated when a law enforcement officer, operating an authorized emergency vehicle, gives notice to stop (either through the use of visual or audible emergency signals or a combination of emergency devices) to a motorist who the officer is attempting to apprehend and that motorist fails to comply with the signal by either maintaining speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. This is recorded if any Related Factor - Driver Level, DR_CF1, DR_CF2 or DR_CF3 is coded as 37.

Related Factors - Vehicle Level

Note: There are also crash-level-related factors in the Accident file, CF1, CF2, and CF3 and driver-related factors in the Vehicle file, namely DR_CF1, DR_CF2, DR_CF3 and (DR_CF4 since 1997).

Note: the FARS coder may have used either of the two variables to code a related factor. One must test both variables to insure that the selected related factor is included.

1982 and later

Variable = VEH_CF1 or VEH_CF2

Element = Blanks
- 00 - None
- 01 - Tires (does not include wheels see value 16) [See DR_CFx (80) Flat Tire]
- 02 - Brake System
- 03 - Steering System - tie rod, kingpin, ball joint, etc.
- 04 - Suspension - springs, shock absorbers, MacPherson struts, axle bearing, control arms, etc.
- 05 - Power Train (Power Train/Engine, since 2001) - universal joint, drive shaft, transmission, etc.
- 06 - Exhaust System
- 07 - Headlights
- 08 - Signal Lights
- 09 - Other Lights
- 10 - Horn
- 11 - Mirrors
- 12 - Wipers
- 13 - Driver Seating and Control
- 14 - Body, Doors, Hood, Other
- 15 - Trailer Hitch
- 16 - Wheels
- 17 - Air Bags (since 1995)
- 18 - Other Vehicle Defects
- 19 - Safety Belts (since 2002)
- 31 - Hit-and-Run Vehicle
- 32 - Vehicle Registration for Handicapped
- 33 - Vehicle Being Pushed by Nonmotorist
- 34 - Vehicle Impact Point - the Result of Something Set in Motion (1998 – 03 only)

(Continued on Next Page)

Related Factors - Vehicle Level (Continued)

1982 and later

35 - Reconstructed Vehicle (1998 – 2007)
35 - Reconstructed/Altered Vehicle (since 2008)
36 - Electric/Alternative Fuel Vehicle (since 1999)
37 - Transporting Children to/from Head Start/Day Care (since 2000)
38 - Vehicle Went Airborne During Crash (2001 – 03)
39 - Highway Construction, Maintenance or Utility Vehicle, In Transport (Inside or Outside Work Zone) (since 2002)
40 - Highway Incident Response Vehicle (since 2002)
41 - Police Fire or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities (since 2004)
42 - Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle, since 2004)
43 - Hazardous Materials/Cargo Released From This Vehicle (2005 – 06)
44 - Adaptive Equipment (since 2007)
99 - Unknown

1975 to 1981

Variable = VEH_CF1 or VEH_CF2

Element =
00 - None
01 - Tires and Wheels
02 - Brake System
03 - Steering System
04 - Suspension - springs, shock absorbers, MacPherson struts, axle bearing, control arms, etc.
05 - Power Train - universal joint, drive shaft, transmission, etc.
06 - Exhaust System
07 - Headlights
08 - Signal Lights
09 - Other Lights
10 - Horn
11 - Mirrors
12 - Wipers
13 - Driver Seating and Control
14 - Body, Doors, Hood, Other
15 - Trailer Hitch
99 - Unknown

Rollover

This is repeated in the Person file.

1978 and later

Variable = ROLLOVER

Element = Blank
0 - No Rollover
1 - First Event
2 - Subsequent Event

1975 to 1977 DATA NOT AVAILABLE

NHTSA'S Rollover	
Classification	**Data Year and Element**
	1978 and later (ROLLOVER)
No Rollover	0
Rollover	1-2

Special Use

This is repeated in the Person file.

1975 and later

Except as noted

Variable = SPEC_USE

Element = Blank
- 0 - No Special Use
- 1 - Taxi
- 2 - Vehicle Used as School Bus
- 3 - Vehicle Used as Other Bus
- 4 - Military
- 5 - Police
- 6 - Ambulance (since 1980)
- 7 - Firetruck (since 1982)
- 9 - Unknown

Note: The variable SCH_BUS in the Accident File and Person File identifies vehicles used as school buses.

Speeding

A fatal crash is "speeding" related if any of the following applies:

- At least one driver involved in the crash had a speeding-related Driver-Related Factor
- At least one driver involved in the crash had a speeding-related Violation Charged

SPEEDING Revised Definition	
Data Year	**Data Element**
1998 and later	DR_CF1 = 43 or DR_CF2=43 or DR_CF3 = 43 or DR_CF4 = 43 or DR_CF1 = 44 or DR_CF2=44 or DR_CF3 = 44 or DR_CF4 = 44 or DR_CF1 = 46 or DR_CF2 = 46 or DR_CF3 = 46 or DR_CF4 = 46 or (21 <= VIOLCHG1 <= 25) or (21 <= VIOLCHG2 <= 25) or (21 <= VIOLCHG3 <= 25) or VIOLCHG1=29 or VIOLCHG2=29 or VIOLCHG3=29
1997	DR_CF1 = 44 or DR_CF2 = 44 or DR_CF3 = 44 or DR_CF4 = 44 or (21 <= VIOLCHG1 <= 25) or (21 <= VIOLCHG2 <= 25) or (21 <= VIOLCHG3 <= 25) or VIOLCHG1 = 29 or VIOLCHG2 = 29 or VIOLCHG3 = 29
1982-1996	DR_CF1 = 44 or DR_CF2 = 44 or DR_CF3 =44 or (2 <= VIOL_CHG <= 3)

SPEEDING Old Definition	
Data Year	**Data Element**
1998 to 2001	DR_CF1 = 44 or DR_CF2=44 or DR_CF3 = 44 or DR_CF4 = 44 or DR_CF1 = 46 or DR_CF2 = 46 or DR_CF3 = 46 or DR_CF4 = 46
1982-1997	DR_CF1 = 44 or DR_CF2 = 44 or DR_CF3 =44

Note: Since the release of the 2001 Annual FARS file, this old definition has no been used by NHTSA

State

1975 and later

Variables = REG_STAT State in which the vehicle was registered
(Note values above 90 conflicted with L_STATE variable see below)
STATE State in which the *crash* occurred, from Accident File
L_STATE State in which the driver is licensed
(Note values above 90 conflicted with REG_STAT variable, See below)

Element = GSA State elements except for 43, Puerto Rico

If the object of the analysis is to examine the effects of the environment, e.g., salt corrosion of vehicles, then use REG_STAT rather than STATE.

00 – Not Applicable
01 - Alabama
02 - Alaska
04 - Arizona
05 - Arkansas
06 - California
08 - Colorado
09 - Connecticut
10 - Delaware
11 - District of Columbia
12 - Florida
13 - Georgia
15 - Hawaii
16 - Idaho
17 - Illinois
18 - Indiana
19 - Iowa
20 - Kansas
21 - Kentucky
22 - Louisiana
23 - Maine
24 - Maryland
25 - Massachusetts
26 - Michigan
27 - Minnesota
28 - Mississippi
29 - Missouri
30 - Montana
31 - Nebraska
32 - Nevada
33 - New Hampshire
34 - New Jersey
35 - New Mexico
36 - New York
37 - North Carolina
38 - North Dakota
39 - Ohio
40 - Oklahoma
41 - Oregon
42 - Pennsylvania
43 - Puerto Rico
44 - Rhode Island
45 - South Carolina
46 - South Dakota
47 - Tennessee
48 - Texas
49 - Utah
50 - Vermont
51 - Virginia
52 - Virgin Islands (since 2004)
53 - Washington
54 - West Virginia
55 - Wisconsin
56 - Wyoming

(Continued on Next Page)

State (Continued)

1975 and later

Registration State Only:

92 - No Registration
93 - Multiple State Registrations - In State (In 1997 level 93 and level 94 were combined into level 93. After 93 the level is Multiple State Registration)
94 - U.S. Government Tags (Includes military, since 2008)
94 - Multiple State Registration - Out-of-State (1975 – 96 only, value=94, not valid after 1996)
95 - Canada (since 2008)
95 - U.S. Government Tags (1975 – 07)
96 - Mexico (since 2008)
96 - Military Vehicle (1975 – 07)
97 - Other Foreign Country (since 2008)
97 - Foreign Country (1975 – 07)
98 - Other Registration (includes Native American Indian Nations, since 2008)
98 - Other Registration (1975 – 07)
99 - Unknown

License State only:

94 - U.S. Government (since 2007)
94 - Military (1975 – 06)
95 - Canada
96 - Mexico
97 - Other Foreign Country
99 - Unknown

State Case

1975 and later

Variable = ST_CASE

This variable is in each Accident, Vehicle, and Person record. It is a combination of the GSA State element and an assigned consecutive number. It is a unique identifier for the crash within the year. It is used as the key when any two of these files from the same year, are merged.

This variable is stored as a numeric variable of six characters; the first two characters are the State element, and the next four characters are the case number, with leading zeros if necessary.

Also see: VEH_NO, Vehicle Number, in the Vehicle File or Person File.

Towed Trailing Unit

2004 and later

Variable = TOW_VEH

Element = Blank
- 0 - No
- 1 - Yes, One Trailer
- 2 - Yes, Two Trailers
- 3 - Yes, Three or More Trailers
- 4 - Yes, Number of Trailers Unknown (since 1984)
- 5 - Vehicle Towing another Motor Vehicle (since 2004)
- 9 - Unknown

1983 and 2003

Variable = TOW_VEH

Element = Blank
- 0 - No
- 1 - Yes, One Trailing Unit
- 2 - Yes, Two Trailing Units
- 3 - Yes, Three or More Trailing Units
- 4 - Yes, Number of Trailing Units Unknown (since 1984)
- 9 - Unknown

1982

Variable = TOW_VEH

Element =
- 0 - No
- 1 - Yes, One Trailing Unit
- 4 - Yes, Number of Trailing Units Unknown
- 5 - Yes, Two or More Trailing Units

1975 to 1981

Variable = TOW_VEH

Element =
- 0 - No
- 1 - Yes

Note that the number of unknowns is 0 until 1982. From 1982 to 1984 the number of unknowns is approximately 2,500 per year. Starting in 1985 the number of unknowns falls to about 300 per year.

This variable not only applies to tractor trailers, but also to boats, cars, and U-Haul-type vehicles that are towed with a trailer hitch. Vehicles pulled by a rope or chain are not counted as towed vehicles.

Travel Speed

1975 and later

Except 1980 & 1981 see note below

Variable = TRAV_SP

Element = Blanks

00	- Stopped Motor Vehicle
01 – 96	- Travel Speed in mph
97	- Speed of 97 mph or Higher
98	- Not Reported
99	- Unknown

Note: This data is collected after the crash, and is an estimate of the travel speed, which is often a judgment, rather than a measurement. Computing the mean without removing the unknowns will increase the mean travel speed.

Note: For the years 1980 and 1981 travel speed was not collected. However, the variable is currently in the database for these two years with all data as missing. With this variable there always have been a high number of unknown cases. Since the data were considered somewhat "uncollectible," a decision was made not to collect the data for these two years. However, although the data were often unavailable, it was considered too important not to try to collect it.

Note: Since 2005 data are collected for parked vehicles and vehicles not in transport. The value 00 above only applies to motor vehicles in transport, for example, a vehicle that is in transport, but stopped at a stop light.

Truck Fuel Element

1975 and later

Variable = FLDCD_TR

This is RLPolk VINA decode data.

Element =
- C - Gasoline engine that can be easily converted to gaseous-powered engine (powered by natural gas, propane, etc.)
- D - Diesel
- E - Electric
- F - Flexible Fuel
- G - Gas
- H - Ethanol Fuel Only
- M - Methanol Gas Only
- N - Compressed Natural Gas
- P - Propane
- 9 - Unknown

Unit Type

Motor vehicles in transport, which are coded “1” for the variable UNITTYPE in the VEHICLE file. Motor vehicles not in transport, which are coded "2", "3", or "4" for the variable UNITTYPE in the VEHNIT file.

2005 and later

Variable = UNITTYPE

Element = 1 - Motor Vehicle in Transport (Inside or Outside the Trafficway, since 2008)

In Transport means any part of the vehicle’s primary outline as defined by the four sides of the vehicle (excluding open doors or mirrors) is within the roadway.

1 - Motor Vehicle in Transport (2005 – 07 only)

In Transport means any part of the vehicle’s primary outline as defined by the four sides of the vehicle (excluding open doors or mirrors) is within the roadway.

2 - Motor Vehicle Not in Transport within the Trafficway

Example, A vehicle parked in a designated curbside parking lane, even if a door is open, is a motor vehicle not in transport.

3 - Motor Vehicle Not in Transport outside the Trafficway

4 - Working Motor Vehicle (highway construction, maintenance, utility only)

Unknowns

1982 and later

Starting in 1982, in the case of a hit-and-run crash, a vehicle-driver form and a person level form for the driver are filled out. When the information about the vehicle driver or person is not known -- which is often the case with hit-and-runs -- the values are coded as unknown.

Example: Between 1982 and 1994, the number of drivers coded with unknown sex fluctuated between 700 and 1,000, approximately 1.5 percent of all drivers involved in fatal crashes. Reviewing the 768 people with sex coded as unknown in the 1994 Annual Report file, all were drivers and 90 percent of them were involved in hit-and-run crashes.

1975 to 1981

In the event of a hit-and-run crash, if the vehicle information was not known, then a vehicle form was not filled out. Likewise, in a hit-and-run crash, if there was no known information at the person level, usually the driver of the unknown vehicle, then a person level form was not filled out. The result is that the number of unknowns is much smaller for this time period than 1982 and later.

Example: From 1975 to 1980, there were 30 to 40 drivers coded with unknown sex, approximately 0.05 percent of all drivers involved in fatal crashes. In 1981 the number of drivers with unknown sex rose to over 300, approximately 0.5 percent of all drivers involved in fatal crashes.

Vehicle Configuration

(See BODY_TYP and CARGO_BT)

2001 and later

Variable = V_CONFIG

Element = Blanks

00 - Not Applicable, not a medium/heavy truck or bus or vehicle displaying a hazardous material placard

This element should be used for automobiles, motorcycles, small buses (with less than 9 seats, including driver), and small trucks or vans (*10,000 lbs. or less)* not carrying hazardous cargo.

01 - Single-Unit Truck

This element is used for two-axle, single-unit trucks with six tires. A single-unit truck carrying hazardous cargo with four tires is coded 70.

02 - Single-Unit Truck

This element is used for single-unit trucks with three or more axles.

03 - Single-Unit Truck

This element is used for single-unit trucks over 10,000 lbs. when the number of axles or tires is unknown.

04 - Truck/Trailer(*s*)

This element is used for single-unit trucks pulling trailers.

05 - Truck Tractor (*bobtail, i.e., tractor only, no trailer*)

This element is used for cab-only vehicles (bobtail).

06 - Tractor/Semi-Trailer (*one trailer*)

This element is used for truck tractors with one trailer. NOTE: This element was used for truck tractors with any number of trailers before 2001. This element should not be for single-unit trucks pulling a trailer.
Use Element 07 for two trailers
Use Element 08 for three trailers

07 - Tractor/Doubles (*two trailers*)

08 - Tractor/Triples (*three trailers*)

19 - Medium/Heavy Trucks, cannot classify

This element is used when you know the vehicle meets the definition of a medium/heavy truck, but you can't select from elements 01-08. An example is a vehicle with one trailer, but it is unknown whether it is a tractor-trailer or a single-unit truck pulling a trailer.

20 - Bus (*seats for 9-15 people, including driver*)

This element is used for smaller van-based buses (*less than 15 seats, including driver*), e.g., commuter vans, van-based school buses.

21 - Bus (*seats for 16 or more people, including driver*, since 2007)

21 - Bus (*seats for more than 15 people, including driver*, 2001 – 06)

This element is used for a van-based bus if it is configured to include enough seats. A CDL is required for the driver of this bus.

(Continued on Next Page)

Vehicle Configuration (Continued)

(See BODY_TYP and CARGO_BT)

2001 and later

70 - Light Truck (*van, mini-van, panel, pickup, sport utility vehicle displaying a hazardous material placard*)

This element is only used for trucks 10,000 lbs. or less, vans, and sport utilities displaying hazardous materials placard. When vehicles in this category are not displaying a hazardous materials placard, use element 00 - Not Applicable.

80 - Passenger Car (*only when displaying a hazardous material placard*)

This element is used for passenger cars displaying a hazardous material placard; other wise, element 00 - Not Applicable.

99 - Unknown if Light or Medium/Heavy Truck/Bus

This element is used if the vehicle meets the definition of a medium/heavy truck or bus but there is reason to suspect that it may not qualify. This element differs from element 19 in that element 19 indicates that the vehicle is a medium/heavy truck, but the configuration is not known.

1995 to 2000

Variable = V_CONFIG

Element =
- 0 - Not Applicable, Not a Medium/Heavy Truck or Bus
- 1 - Single-Unit Truck (*2 axles, 6 tires*)
- 2 - Single-Unit Truck (3 *or more axles*)
- 3 - Single-Unit Truck (*unknown number of axles, tires*)
- 4 - Truck/Trailer(*s*)
- 5 - Truck Tractor (*bobtail, i.e., tractor only, no trailer*)
- 6 - Tractor/Semi-Trailer
- 7 - Medium/Heavy Trucks, Cannot Classify
- 8 - Bus
- 9 - Unknown if Light or Medium/Heavy Truck/Bus

1991 to 1994

Variable = V_CONFIG

Element =
- 0 - Not Applicable, Not a Medium/Heavy Truck or Bus
- 1 - Single-Unit Truck (*2 axles, 6 tires*)
- 2 - Single-Unit Truck (*3 or more axles*)
- 3 - Truck/Trailer(*s*)
- 4 - Truck Tractor (*bobtail, i.e., tractor only, no trailer*)
- 5 - Tractor/Semi-Trailer
- 6 - Medium/Heavy Trucks, Cannot Classify
- 7 - Bus
- 9 - Unknown

Vehicle Forms Submitted (*Number of*)

This comes from the Accident File and is repeated in the Person File

1982 and later

Variable = VE_FORMS

Element = 01 – 99

This counts the number of vehicles in transport involved in the crash. Legally parked vehicles are not included.

Note: In the case of a hit-and-run crash, a Vehicle-Driver form and a Person Level form for the driver are filled out. When the information about the vehicle-driver or person is not known -- which is often the case with hit-and-runs -- the values are coded as unknown.

1976 to 1981

Variable = VE_FORMS

Element = 00 – 99

This counts the Vehicle forms submitted, see note on vehicles below. It is unlikely that the number of vehicles involved in the crash is greater than the Number of Vehicle Forms plus two.

Note: In the event of a hit-and-run crash, if the vehicle information was not known, then **no** vehicle form was filled out. Likewise, if no information was known on the person level, usually the driver of the unknown vehicle, then a Person Level form was **not** filled out. The result is that the number of unknowns is much smaller for this time period than 1982 and later.

1976 to 1981

Variable = VEHICLES

Element = 01 – 99

This counts the number of vehicles in transport involved in the crash. Legally parked vehicles are not included.

Notes:

The count includes only motor vehicles in transport. Motor vehicles are considered to be "in transport" when they are in motion on the trafficway or on the roadway. **Do not include legally parked vehicles.** Be careful; the police officer may incorrectly refer to a vehicle stopped or left on the roadway as "parked."

The count must be the number of motor vehicles involved in the crash; that is, a Vehicle Level form must be submitted for all motor vehicles involved in the crash regardless of whether the motor vehicle was a hit-and-run vehicle, an involved motor vehicle that had left the scene of the crash, etc. Refer to the instructions under HIT-AND-RUN.

(Continued on Next Page)

Vehicle Forms Submitted (Number of) (Continued)

This comes from the Accident File also repeated in the Vehicle File

2005 and later

Variable = VE_TOTAL

Element = 01 – 99

This counts the all of vehicles in the crash. This includes the vehicles in transport which are documented in the Vehicle File and the vehicles not in transport which are documented in the Vehnit File. This variable only appears in the Accident File. The Vehnit File does not exist prior to 2005.

Vehicle Identification Number

1975 and later

Variable = VIN The first [12 (1994 and later)] [10 (1975 – 93)] characters of the vehicle identification number (VIN). The vehicle manufacturers use the VIN to describe certain characteristics of a vehicle and to assign a serial number to the vehicle. VINA is a software program, maintained by R. L. Polk & Co. that deciphers the VIN for 1966 and newer vehicles that are within the scope of the program. In FARS, the VINA program uses analyst-coded vehicle make, model year and the VIN as input values and returns decoded values for automobiles, trucks, and motorcycles. Vehicle type, determined by the analyst-coded body type, is also used as input to facilitate the program processing. Many variables decoded from the VIN have "VIN" as the first part of their names. Some of the results from the VINA program are used as edit checks for these data.

Variables = VIN_1 ... VIN_12 The 1st to 12th character of the vehicle identification number

Starting in 1981, the Vehicle Identification Numbers were required to conform to an international standard. Some of the highlights of those standards appear in the following pages. For vehicles built prior to 1981 one may consult the National Automobile Theft Bureau's publication *Passenger Vehicle Identification Manual* for the year in question. The VINA program developed by R. L. Polk & Co. is capable of decoding the VIN for model years 1961 and later.

The first character of the VIN usually identifies the country or Nation of Origin; the most popular are:

VIN_1 =
- 1 - U.S.
- 2 - Canada
- 3 - Mexico
- J - Japan
- K - Korea
- L - Taiwan
- S - England
- VF - France (V for Europe, F for France)
- W - West Germany
- Y - Sweden
- Z - Italy

(Continued on Next Page)

Vehicle Identification Number (Continued)

1981 and later

The second and third characters of the VIN, more or less, identify the make of the vehicle; the most popular **AUTOMOBILE** makes are:

VIN_2|VIN_3 =

2A - AVANTI
A3 - MITSUBISHI
AB - ISUZU
AJ - JAGUAR
AM - MASERATI (IF VIN_1 = Z)
AM - AMERICAN MOTORS (IF VIN_1 = 1)
AR - ALPHA ROMEO
AW - AUDI
AX - STERLING
B3 - DODGE
BA - BMW
BB - BERTONE
C3 - CHRYSLER
CA - ROLLS ROYCE
CC - LOTUS
CE - DELOREAN
CF - ASTON MARTIN
DB - MERCEDES BENZ
E3 - EAGLE
F1 - EAGLE MEDALLION (IF VIN_1 = V SEE RENAULT)
F1 - MERKUR (IF VIN_1 = W)
F1 - RENAULT (IF VIN_1 = V SEE EAGLE MEDALLION)
F1 - SUBARU (IF VIN_1 = J)
F3 - PEUGEOT
FA - FORD (IF VIN_1 = 1)
FA - FIAT (IF VIN_1 = Z)
FF - FERRARI
FR - PININFARINA
G1 - CHEVROLET
G2 - PONTIAC
G3 - OLDSMOBILE
G4 - BUICK
G6 - CADILLAC
G8 - SATURN
H4 - ACURA
HM - HONDA
JC - JEEP
LN - LINCOLN
M1 - MAZDA
ME - MERCURY
MH - HYUNDAI
N1 - NISSAN
P3 - PLYMOUTH
PO - PORSCHE
S3 - SAAB
S3 - SUZUKI
T2 - TOYOTA
V1 - VOLVO
VW - VOLKSWAGEN

(Continued on Next Page)

Vehicle Identification Number (Continued)

1981 and later

The model year of the vehicle is usually the tenth character. The values are:

VIN_10 =

	L - 1990	Y - 2000
A - 1980	M - 1991	1 - 2001
B - 1981	N - 1992	2 - 2002
C - 1982	P - 1993	3 - 2003
D - 1983	R - 1994	4 - 2004
E - 1984	S - 1995	5 - 2005
F - 1985	T - 1996	6 - 2006
G - 1986	V - 1997	7 - 2007
H - 1987	W - 1998	8 - 2008
J - 1988	X - 1999	9 - 2009
K - 1989		

1981 and later

Variable = VIN_LNGT This is the actual length of the vehicle identification number

Element = 1 – 17 - Actual value
99 - Unknown VIN length

Vehicle Make

1991 and later

Variable = MAKE

Element = [In numerical order]

01 - American Motors
02 - Jeep
Kaiser-Jeep
Willys Jeep
03 - AM General
06 - Chrysler
07 - Dodge
08 - Imperial
09 - Plymouth
10 - Eagle
12 - Ford
13 - Lincoln
14 - Mercury
18 - Buick
18 - Opel
19 - Cadillac
20 - Chevrolet
21 - Oldsmobile
22 - Pontiac
23 - GMC
24 - Saturn
25 - Grumman
29 - Other Domestic
Avanti
Checker
DeSoto
Excalibur
Hudson
Packard
Panoz
Saleen
Studebaker
Stutz
30 - Volkswagen
31 - Alfa Romeo
32 - Audi
33 - Austin/Austin Healey
34 - BMW
35 - Datsun
Nissan
36 - Fiat
37 - Honda
38 - Isuzu
39 - Jaguar
40 - Lancia
41 - Mazda
42 - Mercedes-Benz
43 - MG
44 - Peugeot
45 - Porsche
46 - Renault
47 - Saab
48 - Subaru
49 - Toyota
50 - Triumph
51 - Volvo
52 - Mitsubishi
53 - Suzuki
54 - Acura
55 - Hyundai
56 - Merkur
57 - Yugo
58 - Infiniti
59 - Lexus
60 - Daihatsu
61 - Sterling
62 - Land Rover
63 - KIA
64 - Daewoo
69 - Other Imports
Aston Martin
Bentley
Bertone
Bricklin
Citroen
DeLorean
Desta
Ferrari
Gazelle
Hillman
Jensen
Lada
Lamborghini
Lotus
Maserati
Maybach
Mini Copper
Morgan
Morris
Reliant (British)
Rolls-Royce
Simca
Singer
Spyker
Sunbeam
TVR
70 - BSA
71 - Ducati
72 - Harley-Davidson
73 - Kawasaki
74 - Moto Guzzi
75 - Norton
76 - Yamaha

(Continued on Next Page)

Vehicle Make (Continued)

1991 and later

80 - Brockway
81 - Diamond Reo
Reo
82 - Freightliner
83 - FWD
84 - International Harvester
Navistar
85 - Kenworth
86 - Mack
87 - Peterbilt
88 - Iveco Magirus
89 - White/Autocar
White GMC
90 - Bluebird
91 - Eagle Coach
92 - Gillig
93 - MCI
94 - Thomas Built
98 - Other Make
Auto-Union-DKW
Carpenter
Collins Bus
DINA
Divco
Hino
Mid Bus
Neoplan
Orion
Oshkosh
Scania
Sterling
UD
Van Hool
Western Star
99 - Unknown Make

(Continued on Next Page)

Vehicle Make (Continued)

1991 and later

Variable = MAKE

Element = [In alphabetical order]

54 - Acura
31 - Alfa Romeo
03 - AM General
01 - American Motors
69 - Aston Martin
32 - Audi
33 - Austin/Austin Healey
29 - Avanti
98 - Auto-Union-DKW
69 - Bentley
69 - Bertone
90 - Bluebird
34 - BMW
69 - Bricklin
80 - Brockway
70 - BSA
18 - Buick
19 - Cadillac
98 - Carpenter
29 - Checker
20 - Chevrolet
06 - Chrysler
69 - Citroen
98 - Collins Bus
64 - Daewoo
60 - Daihatsu
35 - Datsun
69 - DeLorean
29 - DeSoto
69 - Desta
81 - Diamond Reo
98 - DINA
98 - Divco
07 - Dodge
71 - Ducati
10 - Eagle
91 - Eagle Coach
29 - Excalibur
69 - Ferrari
36 - Fiat
12 - Ford
82 - Freightliner
83 - FWD
69 - Gazelle
92 - Gillig
23 - GMC
25 - Grumman
72 - Harley-Davidson
69 - Hillman
98 - Hino
37 - Honda
29 - Hudson
55 - Hyundai
08 - Imperial
58 - Infiniti
84 - International Harvester
38 - Isuzu
88 - Iveco Magirus
39 - Jaguar
69 - Jensen
02 - Jeep
02 - Kaiser-Jeep
73 - Kawasaki
85 - Kenworth
63 - KIA
69 - Lada
69 - Lamborghini
40 - Lancia
62 - Land Rover
59 - Lexus
13 - Lincoln
69 - Lotus
86 - Mack
69 - Maserati
69 - Maybach
41 - Mazda
93 - MCI
42 - Mercedes-Benz
14 - Mercury
56 - Merkur
98 - Mid Bus
69 - Mini Cooper
43 - MG
52 - Mitsubishi
69 - Morgan
69 - Morris
74 - Moto Guzzi
84 - Navistar
98 - Neoplan
35 - Nissan
75 - Norton
21 - Oldsmobile
18 - Opel
98 - Orion
98 - Oshkosh
69 - Other Imports
29 - Other Domestic
98 - Other Make
29 - Packard
29 - Panoz
87 - Peterbilt

(Continued on Next Page)

Vehicle Make (Continued)

1991 and later

44 - Peugeot
09 - Plymouth
22 - Pontiac
45 - Porsche
69 - Reliant (British)
46 - Renault
69 - Rolls-Royce
81 - Reo
47 - Saab
29 - Saleen
24 - Saturn
98 - Scania
69 - Simca
69 - Singer
69 - Spyker
61 - Sterling
98 - Sterling
29 - Studebaker
29 - Stutz
48 - Subaru
69 - Sunbeam
53 - Suzuki
94 - Thomas Built
49 - Toyota
50 - Triumph
69 - TVR
98 - UD
99 - Unknown Make
98 - Van Hool
30 - Volkswagen
51 - Volvo
98 - Western Star
89 - White/Autocar
89 - White GMC
02 - Willys Jeep
76 - Yamaha
57 - Yugo

(Continued on Next Page)

Vehicle Make (Continued)

1975 to 1990

Variable = MAKE

Element = [In numerical order]

01 - American Motors
02 - Jeep
03 - AM General
06 - Chrysler
07 - Dodge
08 - Imperial
09 - Plymouth
10 - Eagle (Not before 1988)
12 - Ford
13 - Lincoln
14 - Mercury
18 - Buick
19 - Cadillac
20 - Chevrolet
21 - Oldsmobile
22 - Pontiac
23 - GMC
29 - Other Domestic
30 - Volkswagen
31 - Alfa Romeo
32 - Audi
33 - Austin-Healey
35 - Datsun
36 - Fiat
37 - Honda
38 - Isuzu
39 - Jaguar
40 - Lancia
41 - Mazda
42 - Mercedes-Benz
43 - MG
44 - Peugeot
45 - Porsche
46 - Renault
47 - Saab
48 - Subaru
49 - Toyota
50 - Triumph
51 - Volvo
52 - Mitsubishi (Not before 1982)
53 - Suzuki (Not before 1987)
57 - Lexus (Not before 1988)
58 - Infiniti (Not before 1988)
59 - Other Imports
60 - BSA
61 - Ducati
62 - Harley-Davidson
63 - Kawasaki
64 - Moto Guzzi
65 - Norton
67 - Yamaha
69 - Other Motor Cycle
70 - Moped
80 - Brockway
81 - Diamond Reo
82 - Freightliner
83 - FWD
84 - International Harvester
85 - Kenworth
86 - Mack
87 - Peterbilt
88 - White
95 - Other Truck/Bus
98 - Other Make
99 - Unknown Make

Note: For 1986 and earlier data, one may have to refer to the first several values, 01-09, with a single digit rather than a double digit with a leading "0" zero, e.g., 6 for Chrysler rather than 06 for Chrysler. This may be system-dependent.

(Continued on Next Page)

Vehicle Make (Continued)

1975 to 1990

Variable = MAKE

Element = [In alphabetical order]

31 - Alfa Romeo
03 - AM General
01 - American Motors
32 - Audi
33 - Austin-Healey
34 - BMW
80 - Brockway
60 - BSA
18 - Buick
19 - Cadillac
20 - Chevrolet
06 - Chrysler
35 - Datsun
81 - Diamond Reo
07 - Dodge
61 - Ducati
10 - Eagle (Not before 1988)
36 - Fiat
12 - Ford
82 - Freightliner
83 - FWD
23 - GMC
62 - Harley-Davidson
37 - Honda
08 - Imperial
58 - Infiniti (Not before 1990)
84 - International Harvester
38 - Isuzu
39 - Jaguar
02 - Jeep
63 - Kawasaki
85 - Kenworth
40 - Lancia
57 - Lexus (Not before 1990)
13 - Lincoln
86 - Mack
41 - Mazda
42 - Mercedes-Benz
14 - Mercury
43 - MG
52 - Mitsubishi (Not before 1982)
70 - Moped
64 - Moto Guzzi
65 - Norton
21 - Oldsmobile
29 - Other Domestic
59 - Other Imports
98 - Other Make
69 - Other Motor Cycle
95 - Other Truck/Bus
87 - Peterbilt
44 - Peugeot
09 - Plymouth
22 - Pontiac
45 - Porsche
46 - Renault
47 - Saab
48 - Subaru
53 - Suzuki (Not before 1987)
49 - Toyota
50 - Triumph
99 - Unknown Make
30 - Volkswagen
51 - Volvo
88 - White
67 - Yamaha

Note: For 1986 and earlier data, one may have to refer to the first several values, 01-09, with a single digit rather than a double digit with a leading "0" zero, e.g., 6 for Chrysler rather than 06 for Chrysler. This may be system-dependent.

Vehicle Maneuver

1982 and later

Variable = VEH_MAN

Element =
- 01 - Going Straight
- 02 - Slowing or Stopping in Traffic Lane
- 03 - Starting in Traffic Lane
- 04 - Stopped in Traffic Lane
- 05 - Passing or Overtaking another Vehicle
- 06 - Leaving a Parked Position
- 07 - Parked
- 08 - Entering a Parked Position
- 09 - Maneuvering to Avoid
- 10 - Turning Right: Right Turn on Red Permitted
- 11 - Turning Right: Right Turn on Red Not Permitted
- 12 - Turning Right: Right Turn on Red Not Applicable or Not Known if Permitted
- 13 - Turning Left
- 14 - Making a U-Turn
- 15 - Backing Up (*not parking*)
- 16 - Changing Lanes or Merging
- 17 - Negotiating a Curve
- 98 - Other
- 99 - Unknown

VEH_MAN is the maneuver that the driver was executing just prior to entering a crash situation. For the maneuver that the driver executed to attempt to avoid the crash, see the variable AVOID under Crash Avoidance Maneuver.

Vehicle Make/Vehicle Model

1991 and later

The make data is concatenated with the model data to form the make-model variable. The first two digits identify the make, the last three digits identify the model. If one needs to select cars based on make and model the variable of choice is VINA_MOD rather than MAK_MOD.

Variable = MAK_MOD

Element =

01 American Motors* (AMER)

*Note: Alliance, Encore, Premier (including L, DL, and Limited) is coded under Renault (46).

Automobiles

01001 AMER Rambler/American
01002 AMER Rebel/Matador/Marlin
01003 AMER Ambassador
01004 AMER Pacer
01005 AMER AMX
01006 AMER Javelin
01007 AMER Hornet/Concord
01008 AMER Spirit/Gremlin
01009 AMER Eagle
01010 AMER Eagle SX-4
01398 AMER Other
01399 AMER Unknown

02 Jeep* (Includes Willys**/Kaiser-Jeep) (AMER)

***Note: Jeep DJ-Series are coded under Make 03, Model 466.**
**Note: Willys Jeep can be coded 401, or 999.

SUV/Light Trucks

02401 AMER CJ-2/CJ-3/CJ-4
02402 AMER CJ-5/CJ-6/CJ-7/CJ-8
02403 AMER YJ Series/Wrangler
02404 AMER Cherokee (1984-on)

02 Jeep* (Includes Willys**/Kaiser-Jeep) (Cont.) (AMER)

*Note: Jeep DJ-Series are coded under Make 03, Model 466.
**Note: Willys Jeep can be coded 401, or 999.

SUV/Light Trucks (Cont.)

02405 AMER Liberty
02406 AMER Commander
02421 AMER Cherokee (thru 1983)
02431 AMER Grand Wagoneer
02481 AMER Pickup
02482 AMER Comanche
02498 AMER Other
02499 AMER Unknown

03 AM General (AMGN)

SUV/Light Trucks

03401 AMGN Dispatcher
03402 AMGN Hummer
03421 AMGN Hummer (SUV from 1993-2003; see 03431 for 2004-on) (for Pickup see 03481)
03431 AMGN Hummer (2004-on; see 03421 for 1993-2003)
03466 AMGN Dispatcher

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

03 AM General (Cont.) (AMGN)

SUV/Light Trucks
03481 AMGN Hummer (Pickup) (for SUV see 03421 for 1993-2003; see 03431 for 2004-on)
03498 AMGN Other
03499 AMGN Unknown

Medium/Heavy Trucks
03884 AMGN Medium/Heavy Truck (Military off-road)
03898 AMGN Other
03899 AMGN Unknown

Buses
03983 AMGN Rear engine, flat front
03988 AMGN Other
03989 AMGN Unknown

Vehicles
03998 AMGN Other
03999 AMGN Unknown (**AM GENERAL**)

06 Chrysler/DaimlerChrysler (CHRY)

Automobiles
06009 CHRY Cordoba
06010 CHRY New Yorker (thru 1978)/ Newport/5th Avenue/ Imperial (1979-1983) (excludes all FWD)
06014 CHRY New Yorker/E-Class/ Imperial (1990-1993)/ 5thAvenue
06015 CHRY Laser
06016 CHRY LeBaron
06017 CHRY LeBaron GTS/GTC

06 Chrysler/DaimlerChrysler (Cont.) (CHRY)

Automobiles (Cont.)
06031 CHRY TC (Maserati Sport)
06035 CHRY Conquest
06041 CHRY Concorde
06042 CHRY LHS
06043 CHRY Sebring
06044 CHRY Cirrus
06050 CHRY Executive
06051 CHRY 300M 300/300C
06052 CHRY PT Cruiser
06053 CHRY Prowler (2002-on) (1997, 1999-2001 see 09 Plymouth)
06054 CHRY Pacifica
06055 CHRY Crossfire
06398 CHRY Other
06399 CHRY Unknown

SUV/Light Trucks
06441 CHRY Town & Country
06442 CHRY Voyager (2000-on) (1984-2000 see 09 Plymouth)
06499 CHRY Unknown

Vehicles
06999 CHRY Unknown (**CHRYSLER**)

07 Dodge (DODG)

Automobiles
07001 DODG Dart
07002 DODG Coronet/Magnum/Charger (thru 1978)
07003 DODG Polara/Monaco/Royal Monaco

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

07 Dodge (Cont.) (DODG)

Automobiles (Cont.)
07004 DODG Viper
07005 DODG Challenger
07006 DODG Aspen
07007 DODG Diplomat
07008 DODG Omni/Charger (1983-on)
07009 DODG Mirada
07010 DODG St. Regis
07011 DODG Aries (K)
07012 DODG 400
07013 DODG Rampage (car-based pickup)
07014 DODG 600
07015 DODG Daytona
07016 DODG Lancer
07017 DODG Shadow
07018 DODG Dynasty
07019 DODG Spirit
07020 DODG Neon
07021 DODG Magnum
07024 DODG Charger
07025 DODG Caliber
07033 DODG Challenger - Import
07034 DODG Colt (includes 2WD Vista)
07035 DODG Conquest
07039 DODG Stealth
07040 DODG Monaco
07041 DODG Intrepid
07042 DODG Avenger
07043 DODG Stratus
07398 DODG Other
07399 DODG Unknown

SUV/Light Trucks
07401 DODG RaiderSport
07402 DODG Durango (1998-2003 only; see 07422 for 2004-on)

07 Dodge (Cont.) (DODG)

SUV/Light Trucks (Cont.)
07421 DODG Ramchager
07422 DODG Durango (2004-on; see 07402 for 1998-2003)
07441 DODG Vista Van
07442 DODG Caravan
07461 DODG B-Series Van/Ram Van/ Ram Wagon
07462 DODG Sprinter
07470 DODG Van derivative
07471 DODG D50, Colt Pickup, Ram 50/Ram 100
07472 DODG Dakota
07481 DODG D-W Series Pickup
07482 DODG Ram Pickup
07498 DODG Other
07499-DODG Unknown

Motorhome
07850 DODG Motorhome

Medium/Heavy Trucks
07881 DODG CBE
07882 DODG COE low-entry
07883 DODG COE high-entry
07884 DODG Unknown engine location
07890 DODG COE entry position unknown
07898 DODG Other
07899 DODG Unknown

Buses
07981 DODG Conventional (engine out front)
07988 DODG Other

Vehicles
07998 DODG Other
07999 DODG Unknown (**DODGE**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

08 Imperial (CHRY)

Automobiles
08010 CHRY Imperial
08398 CHRY Other
08399 CHRY Unknown

09 Plymouth (PLYM)

Automobiles
09001 PLYM Valiant/Scamp/ Duster (thru 1976)
09002 PLYM Satellite/Belvedere
09003 PLYM Fury (Fury Gran thru 1978)
09004 PLYM Gran Fury (1980-on)
09005 PLYM Barracuda
09006 PLYM Volare
09007 PLYM Caravelle
09008 PLYM Horizon/Turismo
09011 PLYM Reliant(K)
09013 PLYM Scamp (car-based pickup)
09017 PLYM Sundance
09019 PLYM Acclaim
09020 PLYM Neon (since 2002, see 07 Dodge)
09031 PLYM Cricket
09032 PLYM Arrow
09033 PLYM Sapporo
09034 PLYM Champ/Colt import (includes 2WD Vista)
09035 PLYM Conquest
09037 PLYM Laser
09038 PLYM Breeze
09039 PLYM Prowler (2002-on, see 06 Chrysler)
09398 PLYM Other
09399 PLYM Unknown

09 Plymouth (Cont.) (PLYM)

SUV/Light Trucks
09421 PLYM Trailduster
09441 PLYM Vista Van
09442 PLYM Voyager (minivan) (2001-on, see 06 Chrysler)
09461 PLYM Van full-size (B-Series)
09471 PLYM Arrow pickup (foreign)
09498 PLYM Other
09499 PLYM Unknown

Vehicles
09998 PLYM Other
09999 PLYM Unknown (**PLYMOUTH)**

10 Eagle* (EGIL)

*Note: Eagle model listed under American Motors.

Automobiles
10034 EGIL Summit (excludes wagon)
10037 EGIL Talon
10040 EGIL Premier
10041 EGIL Vision
10044 EGIL Medallion
10045 EGIL Summit Wagon
10398 EGIL Other
10399 EGIL Unknown

12 Ford (FORD)

Automobiles
12001 FORD Falcon
12002 FORD Fairlane
12003 FORD Mustang/Mustang II
12004 FORD Thunderbird (all sizes)
12005 FORD LTD II

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

12 Ford (Cont.) (FORD)

Automobiles (Cont.)
12006 FORD LTD/Custom/Galaxy (all sizes)
12007 FORD Ranchero
12008 FORD Maverick
12009 FORD Pinto
12010 FORD Torino/Gran Torino/Elite
12011 FORD Granada
12012 FORD Fairmont
12013 FORD Escort/EXP/ZX2
12015 FORD Tempo
12016 FORD Crown Victoria
12017 FORD Taurus
12018 FORD Probe
12021 FORD Five Hundred
12022 FORD Freestyle
12023 FORD Fusion
12031 FORD English Ford
12032 FORD Fiesta
12033 FORD Festiva
12034 FORD Laser
12035 FORD Contour
12036 FORD Aspire
12037 FORD Focus
12038 FORD GT
12398 FORD Other
12399 FORD Unknown

SUV/Light Trucks
12401 FORD Bronco (thru 1977)/ Bronco II/Explorer/ Explorer Sport
12402 FORD Escape
12421 FORD Bronco fullsize (1978-on)
12422 FORD Expediton
12423 FORD Excursion
12441 FORD Aerostar

12 Ford (Cont.) (FORD)

SUV/Light Trucks (Cont.)
12442 FORD Windstar
12443 FORD Freestar
12461 FORD E-Series Van/Econoline
12470 FORD Van derivative
12471 FORD Ranger
12472 FORD Courier
12473 FORD Explorer Sport Trac
12481 FORD F-Series Pickup
12498 FORD Other
12499 FORD Unknown

Motorhome
12850 FORD Motorhome

Medium/Heavy Trucks
12880 FORD Pickup (pickup-style only – over 10,000 lbs)
12881 FORD CBE
12882 FORD COE low-entry
12883 FORD COE high-entry
12884 FORD Unknown engine location
12890 FORD COE entry position unknown
12898 FORD Other
12899 FORD Unknown

Buses
12981 FORD Conventional (engine out front)
12988 FORD Other

Vehicles
12998 FORD Other
12999 FORD Unknown (**FORD**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

13 Lincoln (LINC)

Automobiles
13001 LINC Continental (thru 1981)/ Town Car
13002 LINC Mark
13005 LINC Continental (1982-on)
13011 LINC Versailles
13012 LINC LS
13013 LINC Zephyr
13398 LINC Other

SUV/Light Trucks
13401 LINC Aviator
13421 LINC Navigator
13481 LINC Blackwood
13482 LINC Mark LT
13499 LINC Unknown

Vehicles
13999 LINC Unknown (**LINCOLN**)

14 Mercury (Merkur: See "56") (MERC)

Automobiles
14002 MERC Cyclone
14003 MERC Capri-domestic (1967 see 14008)
14004 MERC Cougar/XR7 (1967-1997)
14006 MERC Marquis/ Monterey (car version; for van version 2004 on see code 14444) /Grand Marquis
14008 MERC Comet
14009 MERC Bobcat
14010 MERC Montego(prior to 1976; for 2005 on see code 14020)
14011 MERC Monarch
14012 MERC Zephyr

(Continued on Next Page)

14 Mercury (Merkur: See "56") (Cont.) (MERC)

Automobiles (Cont.)
14013 MERC Lynx/LN7
14015 MERC Topaz
14017 MERC Sable
14020 MERC Montego (2005 on)
14021 MERC Milan
14031 MERC Capri-foreign
14033 MERC Pantera-foreign
14036 MERC Tracer
14037 MERC Mystique
14038 MERC Cougar (1999-2002)
14039 MERC Marauder
14398 MERC Other
14399 MERC Unknown

SUV/Light Trucks (Cont.)
14401 MERC Mountaineer
14402 MERC Mariner
14443 MERC Villager
14444 MERC Monterey (van version; for car version prior to 2004 see code 14006.)
14498 MERC Other
14499 MERC Unknown

Vehicles
14999 MERC Unknown (**MERCURY**)

18 Buick (BUIC)

Automobile (Cont.)
18001 BUIC Special/Skylark
18002 BUIC LeSabre/Centurion/Wildcat
18003 BUIC Electra/Electra 225/ Park Avenue (1991-on)

Vehicle Make/Vehicle Model (Continued)

1991 and later

18 Buick (BUIC)

Automobile
18004 BUIC Roadmaster
18005 BUIC Riviera
18007 BUIC Century
18008 BUIC Apollo/Skylark
18010 BUIC Regal (RWD only)
18012 BUIC Skyhawk
18015 BUIC Skylark(1976-1985)
18018 BUIC Somerset/Skylark
18020 BUIC Regal (FWD)
18021 BUIC Reatta
18022 BUIC LaCrosse
18023 BUIC Lucerne
18031 BUIC Opel Kadett
18032 BUIC Opel Manta
18033 BUIC Opel GT
18034 BUIC Opel Isuzu
18398 BUIC Other
18399 BUIC Unknown

SUV/Light Trucks
18401 BUIC Rendezvous
18402 BUIC Rainier
18441 BUIC Terraza
18499 BUIC Unknown

Vehicles
18999 BUIC Unknown (**BUICK**)

19 Cadillac (CADI)

Automobiles
19003 CADI Deville/Fleetwood (except Limousine)
19004 CADI Limousine
19005 CADI Eldorado

19 Cadillac (Cont.) (CADI)

Automobiles (Cont.)
19006 CADI Commercial Series
19009 CADI Allante
19014 CADI Seville
19016 CADI Cimarron
19017 CADI Catera
19018 CADI CTS
19019 CADI XLR
19020 CADI SRX
19021 CADI STS
19022 CADI DTS
19398 CADI Other
19399 CADI Unknown

SUV/Light Trucks
19421 CADI Escalade/ESV (from 2004-on; see 19431 for 2003)
19431 CADI Escalade ESV
19480 CADI Escalade EXT
19499 CADI Unknown

Vehicles
19999 CADI Unknown (**CADILLAC**)

20 Chevrolet (CHEV)

Automobiles
20001 CHEV Chevelle/Malibu (thru 1983)
20002 CHEV Impala/Caprice
20004 CHEV Corvette
20006 CHEV Corvair
20007 CHEV El Camino
20008 CHEV Nova (thru 1979)
20009 CHEV Camaro
20010 CHEV Monte Carlo (thru 1988)
20011 CHEV Vega

(Continued on Next Page)

Vehicle Make/Vehicle Model (*Continued*)

1991 and later

20 Chevrolet (Cont.) (CHEV)

Automobiles (Cont.)
20012 CHEV Monza
20013 CHEV Chevette
20015 CHEV Citation
20016 CHEV Cavalier
20017 CHEV Celebrity
20019 CHEV Beretta/Corsica
20020 CHEV Lumina
20022 CHEV Cobalt
20023 CHEV HHR
20031 CHEV Spectrum
20032 CHEV Nova/Geo Prizm/Prism
20033 CHEV Sprint/Geo Sprint
20034 CHEV Geo Metro/Metro
20035 CHEV Geo Storm
20036 CHEV Monte Carlo (1995-on)
20037 CHEV Malibu/Malibu Maxx
20038 CHEV SSR
20039 CHEV Aveo
20398 CHEV Other
20399 CHEV Unknown

SUV/Light Trucks
20401 CHEV S-10 Blazer/TrailBlazer (2002 only; for 2003-on, see 20403)
20402 CHEV Geo Tracker/Tracker
20403 CHEV TrailBlazer (2003-on; for 2002, see 20401)
20404 CHEV Equinox
20421 CHEV Fullsize Blazer/Tahoe
20422 CHEV Suburban (from 2004-on; see 20431 for 1950-2003)
20431 CHEV Suburban (from 1950-2003; see 20422 for 2004-on)

20 Chevrolet (Cont.) (CHEV)

SUV/Light Trucks (Cont.)

20441 CHEV Astro Van
20442 CHEV Lumina APV
20443 CHEV Venture
20444 CHEV Uplander
20461 CHEV G-Series Van
20466 CHEV P-Series Van
20470 CHEV Van derivative
20471 CHEV S-10/T-10 pickup
20472 CHEV LUV
20473 CHEV Colorado (since 2004)
20481 CHEV C,K,R,V-Series pickup/Silverado
20482 CHEV Avalanche
20498 CHEV Other
20499 CHEV Unknown

Motorhome
20850 CHEV Motorhome

Medium/Heavy Trucks
20881 CHEV CBE
20882 CHEV COE low-entry
20883 CHEV COE high-entry
20884 CHEV Unknown engine location
20890 CHEV COE entry position unknown
20898 CHEV Other
20899 CHEV Unknown

Buses
20981 CHEV Conventional (engine out front)
20988 CHEV Other

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

20 Chevrolet (Cont.) (CHEV)

Vehicles
20998 CHEV Other
20999 CHEV Unknown (**CHEVROLET**)

21 Oldsmobile (OLDS)

Automobiles
21001 OLDS Cutlass (RWD-only)
21002 OLDS Delta 88/LSS
21003 OLDS Ninety-Eight/Regency
21005 OLDS Toronado
21006 OLDS Commercial Series
21012 OLDS Starfire
21015 OLDS Omega
21016 OLDS Firenza
21017 OLDS Ciera
21018 OLDS Calais
21020 OLDS Cutlass (FWD)
21021 OLDS Achieva/Alero
21022 OLDS Aurora
21023 OLDS Intrigue
21398 OLDS Other
21399 OLDS Unknown

SUV/Light Trucks
21401 OLDS Bravada
21441 OLDS Silhouette
21499 OLDS Unknown

Vehicles
21999 OLDS Unknown (**OLDSMOBILE**)

22 Pontiac (PONT)

Automobiles
22001 PONT LeMans/Tempest (thru 1970)

22 Pontiac (Cont.) (PONT)

Automobiles
22002 PONT Bonneville/Catalina/ Parisienne
22005 PONT Fiero
22008 PONT Ventura/GTO
22009 PONT Firebird/Trans AM
22010 PONT Grand Prix (RWD)
22011 PONT Astre
22012 PONT Sunbird (thru 1980; 1985-on, see 22016)
22013 PONT T-1000/1000
22015 PONT Phoenix
22016 PONT Sunbird (1985-1994)/ J-2000/Sunfire (1995-on)
22017 PONT 6000
22018 PONT Grand AM
22020 PONT Grand Prix (FWD)
22022 PONT G6
22023 PONT Solstice
22031 PONT LeMans (1988-on)
22032 PONT Vibe
22398 PONT Other
22399 PONT Unknown

SUV/Light Trucks
22401 PONT Aztek
22403 PONR Torrent
22441 PONT Trans Sport/Montana/SV6
22499 PONT Unknown

Vehicles
22999 PONT Unknown (**PONTIAC**)

23 GMC (GMC)
Automobiles
23007 GMC Caballero

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

23 GMC (Cont.) (GMC)

SUV/Light Trucks
23401 GMC Jimmy/Typhoon/Envoy
23421 GMC Fullsize Jimmy/Yukon
23422 GMC Suburban/Yukon XL (2004-on; see 20431 for 1950-2003)
23431 GMC Suburban/Yukon XL (2000-on) (1950-2003 only; see 23422 for 2004-on)
23441 GMC Safari (Minivan)
23461 GMC G-Series van/Savana
23466 GMC P-Series van
23470 GMC Van derivative
23471 GMC S15/T15/Somona
23472 GMC Canyon
23481 GMC C,K,R,V-Series pickup/Sierra
23498 GMC Other
23499 GMC Unknown

Motorhome
23850 GMC Motor Home

Medium/Heavy Trucks
23881 GMC CBE
23882 GMC COE low-entry
23883 GMC COE high-entry
23884 GMC Unknown engine location
23890 GMC COE entry position unknown
23898 GMC Other
23899 GMC Unknown

Buses
23981 GMC Conventional (engine out front)
23988 GMC Other

23 GMC (Cont.) (GMC)

Vehicles
23998 GMC Other
23999 GMC Unknown (**GMC**)

24 Saturn (STRN)

Automobiles
24001 STRN SL
24002 STRN SC
24003 STRN SW
24004 STRN EV1/EGV1
24005 STRN LS
24006 STRN LW
24007 STRN Ion
24008 STRN Sky
24009 STRN Aura
24398 STRN Other
24399 STRN Unknown

SUV/Light Trucks
24401 STRN Vue
24441 STRN Relay
24499 STRN Unknown

Vehicles
24999 STRN Unknown (**SATURN**)

25 Grumman/Grumman-Olson (GRUM)

SUV/Light Trucks
25401 GRUM LLV
25441 GRUM Step-in van
25498 GRUM Other
25499 GRUM Unknown

Vehicle Make/Vehicle Model (Continued)

1991 and later

25 Grumman/Grumman-Olson (Cont.) (GRUM)

Medium/Heavy Trucks
25881 GRUM CBE
25882 GRUM COE low-entry
25883 GRUM COE high-entry

Medium/Heavy Trucks (Cont.)
25884 GRUM engine location unknown
25890 GRUM entry position unknown
25898 GRUM Other
25899 GRUM Unknown

Buses
25983 GRUM Flat front, rear engine
25988 GRUM Other

Vehicles
25999 GRUM Unknown
(**GRUMMAN/GRUMMAN-OLSON**)

29 Other Domestic Manufacturers (--------)

Automobiles
29001 -------- Studebaker/Avanti
29002 -------- Checker
29003 -------- Panoz
29004 -------- Saleen
29398 -------- Other
29399 -------- Unknown Make

30 Volkswagen (VOLK)

Automobiles
30031 VOLK Karmann Ghia

30 Volkswagen (VOLK)

Automobiles
30032 VOLK Beetle 1300/1500
30033 VOLK Super Beetle
30034 VOLK 411/412
30035 VOLK Squareback/Fastback
30036 VOLK Rabbit
30037 VOLK Dasher
30038 VOLK Scirocco
30040 VOLK Jetta
30041 VOLK Quantum
30042 VOLK Golf/Cabriolet/Cabrio/GTI
30043 VOLK Rabbit pickup
30044 VOLK Fox
30045 VOLK Corrado
30046 VOLK Passat
30047 VOLK New Beetle
30048 VOLK Phaeton
30051 VOLK Eos
30398 VOLK Other
30399 VOLK Unknown

SUV/Light Trucks
30401 VOLK The Thing (181)
30421 VOLK Touareg
30441 VOLK Vanagon/Camper
30442 VOLK Eurovan
30498 VOLK Other
30499 VOLK Unknown

Vehicles
30998 VOLK Other
30999 VOLK Unknown (**VOLKSWAGEN**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

31 Alfa Romeo (ALFA)

Automobiles
31031 ALFA Spider (Spyder)
31032 ALFA Sports Sedan
31033 ALFA Sprint/Special
31034 ALFA GTV-6
31035 ALFA 164 (Alpha 164)
31398 ALFA Other
31399 ALFA Unknown

32 Audi (AUDI)

Automobiles
32031 AUDI Super 90
32032 AUDI 100
32033 AUDI Fox
32034 AUDI 4000
32035 AUDI 5000
32036 AUDI 80/90
32037 AUDI 200
32038 AUDI V-8 Quattro
32039 AUDI Coupe Quattro
32040 AUDI S4/S6
32041 AUDI Cabriolet (1994-1998)
32042 AUDI A6
32043 AUDI A4
32044 AUDI A8
32045 AUDI TT

33 Austin/Austin Healey (AUST)

Automobiles
33031 AUST Marina
33032 AUST America
33033 AUST Healey Sprite
33034 AUST Healey 100/3000

33 Austin/Austin Healey (Cont.) (AUST)

Automobiles (Cont.)
33035 AUST Mini/Mini Cooper/Mini Moke
33398-AUST Other
33399 AUST Unknown

34 BMW (BMW)

Automobiles
34031 BMW 1600/1800/2000/2002
34032 BMW Coupe (before 1975)
34033 BMW Bavarian Sedan
34034 BMW 3-Series
34035 BMW 5-Series
34036 BMW 6-Series
34037 BMW 7-Series
34038 BMW 8-Series
34039 BMW Z3
34040 BMW Z8
34042 BMW Z4
34398 BMW Other
34399 BMW Unknown

SUV/Light Trucks
34401 BMW X5
34402 BMW X3
34499 BMW Unknown

Motorcycles
34703 BMW 125-349cc
34705 BMW 450-749cc
34706 BMW 750cc or greater
34709 BMW Unknown

Vehicles
34999 BMW Unknown (**BMW**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

35 Nissan/Datsun (NISS-DATS)

Automobiles
35031 NISS F-10
35032 NISS 200SX/240SX
35033 NISS 210/1200/ B210
35034 NISS Z-car, ZX
35035 NISS 310
35036 NISS 510
35037 NISS 610
35038 NISS 710
35039 NISS 810/Maxima
35040 NISS Roadster
35041 NISS 311/411
35042-NISS Stanza
35043 NISS Sentra
35044-NISS Pulsar
35045 NISS Micra
35046 NISS NX 1600/2000
35047 NISS Altima
35048 NISS 350-Z
35049 NISS Murano
35050 NISS Versa
35398 NISS Other
35399 NISS Unknown

SUV/Light Trucks
35401 NISS Pathfinder
35402 NISS Xterra
35421 NISS Pathfinder Amada
35441 NISS Van
35442 NISS Axxess
35443 NISS Quest
35444 NISS Altra EV
35471 NISS Datsun/Nissan pickup (1955-1997)
35472 NISS Frontier (1998-on)
35473 NISS Titan
35498 NISS Other

35 Nissan/Datsun (Cont.) (NISS-DATS)

SUV/Light Trucks (Cont.)
35499 NISS Unknown

Medium/Heavy Trucks
35883 NISS COE high-entry
35898 NISS Other

Medium/Heavy Trucks
35899 NISS Unknown

Vehicles
35999 NISS Unknown (**NISSAN/DATSUN**)

36 Fiat (FIAT)

Automobiles
36031 FIAT 124 (coupe/sedan)
36032 FIAT 124 Spider/Racer
36033 FIAT Brava/131
36034 FIAT 850 (coupe/Spider)
36035 FIAT 128
36036 FIAT X-1/9
36037 FIAT Strada
36398 FIAT Other
36399 FIAT Unknown

Medium/Heavy Trucks
36882 FIAT COE low-entry
36883 FIAT COE high-entry
36890 FIAT COE entry position unknown
36898 FIAT Other
36899 FIAT Unknown

Vehicles
36998 FIAT Other
36999 FIAT Unknown (FIAT)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

37 Honda (Acura: See "54") (HOND)

Automobiles
37031 HOND Civic/CRX, del Sol
37032 HOND Accord
37033 HOND Prelude

Automobiles (Cont.)
37034 HOND 600
37035 HOND S2000
37036 HOND EV Plus
37037 HOND Insight
37038 HOND FCX
37039 HOND Fit
37398 HOND Other
37399 HOND Unknown

SUV/Light Trucks
37401 HOND Passport
37402 HOND CR-V
37403 HOND Element
37421 HOND Pilot
37441 HOND Odyssey
37471 HOND Ridgeline
37499 HOND Unknown

Motorcycles
37701 HOND 0-50cc
37702 HOND 51-124cc
37703 HOND 125-349cc
37704 HOND 350-449cc
37705 HOND 450-749cc
37706 HOND 750cc or greater
37709 HOND Unknown

All-Terrain Vehicles
37732 HOND 51-124cc
37733 HOND 125-349cc

37 Honda (Acura: See "54") (Cont.) (HOND)

All-Terrain Vehicles (Cont.)
37734 HOND 350cc or greater
37739 HOND Unknown

Vehicles
37998 HOND Other
37999 HOND Unknown (**HONDA**)

38 Isuzu (ISU)

Automobiles
38031 ISU I-Mark
38032 ISU Impulse
38033 ISU Stylus
38398 ISU Other
38399 ISU Unknown

SUV/Light Trucks
38401 ISU Trooper/Trooper II
38402 ISU Rodeo/Rodeo Sport
38403 ISU Amigo
38404 ISU VehiCROSS
38405 ISU Axiom
38421 ISU Ascender
38441 ISU Oasis
38471 ISU P'up (pickup)
38472 ISU Hombre
38473 ISU i-280
38474 ISU i-350
38498 ISU Other
38499 ISU Unknown

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Vehicle Make/Vehicle Model (Continued)

1991 and later

38 Isuzu (Cont.) (ISU)

Medium/Heavy Trucks
38881 ISU CBE
38882 ISU COE low-entry
38883 ISU COE high-entry
38884 ISU Unknown engine location
38890 ISU COE entry position unknown
38898 ISU Other
38899 ISU Unknown

Buses
38981 ISU Conventional (engine out front)
38982 ISU Front engine, flat front
38983 ISU Rear engine, flat front
38988 ISU Other

Vehicles
38999 ISU Unknown (**ISUZU**)

39 Jaguar (JAGU)

Automobiles
39031 JAGU XJ-S, XK8, Coupe
39032 JAGU XJ/XJ6/12/XJR/XJ8/XJ8L Sedan/ Coupe
39033 JAGU XK-E
39034 JAGU S-Type
39035 JAGU XKR
39036 JAGU X-Type
39398 JAGU Other
39399 JAGU Unknown

40 Lancia* (LNCI)
*Note: Lancia did not import in 1980. 1982 – last year imported.

Automobiles
40031 LNCI Beta Sedan - HPE
40032 LNCI Zagato
40033 LNCI Scorpion
40398 LNCI Other
40399 LNCI Unknown

41 Mazda (MAZD)

Automobiles
41031 MAZD RX2
41032 MAZD RX3
41033 MAZD RX4
41034 MAZD RX7
41035 MAZD 323/GLC//Protégé/ Protégé5
41036 MAZD Cosmo
41037 MAZD 626
41038 MAZD 808
41039 MAZD Mizer
41040 MAZD R-100
41041 MAZD 616/618
41042 MAZD 1800
41043 MAZD 929
41044 MAZD MX-6
41045 MAZD Miata//MX-5
41046 MAZD MX-3
41047 MAZD Millenia
41048 MAZD MP3
41049 MAZD RX-8
41050 MAZD Mazda6
41051 MAZD Mazda3
41052 MAZD Mazda5
41053 MAZD CX-7

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Vehicle Make/Vehicle Model (Continued)

1991 and later

41 Mazda (Cont.) (MAZD)

Automobiles (Cont.
41398 MAZD Other
41399 MAZD Unknown

SUV/Light Trucks
41401 MAZD Navajo
41402 MAZD Tribute
41441 MAZD MPV
41471 MAZD Pickup/B-Series Pickup
41498 MAZD Other
41499 MAZD Unknown

Vehicles
41999 MAZD Unknown (**MAZDA**)

42 Mercedes-Benz (MERZ)

Automobiles
42031 MERZ 200/220/230/240/250/260/ 280/300/320/420
42032 MERZ 230/280 SL
42033 MERZ 300/350/380/450/500/560 SL
42034 MERZ 350/380/420/450/560 SLC
42035 MERZ 280/300 SEL
42036 MERZ 300/380/420/450/500/560/ SEL & 500/560, 600 SEC & 300/350 SDL
42037 MERZ 300/380/450 SE
42038 MERZ 600, 6.9 Sedan
42039 MERZ 190
42040 MERZ 300
42041 MERZ 400/500E
42042 MERZ C Class (1994-on)
42043 MERZ S Class (1995-on)
42044 MERZ SL Class (1995-on)
42045 MERZ SLK

42 Mercedes-Benz (Cont.) (MERZ)

Automobiles (Cont.)
42046 MERZ CL Class
42047 MERZ CLK
42048 MERZ E Class (1997-on)
42049 MERZ SLR
42050 MERZ R Class
42051 MERZ CLS Class
42398 MERZ Other
42399 MERZ Unknown

SUV/Light Trucks
42401 MERZ M/ML Class
42402 MERZ G Class
42421 GL Class
42461 MERZ Sprinter
42470 MERZ Van derivative
42498 MERZ Other
42499 MERZ Unknown

Medium/Heavy Trucks
42881 MERZ CBE
42882 MERZ COE low-entry
42883 MERZ COE high-entry
42884 MERZ Unknown engine location
42890 MERZ COE entry position unknown
42898 MERZ Other
42899 MERZ Unknown

Buses
42981 MERZ Conventional (engine out front)
42988 MERZ Other
42989 MERZ Unknown
Vehicles
42998 MERZ Other
42999 MERZ Unknown (**MERCEDES-BENZ)**

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Vehicle Make/Vehicle Model (Continued)

1991 and later

43 MG (MG)

Automobiles
43031 MG Midget
43032 MG MGB (MK I/II/IV, 600 Limited, V-8)
43033 MG MGB (GT/MK III)
43034 MG MGA
43035 MG TA/TC/TD/TF
43036 MG MGC
43037 MG Magnette/Sports Sedans
43398 MG Other
43399 MG Unknown

44 Peugeot (PEUG)

Automobiles
44031 PEUG 304
44032 PEUG 403
44033 PEUG 404
44034 PEUG 504/505
44035 PEUG 604
44036 PEUG 405
44398 PEUG Other
44399 PEUG Unknown

Motorcycles
44701 PEUG 0-50cc
44702 PEUG 51-124cc
44709 PEUG Unknown

Vehicles
44999 PEUG Unknown (**PEUGEOT**)

45 Porsche (PORS)

Automobiles
45031 PORS 911/996
45032 PORS 912
45033 PORS 914

(Continued on Next Page)

45 Porsche (Cont.) (PORS)

Automobiles (Cont.)
45034 PORS 924
45035 PORS 928
45036 PORS 930
45037 PORS 944
45038 PORS 959
45039 PORS 968
45040 PORS 986/Boxter
45041 PORS Cayman
45398 PORS Other
45399 PORS Unknown

SVU/Light Trucks
45421 PORS Cayenne

Vehicles
45999 PORS Unknown (**PORSCHE)**

46 Renault (RENA)

Automobiles
46031 RENA LeCar
46032 RENA Dauphine/10/R-8/Caravelle
46033 RENA 12
46034 RENA 15
46035 RENA 16
46036 RENA 17
46037 RENA 18i/Sportwagon
46039 RENA Alliance/Encore GTA, Converible
46041 RENA Alpine
46044 RENA Medallion*
46045 RENA Premier*
46398 RENA Other
46399 RENA Unknown
*Note: Medallion and Premier listed under Eagle after 1987.

Vehicle Make/Vehicle Model (Continued)

1991 and later

47 Saab (SAA)

Automobiles
47031 SAA 99/99E/900
47032 SAA Sonnet
47033 SAA 95/96
47034 SAA 9000
47035 SAA 9-3
47036 SAA 9-5
47037 SAA 9-2x
47398 SAA Other
47399 SAA Unknown

SVU/Light Trucks
47401 SAA 9-7x

Vehicles
47999 SAA Unknown (**SAAB)**

48 Subaru (SUBA)

Automobiles
48031 SUBA Loyale (1990-on)/DL/FE/G/GF/GL/GLF/STD
48032 SUBA Star
48033 SUBA 360
48034 SUBA Legacy/Outback (prior to 2003 only; see 48045 for 2003-on)
48035 SUBA XT/XT6
48036 SUBA Justy
48037 SUBA SVX
48038 SUBA Impreza
48039 SUBA RX
48043 SUBA Brat
48044 SUBA Baja
48045 SUBA Outback (2003-on, see 48034 for prior to 2003)
48398 SUBA Other

48 Subaru (Cont.) (SUBA)

Automobiles (Cont.)
48399 SUBA Unknown

SUV/Light Trucks
48401 SUBA Forester
48402 SUBA B9 Tribeca
48499 SUBA Unknown

Vehicles
48999 SUBA Unknown (**SUBARU**)

49 Toyota (TOYT)

Automobiles
49031 TOYT Corona
49032 TOYT Corolla
49033 TOYT Celica
49034 TOYT Supra
49035 TOYT Cressida
49036 TOYT Crown
49037 TOYT Carina
49038 TOYT Tercel
49039 TOYT Starlet
49040 TOYT Camry
49041 TOYT MR-2/MR Spyder
49042 TOYT Paseo
49043 TOYT Avalon
49044 TOYT Solara
49045 TOYT ECHO
49046 TOYT Pirus
49047 TOYT Matrix
49048 TOYT Scion xA
49049 TOYT Scion xb
49050 TOYT Scion tC
49051 TOYT Yaris
49398 TOYT Other
49399 TOYT Unknown

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

49 Toyota (Cont.) (TOYT)

SUV/Light Trucks
49401 TOYT 4-Runner
49402 TOYT RAV4
49403 TOYT Highlander
49404 TOYT FJ Cruiser
49421 TOYT Land Cruiser
49422 TOYT Sequoia
49441 TOYT Minivan (1984-1990)/Previa (1991-on)
49442 TOYT Sienna
49471 TOYT Pickup
49472 TOYT Tacoma
49481 TOYT T-100
49482 TOYT Tundra
49498 TOYT Other
49499 TOYT Unknown

Vehicles
49999 TOYT Unknown (**TOYOTA**)

50 Triumph (TRIU)

Automobiles
50031 TRIU Spitfire
50032 TRIU GT-6
50033 TRIU TR4
50034 TRIU TR6
50035 TRIU TR7/TR8
50036 TRIU Herald
50037 TRIU Stag
50398 TRIU Other
50399 TRIU Unknown

Motorcycles
50701 TRIU 0-50 cc
50702 TRIU 51-124 cc
50703 TRIU 125-349 cc

50 Triumph (Cont.) (TRIU)

Motorcycles (Cont.)
50704 TRIU 350-449 cc
50705 TRIU 450-749 cc
50706 TRIU 750 cc or greater
50709 TRIU Unknown
50799 TRIU Unknown (**Motored cycle**)

Vehicles
50999 TRIU Unknown (**TRIUMPH**)

51 Volvo (VOLV)

Automobiles
51031 VOLV 122
51032 VOLV 140/142/144/145
51033 VOLV 164
51034 VOLV 240 series/DL/GL/GLT
51035 VOLV 260 series/GLE
51036 VOLV 1800
51037 VOLV PV544
51038 VOLV 760/780
51039 VOLV 740
51040 VOLO 940
51041 VOLO 960
51042 VOLO 850
51043 VOLO 70 Series
51044 VOLO 90 Series
51045 VOLO 80 Series
51046 VOLO 40 Series
51047 VOLO 60 Series
51048 VOLO V50
51398 VOLV Other
51399 VOLV Unknown

SUV/Light Trucks
51401 VOLV XC90

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

51 Volvo Cont.) (VOLV)

Medium/Heavy Trucks
51881 VOLV CBE
51882 VOLV COE low-entry
51883 VOLV COE high-entry
51884 VOLV Unknown engine location
51890 VOLV entry position unknown
51898 VOLV Other
51899 VOLV Unknown

Buses
51981 VOLV Conventional (engine out front)
51988 VOLV Other

Vehicles
51999 VOLV Unknown (**VOLVO**)

52 Mitsubishi (MITS)

Automobiles
52031 MITS Starion
52032 MITS Tredia
52033 MITS Cordia
52034 MITS Galant
52035 MITS Mirage
52036 MITS Precis
52037 MITS Eclipse
52038 MITS Sigma
52039 MITS 3000 GT
52040 MITS Diamonte
52045 MITS Expo Wagon
52046 MITS Lancer/Lancer Sportback
52047 MITS Outlander
52398 MITS Other
52399 MITS Unknown

52 Mitsubishi (Cont.) (MITS)

SUV/Light Trucks
52401 MITS Montero/Montero Sport
52402 MITS Endeavor
52441 MITS Minivan
52471 MITS Pickup
52472 MITS Raider
52498 MITS Other
52499 MITS Unknown

Medium/Heavy Trucks
52882 MITS COE low-entry
52898 MITS Other
52899 MITS Unknown

Buses
52981 MITS Conventional (engine out front)
52982 MITS Front engine, flat Front
52983 MITS Rear engine, flat Front
52988 MITS Other

Vehicles
52999 MITS Unknown (**MITSUBISHI**)

53 Suzuki (SUZI)

Automobiles
53031 SUZI Swift/SA310
53032 SUZI Esteem
53033 SUZI Aerio
53034 SUZI Forenza
53035 SUZI Verona
53036 SUZI Reno
53398 SUZI Other
53399 SUZI Unknown

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

53 Suzuki (Cont.) (SUZI)

SUV/Light Trucks
53401 SUZI Samurai
53402 SUZI Sidekick/Vitara/Vitara V6
53403 SUZI X-90
53404 SUZI Grand Vitara (2003-on; see 53402 for prior to 2003)
53405 SUZI XL7 (2003-on; see 53402 for 2002)
53498 SUZI Other
53499 SUZI Unknown

Motorcycles
53701 SUZI 0-50cc
53702 SUZI 51-124cc
53703 SUZI 125-349cc
53704 SUZI 350-499cc
53705 SUZI 450-749cc
53706 SUZI 750cc or greater
53709 SUZI Unknown

All-Terrain Vehicles
53731 SUZI 0-50cc
53732 SUZI 51-124cc
53733 SUZI 125-349cc
53734 SUZI 350cc or greater
53739 SUZI Unknown cc

Vehicles
53999 SUZI Unknown (**SUZUKI**)

54 Acura (ACUR)

Automobiles
54031 ACUR Integra
54032 ACUR Legend
54033 ACUR NSX
54034 ACUR Vigor

54 Acura (Cont.) (ACUR)

Automobiles (Cont.)
54035 ACUR TL
54036 ACUR RL
54037 ACUR CL
54038 ACUR RSX
54039 ACUR TSX
54398 ACUR Other
54399 ACUR Unknown

SUV/Light Trucks
54401 ACUR SLX
54421 ACUR MDX
54499 ACUR Unknown

Vehicles
54999 ACUR Unknown (**ACURA**)

55 Hyundai (HYUN)

Automobiles
55031 HYUN Pony
55032 HYUN Excel
55033 HYUN Sonata
55034 HYUN Scoupe
55035 HYUN Elantra
55036 HYUN Accent
55037 HYUN Tiburon
55038 HYUN XG300 (2001)/XG350 (2002-on)
55039 HYUN Azera
55398 HYUN Other
55399 HYUN Unknown

SUV/Light Trucks
55401 HYUN Santa Fe
55402 HYUN Tucson

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

55 Hyundai (Cont.) (HYUN)

SUV/Light Trucks (Cont.)
55441 HYUN Entourage
55499 HYUN Unknown

Vehicles
55999 HYUN Unknown (**HYUNDAI**)

56 Merkur (MERK)

Automobiles
56031 MERK XR4Ti
56032 MERK Scorpio
56398 MERK Other
56399 MERK Unknown

57 Yugo (YUGO)

Automobiles
57031 YUGO GV/GVL/GVX

58 Infiniti (INFI)

Automobiles
58031 INFI M30
58032 INFI Q45
58033 INFI G20
58034 INFI J30
58035 INFI I30
58036 INFI I35
58037 INFI G35
58038 INFI M35/M45
58039 INFI FX35/FX45
58398 INFI Other
58399 INFI Unknown

58 Infiniti (INFI)

SUV/Light Trucks
58401 INFI QX4
58421 INFI QX56
58499 INFI Unknown

Vehicles
58999 INFI Unknown (**INFINITI**)

59 Lexus (LEXS)

Automobiles
59031 LEXS ES-250/ES-300/330
59032 LEXS LS-400/430
59033 LEXS SC-400/300
59034 LEXS GS-300/400/430
59035 LEXS IS-250/300/350
59036 LEXS SC-430
59398 LEXS Other
59399 LEXS Unknown

SUV/Light Trucks
59401 LEXS RX300
59402 LEXS GX470
59403 LEXS RX330/400h
59421 LEXS LX450/LX470
59499 LEXS Unknown

Vehicles
59999 LEXS Unknown (**LEXUS**)

60 Daihatsu (DAIH)

Automobiles
60031 DAIH Charade

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

60 Daihatsu (Cont.) (DAIH)

SUV/Light Trucks
60401 DAIH Rocky

Vehicles
60999 DAIH Unknown (**DAIHATSU**)

61 Sterling (STLG)

Automobiles
61031 STLG 827
61398 STLG Other
61399 STLG Unknown

62 Land Rover (LNDR)

SUV/Light Trucks
62401 LNDR Discovery
62402 LNDR Defender
62403 LNDR Freelander (2004-on; see 62422 for 2002-2003)
62421 LNDR Range Rover
62422 LNDR Freelander (2002-2003 only; see 62403 for 2004)
62423 LNDR LR3
62498 LNDR Other
62499 LNDR Unknown

63 KIA (KIA)

Automobiles
63031 KIA Sephia
63032 KIA Rio/Rio5
63033 KIA Spectra/Spectra5
63034 KIA Optima
63035 KIA Amanti
63399 KIA Unknown

63 KIA (Cont.) (KIA)

SUV/Light Trucks
63401 KIA Sportage
63402 KIA Sorrento
63441 KIA Sedona
63499 KIA Unknown

Vehicles
63999 KIA Unknown (**KIA**)

64 Daewoo (DAEW)

Automobiles
64031 DAEW Lanos
64032 DAEW Nubira
64033 DAEW Leganza
64398 DAEW Other
64399 DAEW Unknown

69 Other Import (--------)

Automobiles
69031 -------- Aston Martin
69032 -------- Bricklin
69033 -------- Citroen
69034 -------- DeLorean
69035 -------- Ferrari
69036 -------- Hillman
69037 -------- Jensen
69038 -------- Lamborghini
69039 -------- Lotus
69040 -------- Maserati
69041 -------- Morris
69042 -------- Rolls-Royce/Bentley
69044 -------- Simca
69045 -------- Sunbeam
69046 -------- TVR

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

69 Other Import (Cont.) (--------)

Automobiles (Cont.)
69048 -------- Desta
69049 -------- Reliant
69052 -------- Bertone
69053 -------- Lada
69054 -------- Mini Cooper
69055 -------- Morgan (2003-on; Prior to 2003 see 69398)
69056 -------- Maybach
69057 -------- Spyker
69398 -------- Other Imported Auto
69399 -------- Unknown Make

70 BSA (BSA)

Motorcycles
70701 BSA 0-50cc
70702 BSA 51-124cc
70703 BSA 125-349cc
70704 BSA 350-449cc
70705 BSA 450-749cc
70706 BSA 750cc or greater
70709 BSA Unknown

71 Ducati (DUCA)

Motorcycles
71701 DUCA 0-50cc
71702 DUCA 51-124cc
71703 DUCA 125-349cc
71704 DUCA 350-449cc
71705 DUCA 450-749cc
71706 DUCA 750cc or greater
71709 DUCA Unknown

72 Harley-Davidson (HD)

Motorcycles
72701 HD 0-50cc
72702 HD 51-124cc
72703 HD 125-349cc
72704 HD 350-449cc
72705 HD 450-749cc
72706 HD 750cc or greater
72709 HD Unknown

73 Kawasaki (KAWK)

Motorcycles
73701 KAWK 0-50cc
73702 KAWK 51-124cc
73703 KAWK 125-349cc
73704 KAWK 350-449cc
73705 KAWK 450-749cc
73706 KAWK 750cc or greater
73709 KAWK Unknown

All-Terrain Vehicles
73731 KAWK 0-50cc
73732 KAWK 51-124cc
73733 KAWK 125-349cc
73734 KAWK 350cc or greater
73739 KAWK Unknown

74 Moto Guzzi (MOGU)

Motorcycles
74704 MOGU 350-449cc
74705 MOGU 450-749cc
74706 MOGU 750cc or greater
74709 MOGU Unknown

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

75 Norton (NORT)

Motorcycles
75704 NORT 350-449cc
75705 NORT 450-749cc
75706 NORT 750cc or greater
75709 NORT Unknown

76 Yamaha (YAMA)

Motorcycles
76701 YAMA 0-50cc
76702 YAMA 51-124cc
76703 YAMA 125-349cc
76704 YAMA 350-449cc
76705 YAMA 450-749cc
76706 YAMA 750cc or greater
76709 YAMA Unknown

All-Terrain Vehicles
76731 YAMA 0-50cc
76732 YAMA 51-124cc
76733 YAMA 125-349cc
76734 YAMA 350cc or greater
76739 YAMA Unknown

Vehicles
76998 YAMA Other

80 Brockway (BROC)

Medium/Heavy Trucks
80881 BROC CBE
80882 BROC COE low-entry
80883 BROC COE high-entry
80884 BROC Unknown engine location
80890 BROC COE entry position unknown
80898 BROC Other
80899 BROC Unknown

80 Brockway (Cont.) (BROC)

Motorhome
80850 Motorhome

Buses
80981 BROC Conventional (engine out front)
80982 BROC Front engine, flat front
80983 BROC Rear engine, flat front
80988 BROC Other

Vehicles
80998 BROC Other
80999 BROC Unknown (**BROCKWAY**)

81 Diamond Reo or Reo (DIAR)

Medium/Heavy Trucks
81881 DIAM CBE
81882 DIAM COE low-entry
81883 DIAM COE high-entry
81884 DIAM Unknown engine location
81890 DIAM COE entry position unknown
81898 DIAM Other
81899 DIAM Unknown

Motorhome
81950 DIAM Motorhome

Buses
81981 DIAM Conventional (engine out front)
81982 DIAM Front engine, flat front
81983 DIAM Rear engine, flat front
81988 DIAM Other

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

Diamond Reo or Reo (Cont.) (DIAR)

Vehicles
81998 DIAM Other
81999 DIAM Unknown (**DIAMOND REO or REO**)

82 Freightliner (FRHT)

SUV/Light Trucks
82461 FRHT Sprinter/Advantage

Medium/Heavy Trucks
82881 FRHT CBE
82882 FRHT COE low-entry
82883 FRHT COE high-entry
82884 FRHT Unknown engine location
82890 FRHT COE entry position unknown
82898 FRHT Other
82899 FRHT Unknown

Motorhome
82850 FRHT Motorhome

Buses
82981 FRHT Conventional (Engine out front)
82982 FRHT Front engine, flat front
82983 FRHT Rear engine, flat front
82988 FRHT Other

Vehicles
82998 FRHT Other
82999 FRHT Unknown (**FREIGHTLINER**)

83 FWD (FWD)

Medium/Heavy Trucks
83881 FWD CBE
83882 FWD COE low-entry
83883 FWD COE high-entry
83884 FWD Unknown engine location
83890 FWD COE entry position unknown
83898 FWD Other
83899 FWD Unknown

Motorhome
83850 FWD Motorhome

Buses
83981 FWD Conventional (engine out front)
83982 FWD Front engine, flat front
83983 FWD Rear engine, flat front
83988 FWD Other

Vehicles
83998 FWD Other
83999 FWD Unknown (**FWD**)

84 International Harvester/Navistar (INTL) – (NAVI)

SUV/Light Trucks
84421 INTL Scout
84431 INTL Travelall
84466 INTL Multistop Van
84481 INTL Pickup
84498 INTL Other
84499 INTL Unknown

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

84 International Harvester/Navistar (INTL) – (NAVI)

Medium/Heavy Truck
84881 INTL CBE
84882 INTL COE low-entry
84884 INTL Unknown engine location
84890 INTL COE entry position unknown
84898 INTL Other
84899 INTL Unknown

Motorhome
84850 INTL Motorhome

Buses
84981 INTL Conventional (engine out front)
84982 INTL Front engine, flat front
84983 INTL Rear engine, flat front
84988 INTL Other

Vehicles
84998 INTL Other
84999 INTL Unknown (**INTL. HARVESTER/ NAVISTAR**)

85 Kenworth (KW)

Medium/Heavy Trucks
85881 KW CBE
85882 KW COE low-entry
85883 KW COE high-entry
85884 KW Unknown engine location
85890 KW COE entry position unknown
85898 KW Other
85899 KW Unknown

Motorhome
85850 KW Motorhome

(Continued on Next Page)

85 Kenworth (Cont.) (KW)

Buses
85981 KW Conventional (engine out front)
85982 KW Front engine, flat front
85983 KW Rear engine, flat front
85988 KW Other

Vehicles
85998 KW Other
85999 KW Unknown (**KENWORTH**)

86 Mack (MACK)

Medium/Heavy Trucks
86881 MACK CBE
86882 MACK COE low-entry
86883 MACK COE high-entry
86884 MACK Unknown engine location
86890 MACK COE entry position unknown
86898 MACK Other
86899 MACK Unknown

Motorhome
86850 MACK Motorhome

Buses
86981 MACK Conventional (engine out front)
86982 MACK Front engine, flat front
86983 MACK Rear engine, flat front
86988 MACK Other

Vehicles
86998 MACK Other
86999 MACK Unknown (**MACK**)

Vehicle Make/Vehicle Model (Continued)

1991 and later

87 Peterbilt (PTRB)

Medium/Heavy Trucks
87881 PTRB CBE
87882 PTRB COE low-entry
87883 PTRB COE high-entry
87884 PTRB Unknown engine location
87890 PTRB COE entry position unknown
87898 PTRB Other
87899 PTRB Unknown

Motorhome
87850 PTRB Motorhome

Buses
87981 PTRB Conventional (engine out front)
87982 PTRB Front engine, flat front
87983 PTRB Rear engine, flat front
87988 PTRB Other

Vehicles
87998 PTRB Other
87999 PTRB Unknown (**PETERBILT**)

88 Iveco Magirus* (IVEC)
*Magirus stopped production in 1985; Iveco stopped production in 1991.

Medium/Heavy Trucks
88881 IVEC CBE
88882 IVEC COE low-entry
88883 IVEC COE high-entry
88884 IVEC Unknown engine location
88890 IVEC COE entry position unknown
88898 IVEC Other
88899 IVEC Unknown

(Continued on Next Page)

88 Iveco Magirus (Cont.) (IVEC)

Motorhome
88850 IVEC Motorhome

Buses (Cont.)
88981 IVEC Conventional (engine out front)
88982 IVEC Front engine, flat front
88983 IVEC Rear engine, flat front
88988 IVEC Other

Vehicles
88998 IVEC Other
88999 IVEC Unknown (**IVECO/MAGIRUS**)

89 White/GMC (WHIT-WHGM)

Medium/Heavy Trucks
89881 WHIT CBE
89882 WHIT COE low-entry
89883 WHIT COE high-entry
89884 WHIT Unknown engine location
89890 WHIT COE entry position unknown
89898 WHIT Other
89899 WHIT Unknown

Motorhome
89850 WHIT Motorhome

Buses
89981 WHIT Conventional (engine out front)
89982 WHIT Front engine, flat front
89983 WHIT Rear engine, flat front
89988 WHIT Other

Vehicle Make/Vehicle Model (Continued)

1991 and later

89 White/GMC (Cont.) (WHIT-WHGM)

Vehicles
89998 WHIT Other
89999 WHIT Unknown
(**WHITE/AUTOCAR-WHITE/GMC**)

90 Bluebird (BLUI)

SUV/Light Trucks
90461 BLUI Van Based

Buses
90981 BLUI Conventional (engine out front)
90982 BLUI Front engine, flat front
90983 BLUI Rear engine, flat front
90988 BLUI Other

Vehicles
90999 BLUI Unknown (BLUEBIRD)

91 Eagle Coach (--------)

Buses
91981 -------- Conventional (engine out front)
91982 -------- Front engine, flat front
91983 -------- Rear engine, flat front
91988 -------- Other

92 Gillig (--------)

Buses
92981 -------- Conventional (engine out front)
92982 -------- Front engine, flat front

(Continued on Next Page)

92 Gillig (Cont.) (--------)

Buses
92983 -------- Rear engine, flat front
92988 -------- Other

93 MCI (MCIN)

Buses
93981 MCIN Conventional (engine out front)
93982 MCIN Front engine, flat front
93983 MCIN Rear engine, flat front
93988 MCIN Other

94 Thomas Built (THMS)

SUV/Light Trucks
94461 THMS van-based

Buses
94981 THMS Conventional (engine out front)
94982 THMS Front engine, flat front
94983 THMS Rear engine, flat front
94988 THMS Other
Vehicles
94999 THMS Unknown (**THOMAS BUILT**)

98 Other Make* (--------)
* Occurs when make is not explicitly listed here.

Automobiles (unknown if DOMESTIC or FOREIGN)*
98398 -------- Other
* Do not use MAKE 98 if Other Domestic (29) or Other Import (69) is applicable.

Vehicle Make/Vehicle Model (*Continued*)

1991 and later

98 Other Make (Cont.) (--------)

SUV/Light Trucks
98498 -------- Other

Motorcycles
98701 -------- 0-50cc
98702 -------- 51-124cc
98703 -------- 125-349cc
98704 -------- 350-449cc
98705 -------- 450-749cc
98706 -------- 750cc or greater
98709 -------- Unknown

All Terrain Vehicles
98731 -------- 0-50cc
98732 -------- 51-124cc
98733 -------- 125-349cc
98734 -------- 350cc or greater
98739 -------- Unknown

Medium/Heavy Trucks
98802 -------- Auto-Union-DKW
98803 -------- Divco
98804 -------- Western Star
98805 -------- Oshkosh
98806 -------- Hino
98807 -------- Scania
98808 -------- UD
98809 -------- Sterling
98881 -------- Medium/Heavy CBE
98882 -------- COE low-entry
98883 -------- COE high-entry
98884 -------- Unknown engine location
98890 -------- COE entry position unknown
98898 -------- Other*
* Do not use MAKE 98 if Other Domestic (29) or Other Import (69) is applicable.

(Continued on Next Page)

98 Other Make (Cont.) (--------)

Motorhome
98850 -------- Motorhome

Buses
98902 -------- Neoplan
98903 -------- Carpenter
98904 -------- Collins Bus
98905 -------- DINA
98906 -------- Mid Bus
98907 -------- Orion
98908 -------- Van Hool
98981 -------- Conventional (engine out front
98982 -------- Front engine flat front
98983 -------- Rear engine, flat front
98988 -------- Other*
* Prior to 1999, MCI buses were coded Other Make/Other Bus. Starting in 1999, MCI has its own Make Code 93.
Vehicles
98998 -------- Other
98999 -------- Unknown (**OTHER MAKE**)

99 Unknown Make (--------)

Automobiles
99399 -------- Unknown

SUV/Light Trucks
99499 -------- Unknown

Motorcycles
99701 -------- 0-50cc
99702 -------- 51-124cc
99703 -------- 125-349cc

Vehicle Make/Vehicle Model (Continued)

1991 and later

99 Unknown Make (Cont.) (--------)

Motorcycles (Cont.)
99704 -------- 350-449cc
99705 -------- 450-749cc
99706 -------- 750cc or greater
99709 -------- Unknown

All-Terrain Vehicles
99731 -------- 0-50cc
99732 -------- 51-124cc
99733 -------- 125-349cc
99734 -------- 350cc or greater
99739 -------- Unknown

Medium/Heavy Trucks
99881 -------- Medium/Heavy CBE
99882 -------- COE low-entry
99883 -------- COE high-entry
99884 -------- Unknown engine location
99890 -------- COE entry position unknown
99898 -------- Other
99899 -------- Unknown

(Continued on Next Page)

99 Unknown Make (Cont.) (--------)

Motorhome
99850 -------- Motor home

Buses
99981 -------- Conventional (engine out front
99982 -------- Front engine flat front
99983 -------- Rear engine, flat front
99988 -------- Other
99989 -------- Unknown

Vehicles
99998 -------- Other
99999 -------- Unknown (as to automobile, motored cycle, light truck or truck)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

The make data is concatenated with the model data to form the make-model variable. The first two digits identify the make, the next two digits identify the model. If one needs to select cars based on make and model the variable of choice is VINA_MOD rather than MAK_MOD.

Variable = MAK_MOD

Element =

01 American Motors* (AMER)
*Note: Alliance/Encore (including L, DL and Limited) is coded under Renault (46).

0101 AMER Rambler/American
0102 AMER Rebel/Matador
0103 AMER Ambassador
0104 AMER Pacer
0105 AMER AMX
0106 AMER Javelin
0107 AMER Hornet/Concord
0108 AMER Spirit/Gremlin
0109 AMER Eagle
0110 AMER SX4/Kammback
0172 AMER Espace (minivan)
0197 AMER Other Vehicle
0198 AMER Other (automobile)
0199 AMER Unknown (automobile)

O2 Jeep* (Including Willys) (AMER)**
* Note that Jeep DJ-Series are coded under MAKE 03, MODEL 75.
**** Willys Jeep can be coded 01, 73, 97 or 00.**

0201 AMER CJ-2/CJ-3/CJ-4
0202 AMER CJ-5/CJ-6/CJ-7/CJ-8 (thru 1986, YJ 1986-on)
0203 AMER Wrangler (YJ)

(Continued on Next Page)

02 Jeep* (Including Willys) (Cont.) (AMER)**
* Note that Jeep DJ-Series are coded under MAKE 03, MODEL 75.
**** Willys Jeep can be coded 01, 73, 97 or 00.**

0271 AMER Cherokee
0273 AMER Pickup
0276 AMER Wagoneer
0277 AMER Comanche
0278 AMER Other (SUV/light Truck)
0279 AMER Unknown (SUV/light Truck)
0297 AMER Other Vehicle
0298 AMER Other (automobile)
0299 AMER Unknown (automobile)
0200 AMER Unknown (**JEEP**)

03 AM General (AMGN)

0301 AMGN Dispatcher
0375 AMGN Dispatcher DJ
0387 AMGN Bus (rear engine)
0388 AMGN Other (truck)
0389 AMGN Unknown (truck)
0397 AMGN Other Vehicle

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

06 Chrysler (Cont.) (CHRY)

0397 AMGN Other Vehicle
0398 AMGN Other (automobile)
0399 AMGN Unknown (automobile)
0300 AMGN (**AM GENERAL**)

06 Chrysler (CHRY)

0607 CHRY LeBaron
0609 CHRY Cordoba
0610 CHRY Newport/New Yorker
0614 CHRY E-Class
0615 CHRY Laser
0616 CHRY LeBaron GTS
0631 CHRY Maserati (TC)
0635 CHRY Conquest
0697 CHRY Other Vehicle
0698 CHRY Other (automobile)
0699 CHRY Unknown (automobile)

07 Dodge (DODG)

0701 DODG Dart
0702 DODG Coronet/Charger/Magnum
0703 DODG Polara/Monaco
0704 DODG Royal Monaco
0705 DODG Challenger
0706 DODG Aspen
0707 DODG Diplomat
0708 DODG Omni
0709 DODG Mirada
0710 DODG St. Regis
0711 DODG Aries (K)
0712 DODG 400
0713 DODG Rampage
0714 DODG 600
0715 DODG Daytona

(Continued on Next Page)

07 Dodge (DODG)

0716 DODG Lancer
0717 DODG Shadow
0718 DODG Dynasty
0719 DODG ES Shelby
0733 DODG Challenger - Import
0734 DODG Colt
0735 DODG Conquest
0743 DODG Colt-pickup/Vista
0770 DODG Raider
0771 DODG Ramchager
0772 DODG Caravan:T-van/Voyager
0773 DODG D,W-Series pickup
0774 DODG Van
0775 DODG Van derivative
0777 DODG Dakota/D50
0778 DODG Other (SUV/light truck)
0779 DODG Unknown (SUV/light truck)
0781 DODG CBE: (medium/heavy)
0782 DODG COE: low-entry (medium/heavy truck)
0783 DODG COE: high-entry (medium/heavy truck)
0784 DODG Unknown engine location (medium/heavy truck)
0785 DODG Medium bus (not van-based)
0788 DODG Other (truck
0789 DODG Unknown (truck)
0790 DODG COE: entry position unknown (medium/heavy truck)
0797 DODG Other Vehicle
0798 DODG Other (automobile)
0799 DODG Unknown (automobile)
0700 DODG Unknown (**DODGE**)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

08 Imperial (CHRY)

0810 CHRY Imperial
0897 CHRY Other Vehicle
0898 CHRY Other (automobile)
0899 CHRY Unknown (automobile)

09 Plymouth (PLYM)

0901 PLYM Valiant/Duster/Scamp
0902 PLYM Satellite/Belvedere
0903 PLYM Fury
0904 PLYM Gran Fury
0905 PLYM Barracuda
0906 PLYM Volare
0907 PLYM Caravelle
0908 PLYM Horizon
0911 PLYM Reliant (K)
0913 PLYM Scamp
0917 PLYM Sundance
0919 PLYM Acclaim
0931 PLYM Cricket
0932 PLYM Arrow
0933 PLYM Sapporo (import)
0934 PLYM Champ/Colt (import)
0935 PLYM Conquest
0937 PLYM Laser
0971 PLYM Trailduster
0972 PLYM Voyager T-van
0974 PLYM Van (Voyager)
0977 PLYM Arrow pickup
0978 PLYM Other (SUV/light truck)
0979 PLYM Unknown (SUV/light truck)
0997 PLYM Other Vehicle
0998 PLYM Other (automobile)
0999 PLYM Unknown (automobile)
0900 PLYM Unknown (**PLYMOUTH**)

10 Eagle (EGIL)

1034 EGIL Summit
1037 EGIL Talon
1040 EGIL Premier
1044 EGIL Medallion
1098 EGIL Other (automobile)
1099 EGIL Unknown (**EAGLE**)

12 Ford (FORD)

1201 FORD Falcon
1202 FORD Fairlane
1203 FORD Mustang/Mustang II
1204 FORD Thunderbird
1205 FORD LTD II
1206 FORD LTD/Galaxy/Custom
1207 FORD Ranchero
1208 FORD Maverick
1209 FORD Pinto
1210 FORD Torino/Gran Torino
1211 FORD Granada
1212 FORD Fairmont
1213 FORD Escort
1214 FORD EXP
1215 FORD Tempo
1216 FORD Crown Victoria
1217 FORD Taurus
1218 FORD Probe
1231 FORD English Ford
1232 FORD Fiesta
1233 FORD Laser
1234 FORD Fiesta Kia/Mazda
1270 FORD Bronco II
1271 FORD Bronco
1272 FORD Aerostar
1273 FORD F-Series pickup
1274 FORD Van

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

12 Ford (Cont.) (FORD)

1275 FORD Van derivative
1277 FORD Ranger
1278 FORD Other (SUV/light truck)
1279 FORD Unknown (SUV/light truck)
1281 FORD Ford CBE (medium/heavy truck)
1282 FORD Ford COE low-entry (medium/heavy truck)
1283 FORD Ford COE high-entry (medium/heavy truck)
1284 FORD Ford Unknown engine location (medium/heavy truck)
1285 FORD Medium bus
1288 FORD Other (truck)
1289 FORD Unknown (truck)
1290 FORD COE: entry position unknown (medium/heavy truck)
1297 FORD Other Vehicle
1298 FORD Other (automobile)
1299 FORD Unknown (automobile)
1200 FORD Unknown (**FORD**)

13 Lincoln (LINC)

1301 LINC Continental/Town Car
1302 LINC Mark
1305 LINC Continental
1311 LINC Versailles
1397 LINC Other Vehicle
1398 LINC Other (automobile)
1399 LINC Unknown (automobile)

14 Mercury (MERC)

1402 MERC Cyclone
1403 MERC Capri-domestic

14 Mercury (Cont.) (MERC)

1404 MERC Cougar
1405 MERC Cougar XR7
1406 MERC Marquis/Monterey
1408 MERC Comet
1409 MERC Bobcat
1410 MERC Montego
1411 MERC Monarch
1412 MERC Zephyr
1413 MERC Lynx
1414 MERC LN7
1415 MERC Topaz
1416 MERC Grand Marquis
1417 MERC Sable
1431 MERC Capri-import
1433 MERC Pantera
1434 MERC Merkur
1435 MERC Scorpio
1436 MERC Tracer/Mazda
1497 MERC Other Vehicle
1498 MERC Other (automobile)
1499 MERC Unknown (automobile)

18 Buick (BUIC)

1801 BUIC Regal/Century/Special
1802 BUIC LeSabre/Wildcat/Centurion
1803 BUIC Electra/Electra 225
1805 BUIC Riviera
1808 BUIC Apollo
1810 BUIC Regal/Century (1978-1981)
1812 BUIC Skyhawk (S)
1815 BUIC Skylark
1816 BUIC Skyhawk (J)
1817 BUIC Century (A)
1818 BUIC Somerset
1821 BUIC Reatta

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

18 Buick (Cont.) (BUIC)

1831 BUIC Opel Kadette
1832 BUIC Opel Manta/1900
1833 BUIC Opel GT
1834 BUIC Opel Isuzu
1897 BUIC Other Vehicle
1898 BUIC Other (automobile)
1899 BUIC Unknown (automobile)

19 Cadillac (CADI)

1903 CADI Deville/Brougham
1904 CADI Limousine
1905 CADI Eldorado
1906 CADI Commercial Series
1909 CADI Allante
1914 CADI Seville
1916 CADI Cimarron
1997 CADI Other Vehicle
1998 CADI Other (automobile)
1999 CADI Unknown (automobile)

20 Chevrolet (CHEV)

2001 CHEV Malibu/Chevelle
2002 CHEV Caprice/Impala
2004 CHEV Corvette
2006 CHEV Corvair
2007 CHEV El Camino
2008 CHEV Nova
2009 CHEV Camaro
2010 CHEV Monte Carlo
2011 CHEV Vega
2012 CHEV Monza
2013 CHEV Chevette
2015 CHEV Citation
2016 CHEV Cavalier

20 Chevrolet (Cont.) (CHEV)

2017 CHEV Celebrity
2019 CHEV Baretta/Corsica 2020 CHEV Lumina
2031 CHEV Spectrum (Isuzu)
2032 CHEV Nova (Toyota)
2033 CHEV Sprint
2034 CHEV Geo Metro
2035 CHEV Geo Storm
2050 CHEV Geo Tracker
2070 CHEV S-10 Blazer
2071 CHEV Blazer
2072 CHEV Astrovan
2073 CHEV C, K-Series pickup
2074 CHEV G-Series van
2075 CHEV Van derivatives
2076 CHEV Suburban
2077 CHEV S-10 Luv Pickup
2078 CHEV Other (SUV/light truck)
2079 CHEV Unknown (SUV/light truck)
2080 CHEV Lumina
2081 CHEV CBE (medium/heavy truck)
2082 CHEV COE low-entry (medium/heavy truck)
2083 CHEV COE high-entry (medium/heavy truck)
2084 CHEV Unknown engine location (medium/heavy truck)
2085 CHEV Bus
2088 CHEV Other (truck)
2089 CHEV Unknown (truck)
2090 CHEV COE: entry position unknown (medium/heavy truck)
2097 CHEV Other Vehicle
2098 CHEV Other (automobile)
2099 CHEV Unknown (automobile)
2000 CHEV Unknown (**CHEVROLET**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

21 Oldsmobile (OLDS)

2101 OLDS Cutlass
2102 OLDS Delta 88
2103 OLDS Ninety-Eight
2105 OLDS Toronado
2106 OLDS Commercial Series
2112 OLDS Starfire
2115 OLDS Omega
2116 OLDS Firenza
2117 OLDS Ciera
2118 OLDS Calais
2180 OLDS Silhouette
2197 OLDS Other Vehicle
2198 OLDS Other (automobile)
2199 OLDS Unknown (automobile)

22 Pontiac (PONT)

2201 PONT LeMans/Tempest
2202 PONT Bonneville/Catalina/Parisienne
2205 PONT Fiero
2208 PONT Ventura
2209 PONT Firebird/Trans AM
2210 PONT Grand Prix
2211 PONT Astre
2212 PONT Sunbird
2213 PONT T1000/1000
2215 PONT Phoenix
2216 PONT J-2000/2000
2217 PONT 6000
2218 PONT Gran AM
2280 PONT Trans Sport
2297 PONT Other Vehicle
2298 PONT Other (automobile)
2299 PONT Unknown (automobile)

23 GMC (GMC)

2307 GMC Caballero/Sprint
2370 GMC Jimmy/S-15-based
2371 GMC Jimmy full-based
2372 GMC Safari
2373 GMC C, K-Series pickup
2374 GMC G Van/Vandura,Rally Van
2375 GMC Van derivatives
2376 GMC Suburban
2377 GMC S15
2378 GMC Other (SUV/light truck)
2379 GMC Unknown (SUV/light truck)
2381 GMC CBE (medium/heavy truck)
2382 GMC COE low-entry (medium/heavy truck)
2383 GMC COE high-entry (medium/heavy truck)
2384 GMC Unknown engine location (medium/heavy truck)
2385 GMC Bus
2388 GMC Other (truck)
2389 GMC Unknown (truck)
2390 GMC COE entry position unknown (medium/heavy truck)
2397 GMC Other Vehicle
2398 GMC Other (automobile)
2399 GMC Unknown (automobile)
2300 GMC Unknown (**GMC**)

29 Other Domestic Manufacturers (--------)

2901 -------- Studebaker/Avanti
2902 -------- Checker
2998 -------- Other (automobile)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

30 Volkswagen (VOLK)

3031 VOLK Karmann Ghia
3032 VOLK Beetle
3033 VOLK Super Beetle
3034 VOLK 411/412
3035 VOLK Squareback/Fastback
3036 VOLK Rabbit
3037 VOLK Dasher
3038 VOLK Scirocco
3039 VOLK The Thing
3040 VOLK Jetta
3041 VOLK Quantum
3042 VOLK Golf
3043 VOLK Rabbit pickup
3044 VOLK Fox
3045 VOLK Corrado
3074 VOLK Van/Vanagon/Camper
3078 VOLK Other (SUV/light truck)
3079 VOLK Unknown (SUV/light truck)
3097 VOLK Other Vehicle
3098 VOLK Other (automobile)
3099 VOLK Unknown (automobile)
3000 VOLK Unknown (**VOLKSWAGEN**)

31 Alfa Romeo (ALFA)

3131 ALFA Spider
3132 ALFA Sports Sedan
3133 ALFA Sprint Veloce
3134 ALFA GTV-6
3135 ALFA 164
3197 ALFA Other Vehicle
3198 ALFA Other (automobile)
3199 ALFA Unknown (automobile)

32 Audi (AUDI)

3231 AUDI Super 90
3232 AUDI 100
3233 AUDI Fox
3234 AUDI 4000
3235 AUDI 5000
3236 AUDI 80/90
3237 AUDI 200
3238 AUDI Quattro
3297 AUDI Other Vehicle
3298 AUDI Other (automobile)
3299 AUDI Unknown (automobile)

33 Austin/Austin Healery (AUST)

3331 AUST Marina
3332 AUST America
3333 AUST Healey Sprite
3334 AUST Healey 3000
3335 AUST Mini
3397 AUST Other Vehicle
3398 AUST Other (automobile)
3399 AUST Unknown (automobile)

34 BMW (BMW)

3431 BMW 1600/2002
3432 BMW Coupe
3433 BMW Bavaria Sedan
3434 BMW 630/633
3435 BMW 318i/320i/325E
3436 BMW 524i/528i/530i/533i/535
3437 BMW 733i
3461 BMW 0-50cc
3462 BMW 51-124cc
3463 BMW 125-349cc

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

34 BMW (Cont.) (BMW)

3464 BMW 350-449cc
3465 BMW 450-749cc
3466 BMW 750cc & over
3469 BMW Unknown (cc)
3497 BMW Other Vehicle
3498 BMW Other (automobile)
3499 BMW Unknown (automobile)
3400 BMW Unknown (**BMW**)

35 Nissan/Datsun (NISS-DATS)

3531 NISS F-10
3532 NISS 200 SX/240 SX
3533 NISS B210/210/1200
3534 NISS 240/260/280/300 Z, ZX
3535 NISS 310
3536 NISS 510
3537 NISS 610
3538 NISS 710
3539 NISS 810/Maxima
3540 NISS Roadster-SPL/SRL 311/SRL 341)
3541 NISS PL/RL 411
3542 NISS Stanza
3543 NISS Sentra
3544 NISS Pulsar
3570 NISS MPV
3572 NISS Van
3577 NISS Pickup
3578 NISS Other (SUV/light truck)
3579 NISS Unknown (SUV/light truck)
3580 NISS Axxess
3583 NISS COE (large truck)
3588 NISS Other (truck)
3597 NISS Other Vehicle
3598 NISS Other (automobile)

35 Nissan/Datsun (Cont.) (NISS-DATS)

3599 NISS Unknown (automobile)
3500 NISS Unknown (**NISSAN)**

36 Fiat (FIAT)

3631 FIAT 124 Coupe/Sedan
3632 FIAT 124 Spider
3633 FIAT Brava/131
3634 FIAT 850 Coupe/Spider
3635 FIAT 128
3636 FIAT X-1/9
3637 FIAT Strada
3697 FIAT Other Vehicle
3698 FIAT Other (automobile)
3699 FIAT Unknown (automobile)

37 Honda (HOND)

3731 HOND Civic
3732 HOND Accord
3733 HOND Prelude
3734 HOND 600
3735 HOND Civic-CRX
3736 HOND Acura
3761 HOND 0-50cc
3762 HOND 51-124cc
3763 HOND 125-349cc
3764 HOND 350-449cc
3765 HOND 450-749cc
3766 HOND 750cc & over
3769 HOND Unknown (cc)
3797 HOND Other Vehicle
3798 HOND Other (automobile)
3799 HOND Unknown (automobile)
3700 HOND Unknown (**HONDA)**

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

38 Isuzu (ISU)

3831 ISU I-Mark
3832 ISU Impulse
3833 ISU Stylus
3839 ISU Amigo
3870 ISU Trooper II
3877 ISU Pup pickup/Rodeo
3878 ISU Other (SUV/light truck)
3879 ISU Unknown (SUV/light truck)
3897 ISU Other Vehicle
3898 ISU Other (automobile)
3899 ISU Unknown (automobile)
3800 ISU Unknown (**ISUZU**)

39 Jaguar (JAGU)

3931 JAGU XJ-S Coupe
3932 JAGU XJ6/XJ12 Sedan/Coupe
3933 JAGU XK-E
3997 JAGU Other Vehicle
3998 JAGU Other (automobile)
3999 JAGU Unknown (automobile)

40 Lancia (LNCI)

4031 LNCI Beta Sedan/HPE
4032 LNCI Beta Coupe/Zagato
4033 LNCI Scorpion
4097 LNCI Other Vehicle
4098 LNCI Other (automobile)
4099 LNCI Unknown (automobile)

41 Mazda (MAZD)

4131 MAZD RX2
4132 MAZD RX3
4133 MAZD RX4

41 Mazda (Cont.) (MAZD)

4134 MAZD RX7
4135 MAZD GLC/323
4136 MAZD Cosmo
4137 MAZD 626
4138 MAZD 808
4139 MAZD Mizer
4140 MAZD R-100
4141 MAZD 618/616
4142 MAZD 1800
4143 MAZD 929
4144 MAZD MX-6
4145 MAZD Miata
4172 MAZD MPV
4177 MAZD pickup
4178 MAZD Other (SUV/light truck)
4179 MAZD Unknown (SUV/light truck)
4197 MAZD Other Vehicle
4198 MAZD Other (automobile)
4199 MAZD Unknown (automobile)
4100 MAZD Unknown (**MAZDA**)

42 Mercedes-Benz (MERZ)

4231 MERZ 200/220/230/240/250/260/ 280/300 (sedan and 5-passenger Coupe 'C' only)
4232 MERZ 230SL/280SL (2-passenger)
4233 MERZ 350 SL/450 SL, 380 SL/560 SL, 300 SL/500 SL
4234 MERZ 350 SLC/450 SLC/380 SLC
4235 MERZ 280 SEL/300 SEL
4236 MERZ 450 SEL/380 SEL/500 SEL/500 SEC/420 SEL/560 SEL/560 SEC
4237 MERZ 300 SE/380 SE/450 SE
4238 MERZ 600/6.9 sedan

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

42 Mercedes-Benz (Cont.) (MERZ)

4239 MERZ 190
4275 MERZ Van derivative
4281 MERZ CBE (medium/heavy truck)
4282 MERZ COE: low-entry (medium/heavy truck)
4283 MERZ COE: high-entry (medium/heavy truck)
4284 MERZ Unknown engine location (medium/heavy truck)
4285 MERZ Medium Bus
4288 MERZ Other (truck)
4289 MERZ Unknown (truck)
4290 MERZ COE: entry position unknown (medium/heavy truck)
4297 MERZ Other Vehicle
4298 MERZ Other (automobile)
4299 MERZ Unknown (automobile)
4200 MERZ Unknown (**MERCEDES-BENZ**)

43MG (MG)

4331 MG MG Midget
4332 MG MGB
4333 MG MGB-GT
4334 MG MGA
4335 MG TA/TC/TD/TF
4336 MG MGC
4397 MG Other Vehicle
4398 MG Other (automobile)
4399 MG Unknown (automobile)

44 Peugeot (PEUG)

4431 PEUG 304
4432 PEUG 403
4433 PEUG 404

44 Peugeot (Cont.) (PEUG)

4434 PEUG 505/504
4435 PEUG 604
4436 PEUG 405
4461 PEUG 0-50cc
4462 PEUG 51-124cc
4469 PEUG Unknown cc
4497 PEUG Other Vehicle
4498 PEUG Other (automobile)
4499 PEUG Unknown (automobile)

45 Porsche (PORS)

4531 PORS 911
4532 PORS 912/912E
4533 PORS 914
4534 PORS 924
4535 PORS 928
4536 PORS 930/Turbo
4537 PORS 944
4538 PORS 959
4597 PORS Other Vehicle
4598 PORS Other (automobile)
4599 PORS Unknown (automobile)

46 Renault (RENA)

4631 RENA LeCar
4632 RENA 10/Dauphine/Caravelle/R-8
4633 RENA 12
4634 RENA 15
4635 RENA 16
4636 RENA 17
4637 RENA R18i
4638 RENA Fuego
4639 RENA Alliance
4640 RENA Encore

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

46 Renault (Cont.) (RENA)

4641 RENA Alpine
4644 RENA Medallion
4697 RENA Other Vehicle
4698 RENA Other (automobile)
4699 RENA Unknown (automobile)

47 Saab (SAA)

4731 SAA 99/99E/900
4732 SAA Sonnet
4733 SAA 95/96/97
4734 SAA 9000
4797 SAA Other Vehicle
4798 SAA Other (automobile)
4799 SAA Unknown (automobile)

48 Subaru (SUBA)

4831 SUBA FE/GF/DL/STD/GL/G/GLF
4832 SUBA Star
4833 SUBA 360
4834 SUBA Legacy
4835 SUBA XT
4836 SUBA Justy
4843 SUBA Brat
4878 SUBA Other (SUV/light truck)
4879 SUBA Unknown (SUV/light truck)
4897 SUBA Other Vehicle
4898 SUBA Other (automobile)
4899 SUBA Unknown (automobile)
4800 SUBA Unknown (SUBARU)

49 Toyota (TOYT)

4931 TOYT Corona
4932 TOYT Corolla

49 Toyota (TOYT)

4933 TOYT Celica
4934 TOYT Celica Supra
4935 TOYT Cressida
4936 TOYT Crown
4937 TOYT Carina
4938 TOYT Tercel
4939 TOYT Starlet
4940 TOYT Camry
4941 TOYT MR2
4970 TOYT 4-Runner
4971 TOYT Land Cruiser
4972 TOYT Minivan
4977 TOYT Chinook (pickup)
4978 TOYT Other (SUV/light truck)
4979 TOYT Unknown (SUV/light truck)
4997 TOYT Other Vehicle
4998 TOYT Other (automobile)
4999 TOYT Unknown (automobile)
4900 TOYT Unknown (**TOYOTA**)

50 Triumph (TRIU)

5031 TRIU Spitfire
5032 TRIU GT6
5033 TRIU TR4
5034 TRIU TR6
5035 TRIU TR7/TR8
5036 TRIU Herald
5037 TRIU Stag
5061 TRIU 0-50cc
5062 TRIU 51-124 cc
5063 TRIU 125-349 cc
5064 TRIU 350-449 cc
5065 TRIU 450-749 cc
5066 TRIU 750cc & more
5069 TRIU Unknown (cc)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

50 Triumph (Cont.) (TRIU)

5097 TRIU Other Vehicle
5098 TRIU Other (automobile)
5099 TRIU Unknown (automobile)
5000 TRIU Unknown (**TRIUMPH**)

51 Volvo (VOLV)

5131 VOLV 122
5132 VOLV 142/144/145
5133 VOLV 164
5134 VOLV 240/242/244/245
5135 VOLV 262/264/265
5136 VOLV 1800
5137 VOLV P-544
5138 VOLV 760/780 GLE
5139 VOLV 740 GLE
5181 VOLV CBE (medium/heavy truck)
5182 VOLV COE low-entry: (medium/heavy truck)
5183 VOLV COE high-entry: (medium/heavy truck)
5184 VOLV Unknown engine location (medium/heavy truck)
5185 VOLV Medium bus
5188 VOLV Other (truck)
5189 VOLV Unknown (truck)
5190 VOLV COE: entry position unknown (medium/heavy truck)
5197 VOLV Other Vehicle
5198 VOLV Other (automobile)
5199 VOLV Unknown (automobile)
5100 VOLV Unknown (**VOLVO**)

52 Mitsubishi (MITS)

5231 MITS Starion

52 Mitsubishi (MITS)

5232 MITS Tredia
5233 MITS Cordia
5234 MITS Galant/Sigma
5235 MITS Mirage
5336 MITS Precis
5237 MITS Eclipse
5270 MITS Montero
5272 MITS Minivan
5277 MITS pickup Mighty Max/SPX
5278 MITS Other (SUV/light truck)
5298 MITS Other (automobile)
5299 MITS Unknown (automobile)
5200 MITS Unknown (MITSUBISHI)

53 Suzuki (SUZI)

5331 SUZI SA 310/GLX
5334 SUZI Swift
5339 SUZI Sidekick
5361 SUZI 0-0cc
5362 SUZI 51-124cc
5363 SUZI 125-349cc
5364 SUZI 350-449cc
5365 SUZI 450-749cc
5366 SUZI 750cc & over
5369 SUZI Unknown (cc)
5370 SUZI SJ-410/Samurai
5378 SUZI Other (SUV/light truck)
5388 SUZI Other (truck)
5397 SUZI Other Vehicle
5300 SUZI Unknown (**SUZUKI**)

57 Lexus (LEXS)

5731 LEXS-250
5732 LEXS LS-400

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

58 Infiniti (INFI)

5831 INFI M30
5832 INFI Q45

59 Other Import (--------)

5931 -------- Aston Martin
5932 -------- Bricklin
5933 -------- Citroen
5934 -------- DeLorean
5935 -------- Ferrari
5936 -------- Hillman
5937 -------- Jensen
5938 -------- Lamborghini
5939 -------- Lotus
5940 -------- Maserati
5941 -------- Morris
5942 -------- Rolls-Royce/Bentley
5943 -------- Rover
5944 -------- Simca
5945 -------- Sunbeam
5946 -------- TVR
5947 -------- Daihatsu (Charade)
5948 -------- Desta (APV-utility)
5949 -------- Reliant (British)
5950 -------- Yugo
5951 -------- Hyundai
5952 -------- Sterling
5998 -------- Other (automobile) (e.g., Morgan, Singer)

60 BSA (BSA)

6061 BSA 0-50cc
6062 BSA 51-124cc
6063 BSA 125-349cc
6064 BSA 350-449cc

60 BSA (Cont.) (BSA)

6065 BSA 450-749cc
6066 BSA 750cc and over
6069 BSA Unknown (cc)
6097 BSA Other Vehicle

61 Ducati (DUCA)

6161 DUCA 0-50cc
6162 DUCA 51-124cc
6163 DUCA 125-349cc
6164 DUCA 350-449cc
6165 DUCA 450-749cc
6166 DUCA 750cc and over
6169 DUCA Unknown (cc)
6197 DUCA Other Vehicle

62 Harley-Davidson (HD)

6261 HD 0-50cc
6262 HD 51-124cc
6263 HD 125-349cc
6264 HD 350-449cc
6265 HD 450-749cc
6266 HD 750cc and over
6269 HD Unknown (cc)
6297 HD Other Vehicle

63 Kawasaki (KAWK)

6361 KAWK 0-50cc
6362 KAWK 51-124cc
6363 KAWK 125-349cc
6364 KAWK 350-449cc
6365 KAWK 450-749cc
6366 KAWK 750cc and over

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

63 Kawasaki (Cont.) (KAWK)

6369 KAWK Unknown (cc)
6397 KAWK Other Vehicle

64 Moto Guzzi (MOGU)

6461 MOGU 0-50cc
6462 MOGU 51-124cc
6463 MOGU 125-349cc
6464 MOGU 350-449cc
6465 MOGU 450-749cc
6466 MOGU 750cc and over
6469 MOGU Unknown (cc)
6497 MOGU Other Vehicle

65 Norton (NORT)

6561 NORT 0-50cc
6562 NORT 51-124cc
6563 NORT 125-349cc
6564 NORT 350-449cc
6565 NORT 450-749cc
6566 NORT 750cc and over
6569 NORT Unknown (cc)
6597 NORT Other Vehicle

67 Yamaha (YAMA)

6761 YAMA 0-50cc
6762 YAMA 51-124cc
6763 YAMA 125-349cc
6764 YAMA 350-449cc
6765 YAMA 450-749cc
6766 YAMA 750cc and over
6769 YAMA Unknown (cc)
6797 YAMA Other Vehicle

69 Other Motorcycle (--------)

6961 -------- 0-50cc
6962 -------- 51-124cc
6963 -------- 125-349cc
6964 -------- 350-449cc
6965 -------- 450-749cc
6966 -------- 750cc and over
6969 -------- Unknown (cc)
6997 -------- Other Vehicle

70 Moped – Use if Make Not listed (--------)

7061 -------- 0-50cc
7062 -------- 51-124cc
7069 -------- Unknown (cc)

80 Brockway (BROC)

8080 BROC Motorhome
8081 BROC CBE (medium/heavy truck)
8082 BROC COE low-entry (medium/heavy truck)
8083 BROC COE high-entry: (medium/heavy truck)
8084 BROC Unknown engine location (medium/heavy truck)
8085 BROC Bus (Conventional (engine out front)
8086 BROC Bus (flat front, front engine)
8087 BROC Bus (flat front, rear engine)
8088 BROC Other (truck)
8089 BROC Unknown (truck)
8090 BROC COE entry position unknown (medium/heavy truck)
8097 BROC Other Vehicle

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

81 Diamond Reo or Reo (DIAR)

8180 DIAR Motorhome
8181 DIAR CBE (medium/heavy truck)
8182 DIAR COE low-entry: (medium/heavy truck)
8183 DIAR COE high-entry (medium/heavy truck)
8184 DIAR Unknown engine location (medium/heavy truck)
8185 DIAR Bus
8186 DIAR Bus (flat front, front engine)
8187 DIAR Bus (flat front, rear engine)
8188 DIAR Other (truck)
8189 DIAR Unknown (truck)
8190 DIAR COE entry position unknown (medium/heavy truck)
8197 DIAR Other Vehicle

82 Freightliner or White Freightliner (FRHT)

8280 FRHT Motorhome
8281 FRHT CBE (medium/heavy truck)
8282 FRHT COE low-entry (medium/heavy truck)
8283 FRHT COE high-entry (medium/heavy truck)
8284 FRHT Unknown engine location (medium/heavy truck)
8285 FRHT Bus
8286 FRHT Bus (flat front, front engine)
8287 FRHT Bus (flat front, rear engine)
8288 FRHT Other (truck)
8289 FRHT Unknown (truck)
8290 FRHT COE entry position unknown (medium/heavy truck)
8297 FRHT Other Vehicle

83 FWD (FWD)

8380 FWD Motorhome
8381 FWD CBE (medium/heavy truck)
8382 FWD COE low-entry (medium/heavy truck)
8383 FWD COE high-entry (medium/heavy truck)
8384 FWD Unknown engine location (medium/heavy truck)
8385 FWD Bus
8386 FWD Bus (flat front, front engine)
8387 FWD Bus (flat front, rear engine)
8388 FWD Other (truck)
8389 FWD Unknown (truck)
8390 FWD COE entry position unknown
8397 FWD Other Vehicle

84 International Harvester (INTL)

8471 INTL Scout
8473 INTL Pickup/panel
8475 INTL Multistop
8476 INTL Travellall
8478 INTL Other (SUV/light truck)
8479 INTL Unknown (SUV/light truck)
8480 INTL Motorhome
8481 INTL CBE (medium/heavy truck)
8482 INTL COE low-entry (medium/heavy truck)
8483 INTL COE high-entry (medium/heavy truck)
8484 INTL Unknown engine location (medium/heavy truck)
8485 INTL Bus (conventional)
8486 INTL Bus (flat front, front engine)
8487 INTL Bus (flat front, rear engine)
8488 INTL Other truck

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

84 International Hearvester (Cont.) (INTL)

8489 INTL Unknown truck
8490 INTL COE entry position unknown (medium/heavy truck)
8497 INTL Other Vehicle
8400 INTL Unknown (**INTERNATIONAL HARVESTER**)

85 Kenworth (KW)

8580 KW Motorhome
8581 KW CBE (medium/heavy truck)
8582 KW COE low-entry (medium/heavy truck)
8583 KW COE high-entry (medium/heavy truck)
8584 KW Unknown engine location (medium/heavy truck)
8585 KW Bus
8586 KW Bus (flat front, front engine)
8587 KW Bus (flat front, rear engine)
8588 KW Other (truck)
8589 KW Unknown (truck)
8590 KW COE entry position unknown
8597 KW Other Vehicle

86 Mack (MACK)

8680 Mack MACK Motorhome
8681 MACK CBE (medium/heavy truck)
8682 MACK COE low-entry (medium/heavy truck)
8683 MACK COE high-entry (medium/heavy truck)
8684 MACK Unknown engine location (medium/heavy truck)

86 Mack (Cont.) (MACK)

8685 MACK Bus
8686 MACK Bus (flat front, front engine)
8687 MACK Bus (flat front, rear engine)
8688 MACK Other (truck)
8689 MACK Unknown (truck)
8690 MACK COE entry position unknown (medium/heavy truck)
8697 MACK Other Vehicle

87 Peterbilt (PTRB)

8780 PTRB Motorhome
8781 PTRB CBE (medium/heavy truck)
8782 PTRB COE low-entry (medium/heavy truck)
8783 PTRB COE high-entry (medium/heavy truck)
8784 PTRB Unknown engine location (medium/heavy truck)
8785 PTRB Bus
8786 PTRB Bus (flat front, front engine)
8787 PTRB Bus (flat front, rear engine)
8788 PTRB Other (truck)
8789 PTRB Unknown (truck)
8790 PTRB COE entry position unknown
8797 PTRB Other Vehicle

88 White (WHIT)

8880 WHIT Motorhome
8881 WHIT CBE (medium/heavy truck)
8882 WHIT COE low-entry (medium/heavy truck)
8883 WHIT COE high-entry (medium/heavy truck)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

88 White (Cont.) (WHIT)

8884 WHIT Unknown engine location (medium/heavy truck)
8885 WHIT Bus
8886 WHIT Bus (flat front, front engine)
8887 WHIT Bus (flat front, rear engine)
8888 WHIT Other (truck)
8889 WHIT Unknown (truck)
8890 WHIT COE entry position unknown (medium/heavy truck)
8897 WHIT Other Vehicle

95 Other (truck or bus) (--------)

9501 -------- Autocar
9502 -------- Auto-Union-DKW
9503 -------- Divco
9504 -------- Western Star
9578 -------- Other (SUV/light truck)
9588 -------- Other (truck)

98 Other Make (--------)

9800 -------- Other Unknown
9897 -------- Other Vehicle
9899 -------- Other Unknown auto

99 Unknown Make (--------)

9900 -------- Unknown (automobile/motored cycle/ light truck/ truck)
9969 -------- Unknown (motored cycle)
9979 -------- Unknown (SUV/light truck
9989 -------- Unknown (truck)
9997 -------- Unknown (e.g., snowmobile/ go-cart)
9999 -------- Unknown (automobile)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1982 to 1986

The make data is concatenated with the model data to form the make-model variable. The first two digits identify the make the next two digits identify the model. If one needs to select cars based on make and model the variable of choice is VINA_MOD rather than MAK_MOD.

Variable = MAK_MOD

Element =

01 American Motors * (AMER)

* NOTE: Alliance/Encore (including L, DL and Limited) is coded under Renault (46)

0101 AMER Rambler/American
0102 AMER Rebel/Matador
0103 AMER Ambassador
0104 AMER Pacer
0105 AMER AMX
0106 AMER Javelin
0107 AMER Hornet/Concord
0108 AMER Spirit/Gremlin
0109 AMER Eagle
0110 AMER SX4/Kammback
0172 AMER Espace (minivan)
0198 AMER Other (automobile)
0199 AMER Unknown (automobile)

02 Jeep* (AMER)

* Note that Jeep DJ-Series are coded under Make 03, Model 75.

0201 AMER CJ-2/CJ-3/CJ-4
0202 AMER CJ-5/CJ-6/CJ-7/CJ-8
0271 AMER Cherokee
0273 AMER Pickup
0276 AMER Wagoneer
0277 AMER Comanche
0278 AMER Other (SUV/light truck)
0279 AMER Unknown (SUV/light truck)

02 Jeep* (AMER)

* Note that Jeep DJ-Series are coded under Make 03, Model 75.

0298 AMER Other (automobile)
0299 AMER Unknown (automobile)
0200 AMER Unknown (**JEEP**)

03 AM General (AMGN)

0301 AMGN Dispatcher
0375 AMGN Dispatcher DJ-Series
0387 AMGN Bus (rear engine)
0388 AMGN Other (truck)
0389 AMGN Unknown (truck)
0397 AMGN Other Vehicle
0398 AMGN Other (automobile)
0399 AMGN Unknown (automobile)
0300 AMGN Unknown (**AM GENERAL**)

06 Chrysler (CHRY)

0607 CHRY LeBaron
0609 CHRY Cordoba
0610 CHRY Newport/New Yorker
0614 CHRY E-Class
0615 CHRY Laser
0616 CHRY LeBaron GTS
0631 CHRY Maserati

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1982 to 1986

06 Chrysler (Cont.) (CHRY)

0698 CHRY Other (automobile)
0699 CHRY Unknown (automobile)

07 Dodge (DODG)

0701 DODG Dart
0702 DODG Coronet/Charger/Magnum
0703 DODG Polara/Monaco
0704 DODG Royal Monaco
0705 DODG Challenger
0706 DODG Aspen
0707 DODG Diplomat
0708 DODG Omni
0709 DODG Mirada
0710 DODG St. Regis
0711 DODG Aries (K)
0712 DODG 400
0713 DODG RAMPAGE
0714 DODG 600
0715 DODG Daytona
0716 DODG Lancer
0717 DODG Shadow
0732 DODG Arrow
0733 DODG Challenger - Import
0734 DODG Colt
0735 DODG Conquest
0743 DODG Colt pickup, Vista Van
0771 DODG Ramcharger
0772 DODG Caravan
0773 DODG D, W-Series Pickup
0774 DODG Van
0777 DODG Dakota/D50
0778 DODG Other (SUV/light truck)
0779 DODG Unknown (SUV/light truck)
0781 DODG CBE (medium/heavy truck)

07 Dodge (Cont.) (DODG)

0782 DODG COE low-entry (medium/heavy truck)
0783 DODG COE high-entry (medium/heavy truck)
0784 DODG Unknown engine location (medium/heavy truck)
0785 DODG Medium Bus (not van-based)
0788 DODG Other (truck)
0789 DODG Unknown (truck)
0790 DODG COE, entry position unknown (medium/heavy truck)
0797 DODG Other Vehicle
0798 DODG Other (automobile)
0799 DODG Unknown (automobile)
0700 DODG Unknown (**DODGE**)

08 Imperial (CHRY)

0810 CHRY Imperial
0897 CHRY Other Vehicle
0898 CHRY Other (automobile)
0899 CHRY Unknown (automobile)

09 Plymouth (PLYM)

0901 PLYM Valiant/Duster/Scamp
0902 PLYM Satellite/Belvedere
0903 PLYM Fury
0904 PLYM Gran Fury
0905 PLYM Barracuda
0906 PLYM Volare
0907 PLYM Caravelle
0908 PLYM Horizon
0911 PLYM Reliant (K)
0913 PLYM Scamp
0917 PLYM Sundance

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

09 Plymouth (Cont.) (PLYM)

0931 PLYM Cricket
0932 PLYM Arrow
0933 PLYM Sapporo (import)
0934 PLYM Champ/Colt (import)
0935 PLYM Conquest
0971 PLYM Trailduster
0972 PLYM Voyager
0974 PLYM Van (Voyager)
0977 PLYM Arrow pickup
0978 PLYM Other (SUV/light truck)
0979 PLYM Unknown (SUV/light truck)
0997 PLYM Other Vehicle
0998 PLYM Other (automobile)
0999 PLYM Unknown (automobile)
0900 PLYM Unknown (**PLYMOUTH**)

12 Ford (FORD)

1201 FORD Falcon
1202 FORD Fairlane
1203 FORD Mustang/Mustang II
1204 FORD Thunderbird
1205 FORD LTD II
1206 FORD LTD/Galaxy/Torino
1207 FORD Ranchero
1208 FORD Maverick
1209 FORD Pinto
1210 FORD Torino/Gran Torino
1211 FORD Granada
1212 FORD Fairmont
1213 FORD Escort
1214 FORD EXP
1215 FORD Tempo
1216 FORD Crown Victoria
1217 FORD Taurus
1231 FORD English Ford

12 Ford (Cont.) (FORD)

1232 FORD Fiesta
1233 FORD Laser
1270 FORD Bronco II
1271 FORD Bronco
1272 FORD Aerostar
1273 FORD F-Series pickup
1274 FORD Van
1275 FORD Van Derivative
1277 FORD Ranger
1278 FORD Other (SUV/light truck)
1279 FORD Unknown (SUV/light truck)
1281 FORD CBE (medium/heavy truck)
1282 FORD COE low-entry (medium/heavy truck)
1283 FORD COE high-entry (medium/heavy truck)
1284 FORD Unknown engine location (medium/heavy truck)
1285 FORD Medium Bus
1288 FORD Other (truck)
1289 FORD Unknown (truck)
1290 FORD COE, entry position unknown
1297 FORD Other Vehicle
1298 FORD Other (automobile)
1299 FORD Unknown (automobile)
1200 FORD Unknown (**FORD**)

13 Lincoln (LINC)

1301 LINC Lincoln Continental
1302 LINC Mark
1311 LINC Versailles
1397 LINC Other Vehicle
1398 LINC Other (automobile)
1399 LINC Unknown (**LINCOLN**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1982 to 1986

14 Mercury (MERC)

1402 MERC Cyclone
1403 MERC Capri-Domestic
1404 MERC Cougar
1405 MERC Cougar XR7
1406 MERC Marquis/Monterey
1408 MERC Comet
1409 MERC Bobcat
1410 MERC Montego
1411 MERC Montego
1412 MERC Zephyr
1413 MERC Lynx
1414 MERC LN7
1415 MERC Topaz
1416 MERC Grand Marquis
1417 MERC Sable
1431 MERC Capri - Import
1433 MERC Pantera
1434 MERC Merkur
1435 MERC Scorpio
1497 MERC Other Vehicle
1498 MERC Other (automobile
1499 MERC Unknown (automobile)

18 Buick (BUIC)

1801 BUIC Regal/Century/Special
1802 BUIC LeSabre/Wildcat/Centurion
1803 BUIC Electra, Electra 225
1805 BUIC Riviera
1808 BUIC Apollo
1810 BUIC Regal
1812 BUIC Skyhawk
1815 BUIC Skylark
1816 BUIC Skylark J/T
1817 BUIC Centruy A/T
1818 BUIC Somerset

18 Buick (Cont.) (BUIC)

1831 BUIC Opel Kadette
1832 BUIC Opel Manta/1900
1833 BUIC Opel GT
1834 BUIC Opel Isuzu
1397 BUIC Other Vehicle
1898 BUIC Other (automobile)
1899 BUIC Unknown (automobile)

19 Cadillac (CADI)

1903 CADI DeVille/Brougham
1904 CADI Limousine
1905 CADI Eldorado
1906 CADI Commercial Series
1909 CADI Allante
1914 CADI Seville
1916 CADI Cimarron
1997 CADI Other Vehicle
1998 CADI Other (automobile)
1999 CADI Unknown (automobile)

20 Chevrolet (CHEV)

2001 CHEV Malibu/Chevelle
2002 CHEV Caprice/Impala
2004 CHEV Corvette
2006 CHEV Corvair
2007 CHEV El Camino
2008 CHEV Nova
2009 CHEV Camaro
2010 CHEV Monte Carlo
2011 CHEV Vega
2012 CHEV Monza
2013 CHEV Chevette
2015 CHEV Citation
2016 CHEV Cavalier

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

20 Chevrolet (Cont.) (CHEV)

2017 CHEV Celebrity
2019 CHEV Baretta/Corsica
2031 CHEV Spectrum (Isuzu-made)
2032 CHEV Nova (Toyota)
2033 CHEV Sprint
2070 CHEV Blazer S-10
2071 CHEV Blazer
2072 CHEV Astrovan
2073 CHEV C, K-Series pickup
2074 CHEV G-Series Van
2075 CHEV Van Derivatives
2078 CHEV Other (SUV/light truck)
2079 CHEV Unknown (SUV/light truck)
2081 CHEV CBE (medium/heavy truck)
2082 CHEV COE low-entry (medium/heavy truck)
2083 CHEV COE high-entry (medium/heavy truck)
2084 CHEV Unknown engine location (medium/heavy truck)
2085 CHEV BUS
2088 CHEV Other (truck)
2089 CHEV Unknown (truck)
2090 CHEV COE, entry position unknown
2097 CHEV Other Vehicle
2098 CHEV Other (automobile
2099 CHEV Unknown (automobile)
2000 CHEV Unknown (**CHEVROLET**)

21 Oldsmobile (OLDS)

2101 OLDS Cutclass
2102 OLDS Delta 88
2103 OLDS Ninety-Eight
2105 OLDS Toronado
2106 OLDS Commercial Series

21 Oldsmobile (Cont.) (OLDS)

2112 OLDS Starfire
2115 OLDS Omega
2116 OLDS Firenza
2117 OLDS Ciera
2118 OLDS Calais
2197 OLDS Other Vehicle
2198 OLDS Other (automobile)
2199 OLDS Unknown (automobile)

22 Pontiac (PONT)

2201 PONT LeMans/Tempest
2202 PONT Bonneville/Cataline/Parisienne
2205 PONT Fiero
2208 PONT Ventura
2209 PONT Firebird/Trans Am
2210 PONT Grand Prix
2211 PONT Astre
2212 PONT Sunbird
2213 PONT T1000/1000
2215 PONT Phoenix
2216 PONT J-2000
2217 PONT 6000
2218 PONT Grand AM
2297 PONT Other Vehicle
2298 PONT Other (automobile)
2299 PONT Unknown (automobile)

23 GMC (GMC)

2307 GMC Caballero/Sprint
2370 GMC Jimmy S-15
2371 GMC Jimmy (full-size truck based)
2372 GMC Safari (minivan)
2373 GMC C, K-Series pickup
2374 GMC G Van/Vandura, Rally Van

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

23 GMC (Cont.) (GMC)

2375 GMC Van Derivatives
2376 GMC Suburban
2277 GMC S15
2378 GMC Other (SUV/light truck)
2379 GMC Unknown (SUV/light truck)
2381 GMC CBE (medium/heavy truck)
2382 GMC COE low-entry (medium/heavy truck)
2383 GMC COE high-entry (medium/heavy truck)
2384 GMC Unknown engine location (medium/heavy truck)
2385 GMC BUS
2388 GMC Other (truck)
2389 GMC Unknown (truck)
2390 GMC COE, entry position unknown (medium/heavy truck)
2397 GMC Other Vehicle
2398 GMC Other (automobile)
2399 GMC Unknown (automobile)
2300 GMC Unknown (**GMC**)

29 Other Domestic (--------)

2901 -------- Studebaker/Avanti
2902 -------- Checker
2998 -------- Other (automobile)

30 Volkswagen (VOLK)

3031 VOLK Karmann Ghia
3032 VOLK Beetle
3033 VOLK Super Beetle
3034 VOLK 411/412
3035 VOLK Squareback/Fastback
3036 VOLK Rabbit

30 Volkswagen (Cont.) (VOLK)

3037 VOLK Dasher
3038 VOLK Scirocco
3039 VOLK The Thing
3040 VOLK Jetta
3041 VOLK Quantum
3042 VOLK Golf
3072 VOLK Rabbit pickup
3074 VOLK Van/Vanagon/Camper
3078 VOLK Other (SUV/light truck)
3079 VOLK Unknown (SUV/light truck)
3097 VOLK Other Vehicle
3098 VOLK Other (automobile)
3099 VOLK Unknown (automobile)
3000 VOLK Unknown (**VOLKSWAGEN**)

31 Alfa Romeo (ALFA)

3131 ALFA Spider
3132 ALFA Sports Sedan
3133 ALFA Sprint Veloce
3134 ALFA GTV-6
3197 ALFA Other Vehicle
3198 ALFA Other (automobile)
3199 ALFA Unknown (automobile)

32 Audi (AUDI)

3231 AUDI Super 90
3232 AUDI 100
3233 AUDI Fox
3234 AUDI 4000
3235 AUDI 5000
3236 AUDI Quattro
3297 AUDI Other Vehicle
3298 AUDI Other (automobile)
3299 AUDI Unknown (automobile)

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

33 Austin/Austin Healey (AUST)

3331 AUST Marina
3332 AUST America
3333 AUST Healey Sprite
3334 AUST Healey 3000
3335 AUST Mini
3397 AUST Other Vehicle
3398 AUST Other (automobile)
3399 AUST Unknown (automobile)

34 BMW (BMW)

3431 BMW 1600, 2002
3432 BMW Coupe
3433 BMW Bavaria Sedan
3434 BMW 630, 633
3435 BMW 318i, 320i, 325E
3436 BMW 524i, 528i, 530i, 533i
3437 BMW 733i
3461 BMW 0-50cc
3462 BMW 51-124cc
3463 BMW 125-349cc
3464 BMW 350-449cc
3465 BMW 450-749cc
3466 BMW 750cc or over
3469 BMW Unknown (cc)
3497 BMW Other Vehicle
3498 BMW Other (automobile)
3499 BMW Unknown automobile)
3400 BMW Unknown (**BMW**)

35 Nissan/Datsun (NISS)

3531 NISS F-10
3532 NISS 200 SX
3533 NISS B210/210/1200
3534 NISS 240/260/280/300

35 Nissan/Datsun (Cont.) (NISS)

3535 NISS 310
3536 NISS 510
3537 NISS 610
3538 NISS 710
3539 NISS 810 Maxima
3540 NISS Roadster (SPL 311/SRL 341)
3541 NISS PL 411/RL 411
3542 NISS Stanza
3543 NISS Sentra
3544 NISS Pulsar
3570 NISS MPV
3572 NISS Pickup
3578 NISS Other (SUV/light truck)
3579 NISS Unknown suv/light truck)
3583 NISS COE (large truck)
3597 NISS Other Vehicle
3598 NISS Other (automobile)
3599 NISS Unknown (automobile)
3500 NISS Unknown (**DATSUN**)

36 Fiat (FIAT)

3631 FIAT 124 (Coupe/Sedan)
3632 FIAT 124 Spider
3633 FIAT Brava/131
3634 FIAT 850 (Coupe & Spyder)
3635 FIAT 128
3636 FIAT X-1/9
3637 FIAT Strada
3697 FIAT Other Vehicle
3698 FIAT Other (automobile)
3699 FIAT Unknown (automobile)

37 Honda (HOND

3731 HOND Civic

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

37 Honda (Cont.) (HOND

3732 HOND Accord
3733 HOND Prelude
3734 HOND 600
3735 HOND Civic-Crx
3736 HOND Acura
3761 HOND 0-50cc
3762 HOND 51-124cc
3763 HOND 125-349cc
3764 HOND 350-449cc
3765 HOND 450-749cc
3766 HOND 750cc or over
3769 HOND Unknown (cc)
3797 HOND Other Vehicle
3798 HOND Other (automobile)
3799 HOND Unknown (automobile)
3700 HOND Unknown (**HONDA**)

38 Isuzu (ISU)

3831 ISU I-Mark
3832 ISU Impulse
3833 ISU Aska
3870 ISU Trooper II
3877 ISU P'up (Rodeo pickup)
3878 ISU Other (SUV/light truck)
3879 ISU Unknown (SUV/light truck)
3897 ISU Other Vehicle)
3898 ISU Other (automobile)
3899 ISU Unknown (automobile)
3800 ISU Unknown (**ISUZU**)

39 Jaguar (JAGU)

3931 JAGU XJ-S Coupe
3932 JAGU XJ6/XJ12 Sedan/Coupe
3933 JAGU XK-E

39 Jaguar (Cont.) (JAGU)

3997 JAGU Other Vehicle
3998 JAGU Other (automobile)
3999 JAGU Unknown (automobile)

40 Lancia (LNCI)

4031 LNCI Beta Sedan/HPE
4032 LNCI Beta Coupe/Zagato
4033 LNCI Scorpion
4097 LNCI Other Vehicle
4098 LNCI Other (automobile)
4099 LNCI Unknown (automobile)

41 Mazda (MAZD)

4131 MAZD RX2
4132 MAZD RX3
4133 MAZD RX4
4134 MAZD RX7
4135 MAZD GLC/323
4136 MAZD Cosmo
4137 MAZD 626
4138 MAZD 808
4139 MAZD Mizer
4140 MAZD R-100
4141 MAZD 618/616
4142 MAZD 1800
4143 MAZD 929
4172 MAZD Pickup
4178 MAZD Other (SUV/light truck)
4179 MAZD Unknown (SUV/light truck)
4197 MAZD Other Vehicle
4198 MAZD Other (automobile)
4199 MAZD Unknown (automobile)
4100 MAZD Unknown (**MAZDA**)

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

42 Mercedes-Benz (MERZ)

4231 MERZ 200/220/230/240/250/280/300 (Sedan and 5 passenger Coupe 'C' only)
4232 MERZ 230 SL/280 SL (2 Passenger)
4233 MERZ 350 SL/450 SL/380 SL/560 SL
4234 MERZ 350 SLC/450 SLC/380 SLC
4235 MERZ 300 SEL/280 SEL
4236 MERZ 450 SEL/380 SEL/500 SEL/500 SEC/420 SEL/560 SEL/560 SEC
4237 MERZ 380 SE/450 SE
4238 MERZ 600/6.9 SEDAN
4239 MERZ 190
4275 MERZ Van Derivative
4281 MERZ CBE (medium/heavy truck)
4282 MERZ COE low entry (medium/heavy truck)
4283 MERZ COE high entry (medium/heavy truck)
4284 MERZ Unknown engine location (medium/heavy truck)
4285 MERZ Medium Bus
4288 MERZ Other (truck)
4289 MERZ Unknown (truck)
4290 MERZ COE, entry position unknown (medium/heavy truck)
4297 MERZ Other Vehicle
4298 MERZ Other (automobile)
4299 MERZ Unknown (automobile)
4200 MERZ Unknown (**MERCEDES-BENZ**)

43 MG (MG)

4331 MG MG Midget
4332 MG MGB
4333 MG MGB GT

43 MG (Cont.) (MG)

4334 MG MGA
4335 MG TA/TC/TD/TF
4336 MG MGC
4397 MG Other Vehicle
4398 MG Other (automobile)
4399 MG Unknown (automobile)

44 Peugeot (PEUG)

4431 PEUG 304
4432 PEUG 403
4433 PEUG 404
4434 PEUG 505/504
4435 PEUG 604
4461 PEUG 0-50cc
4462 PEUG 51-124cc
4469 PEUG Unknown (cc)
4497 PEUG Other Vehicle
4498 PEUG Other (automobile)
4499 PEUG Unknown (automobile)

45 Porsche (PORS)

4531 PORS 911
4532 PORS 912/912E
4533 PORS 914
4534 PORS 924
4535 PORS 928
4536 PORS 930/Turbo
4537 PORS 944
4538 PORS 959
4597 PORS Other Vehicle
4598 PORS Other (automobile)
4599 PORS Unknown (automobile)

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

46 Renault (RENA)

4631 RENA LeCar
4632 RENA 10/Dauphine/Caravelle/R-8
4633 RENA 12
4634 RENA 15
4635 RENA 16
4636 RENA 17
4637 RENA R18i
4638 RENA Fuego
4639 RENA Alliance
4640 RENA Encore
4641 RENA Alpine
4697 RENA Other Vehicle
4698 RENA Other (automobile)
4699 RENA Unknown (automobile)

47 Saab (SAA)

4731 SAA 99/99E/900/9000
4732 SAA Sonnet
4733 SAA 95/96/97
4797 SAA Other Vehicle
4798 SAA Other (automobile)
4799 SAA Unknown (automobile)

48 Subaru (SUBA)

4831 SUBA FE/GF/DL/STD/GL/G/GLF
4832 SUBA Star
4833 SUBA 360
4843 SUBA Brat
4878 SUBA Other (SUV/light truck)
4879 SUBA Unknown (SUV/light truck)
4897 SUBA Other Vehicle
4898 SUBA Other (automobile)
4899 SUBA Unknown (automobile)
4800 SUBA Unknown (**SUBARU**)

49 Toyota (TOYT)

4931 TOYT Corona
4932 TOYT Corolla
4933 TOYT Celica
4934 TOYT Celica Supra
4935 TOYT Cressida
4936 TOYT Crown
4937 TOYT Carina
4938 TOYT Tercel
4939 TOYT Starlet
4940 TOYT Camry
4941 TOYT MR2
4970 TOYT 4-Runner
4971 TOYT Landcruiser
4972 TOYT Mini-Van
4974 TOYT Chinook
4977 TOYT Pickup
4978 TOYT Other (SUV/light truck)
4779 TOYT Unknown (SUV/light truck)
4798 TOYT Other Vehicle
4998 TOYT Other (automobile)
4999 TOYT Unknown (automobile)
4900 TOYT Unknown (**TOYOTA**)

50 Triumph (TRIU)

5001 TRIU Spitfire
5002 TRIU GT6
5003 TRIU TR4
5004 TRIU TR6
5005 TRIU TR7/TR8
5036 TRIU Herald
5037 TRIU Stag
5061 TRIU 0-50cc
5062 TRIU 51-124cc
5063 TRIU 125-349cc

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

50 Triumph (Cont.) (TRIU)

5064 TRIU 350-449cc
5065 TRIU 450-749cc
5066 TRIU 750cc or more
5069 TRIU Unknown (cc)
5097 TRIU Other Vehicle
5098 TRIU Other (automobile)
5099 TRIU Unknown (automobile)
5000 TRIU Unknown (**TRIUMPH**)

51 Volvo (VOLV)

5131 VOLV 122
5132 VOLV 142/144/145
5133 VOLV 164
5134 VOLV 242/244/245
5135 VOLV 262/264/265
5136 VOLV 1800
5137 VOLV P-544
5138 VOLV 760/780 GLE
5139 VOLV 740 GLE
5181 VOLV CBE (medium/heavy truck)
5182 VOLV COE low-entry (medium/heavy truck)
5183 VOLV COE high-entry (medium/heavy truck)
5184 VOLV Unknown engine location (medium/heavy truck)
5185 VOLV Medium Bus
5188 VOLV Other (truck)
5189 VOLV Unknown (truck)
5190 VOLV COE, entry position unknown (medium/heavy truck)
5197 VOLV Other Vehicle
5198 VOLV Other (automobile)
5199 VOLV Unknown (automobile)
5100 VOLV Unknown (**VOLVO**)

52 Mitsubishi (MITS)

5231 MITS Starion
5232 MITS Tredia
5233 MITS Cordia
5234 MITS Galant
5235 MITS Mirage
5270 MITS Montero
5272 MITS Mini-Van
5277 MITS Pickup
5298 MITS Other (automobile)
5299 MITS Unknown (automobile)
5200 MITS Unknown (**MITSUBISHI**)

53 Suzuki (SUZI)

5331 SUZI SA 310
5361 SUZI 0-50cc
5362 SUZI 51-124cc
5363 SUZI 125-349cc
5364 SUZI 350-449cc
5365 SUZI 450-749cc
5366 SUZI 750cc or over
5369 SUZI Unknown (cc)
5370 SUZI SJ-410
5397 SUZI Other Vehicle
5300 SUZI Unknown (**SUZUKI**)

59 Other Import (--------)

5931 -------- Aston Martin
5932 -------- Bricklin
5933 -------- Citroen
5934 -------- Delorean
5935 -------- Ferrari
5936 -------- Hillman
5937 -------- Jensen
5938 -------- Lamborghini

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

59 Other Import (Cont.) (--------)

5939 -------- Lotus
5940 -------- Maserati
5941 -------- Morris
5942 -------- Rolls Royce/Bentley
5943 -------- Rover
5944 -------- Simca
5945 -------- Sunbeam
5946 -------- TVR
5947 -------- Daihatsu (Charade)
5948 -------- Desta (APV-utility)
5949 -------- Reliant (British)
5950 -------- Yugo
5951 -------- Hyundai
5998 -------- Other (automobile) (e.g., Morgan, Singer)

60 BSA (BSA)

6061 BSA 0-50cc
6062 BSA 51-124cc
6063 BSA 125-349cc
6064 BSA 350-449cc
6065 BSA 450-749cc
6066 BSA 750cc and over
6069 BSA Unknown (cc)
6097 BSA Other Vehicle

61 Ducati (DUCA)

6161 DUCA 0-50cc
6162 DUCA 51-124cc
6163 DUCA I 125-349cc
6164 DUCA 350-449cc
6165 DUCA I 450-749cc
6166 DUCA 750cc and over

61 Ducati (Cont.) (DUCA)

6169 DUCA Unknown (cc)
6197 DUCA Other Vehicle

62 Harley-Davidson (HD)

6261 HD 0-50cc
6262 HD 51-124cc
6263 HD 125-349cc
6264 HD 350-449cc
6265 HD 450-749cc
6266 HD 750cc and over
6269 HD Unknown (cc)
6297 HD Other Vehicle

63 Kawasaki (KAWK)

6361 KAWK 0-50cc
6362 KAWK 51-124cc
6363 KAWK 125-349cc
6364 KAWK 350-449cc
6365 KAWK 450-749cc
6366 KAWK 750cc and over
6369 KAWK Unknown (cc)
6397 KAWK Other Vehicle

64 Moto-Guzzi (MOGU)

6461 MOGU 0-50cc
6462 MOGU 51-124cc
6463 MOGU 125-349cc
6464 MOGU 350-449cc
6465 MOGU 450-749cc
6466 MOGU 750cc and over
6469 MOGU Other (cc)
6497 MOGU Other Vehicle

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

65 NORTON (NORT)

6561 NORT 0-50cc
6562 NORT 51-124cc
6563 NORT 125-349cc
6564 NORT 350-449cc
6565 NORT 450-749cc
6566 NORT 750cc and over
6569 NORT Unknown (cc)
6597 NORT Other Vehicle

67 Yamaha (YAMA)

6761 YAMA 0-50cc
6762 YAMA 51-124cc
6763 YAMA 125-349cc
6764 YAMA 350-449cc
6765 YAMA 450-749cc
6766 YAMA 750cc and over
6769 YAMA Unknown (cc)
6797 YAMA Other Vehicle

69 Other Motored Cycle (--------)

6961 -------- 0-50cc
6962 -------- 51-124cc
6963 -------- 125-349cc
6964 -------- 350-449cc
6965 -------- 450-749cc
6966 -------- 750cc and over
6969 -------- Other (cc)
6997 -------- Other Vehicle

70 Mo-Ped (--------)

7061 -------- 0-50cc
7062 -------- 51-124cc
7069 -------- Unknown (cc)

80 Brockway (BROC)

8080 BROC Motorhome
8081 BROC CBE (medium/heavy truck)
8082 BROC COE low-entry (medium/heavy truck)
8083 BROC COE high-entry (medium/heavy truck)
8084 BROC Unknown engine location (medium/heavy truck)
8085 BROC Bus
8086 BROC Bus (flat front, front engine)
8087 BROC Bus (flat front, rear engine)
8088 BROC Other (truck)
8089 BROC Unknown (truck)
8090 BROC COE, entry position unknown (medium/heavy truck)
8097 BROC Other Vehicle

81 Diamond Reo or Reo (DIAR)

8180 DIAR Motorhome
8181 DIAR CBE (medium/heavy truck)
8182 DIAR COE low-entry (medium/heavy truck)
8183 DIAR COE high-entry (medium/heavy truck)
8184 DIAR Unknown engine location (medium/heavy truck)
8185 DIAR Bus
8186 DIAR Bus (flat front, front engine)
8187 DIAR Bus (flat front, rear engine)
8188 DIAR Other (truck)
8189 DIAR Unknown (truck)
8390 DIAR COE, entry position unknown (medium/heavy truck)
8197 DIAR Other Vehicle

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

82 Freightliner or White Frelightliner (FRHT)

8280 FRHT Motorhome
8281 FRHT CBE (medium/heavy truck)
8282 FRHT COE low-entry (medium/heavy truck)
8283 FRHT COE high-entry (medium/heavy truck)
8284 FRHT Unknown engine location (medium/heavy truck)
8285 FRHT Bus
8286 FRHT Bus (flat front, front engine)
8287 FRHT Bus (flat front, rear engine)
8288 FRHT Other (truck)
8289 FRHT Unknown (truck)
8290 FRHT COE, entry position unknown (medium/heavy truck)
8297 FRHT Other Vehicle

83 FWD (FWD)

8380 FWD Motorhome
8381 FWD CBE (medium/heavy truck)
8382 FWD COE low-entry (medium/heavy truck)
8383 FWD COE high-entry (medium/heavy truck)
8384 FWD Unknown engine location (medium/heavy truck)
8385 FWD Bus
8386 FWD Bus (flat front, front engine)
8387 FWD Bus (flat front, rear engine)
8388 FWD Other (truck)
8389 FWD Unknown (truck)
8390 COE, entry position unknown (medium/heavy truck)
8397 FWD Other Vehicle

84 International Harvester (INTL)-(NAVI)

8471 INTL Scout
8473 INTL Pickup/Panel
8475 INTL Multistop
8476 INTL Travellall
8478 INTL Other (SUV/light truck)
8479 INTL Unknown (SUV/light truck)
8480 INTL Motorhome
8481 INTL CBE (medium/heavy truck)
8482 INTL COE low-entry (medium/heavy truck)
8483 INTL COE high-entry (medium/heavy truck)
8484 INTL Unknown engine location (medium/heavy truck)
8485 INTL Bus (Conventional)
8486 INTL Bus (flat front, front engine)
8487 INTL Bus (flat front, rear engine)
8488 INTL Other (truck)
8489 INTL Unknown (truck)
8490 INTL COE, entry position unknown (medium/heavy truck)
8497 INTL Other Vehicle
8400 INTL Unknown (INTERNATIONAL HARVESTER)

85 Kenworth (KW)

8580 KW Motorhome
8581 KW CBE (medium/heavy truck)
8582 KW COE low-entry (medium/heavy truck)
8583 KW COE high-entry (medium/heavy truck)
8584 KW Unknown engine location (medium/heavy truck)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1982 to 1986

85 Kenworth (Cont.) (KW)

8585 KW Bus
8586 KW Bus (flat front, front engine)
8587 KW Bus (flat front, rear engine)
8588 KW Other (truck)
8589 KW Unknown (truck)
8590 KW COE, entry position unknown (medium/heavy truck)
8597 KW Other Vehicle

86 Mack (MACK)

8680 MACK Motorhome
8681 MACK CBE (medium/heavy truck)
8682 MACK COE low-entry (medium/heavy truck)
8683 MACK COE high-entry (medium/heavy truck)
8684 MACK Unknown engine location (medium/heavy truck)
8685 MACK Bus
8686 MACK Bus (flat front, front engine)
8687 MACK Bus (flat front, rear engine)
8688 MACK Other (truck)
8689 MACK Unknown (truck)
8690 MACK COE, entry position unknown (medium/heavy truck)
8697 MACK Other Vehicle

87 Peterbilt (PTRB)

8780 PTRB Motorhome
8781 PTRB CBE (medium/heavy truck)
8782 PTRB COE low-entry (medium/heavy truck)
8783 PTRB COE high-entry (medium/heavy truck)
8784 PTRB Unknown engine location (medium/heavy truck)
8785 PTRB Bus
8786 PTRB Bus (flat front, front engine)
8787 PTRB Bus (flat front, rear engine)
8788 PTRB Other (truck)
8789 PTRB Unknown (truck)
8790 PTRB COE, entry position unknown (medium/heavy truck)
8797 PTRB Other Vehicle

87 Peterbilt (Cont.) (PTRB)

88 White (WHIT)

8880 WHIT Motorhome
8881 WHIT CBE (medium/heavy truck)
8882 WHIT COE low-entry (medium/heavy truck)
8883 WHIT COE high-entry (medium/heavy truck)
8884 WHIT Unknown engine location (medium/heavy truck)
8885 WHIT Bus
8886 WHIT Bus (flat front, front engine)
8887 WHIT Bus (flat front, rear engine)
8888 WHIT Other (truck)
8889 WHIT Unknown (truck)
8890 WHIT COE, entry position unknown (medium/heavy truck)
8897 WHIT Other Vehicle

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1982 to 1986

95 Other (Truck or Bus) (--------)

9501 Autocar
9502 Auto-Union-DKW
9503 Divco
9504 Western Star
9578 Other (SUV/light truck)
9588 Other (truck)
9597 Other Vehicle (bus)

98 Other Make (--------)

9800 -------- Unknown
9897 -------- Other Vehicle
9899 -------- Unknown (automobile)

99 Unknown Make (--------)

9900 -------- Unknown (as to automobile, motored cycle light truck, or truck)
9969 -------- Unknown (motored cycle)
9979 -------- Unknown (SUV/light truck)
9989 -------- Unknown (truck)
9999 -------- Unknown (automobile)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

The make data is concatenated with the model data to form the make-model variable. The first digit or two identifies the make, the last two digits identifies the model. The early years of data had different values but have been changed to the values listed here. If one needs to select cars based on make and model the variable of choice is VINA_MOD rather than MAK_MOD.

Variable = MAK_MOD

Values =

01 American Motors (AMER)

101 AMER Rambler/American
102 AMER Rebel/Matador
103 AMER Ambassador
104 AMER Pacer
105 AMER AMX
106 AMER Javelin
107 AMER Hornet/Concord
108 AMER Spirit/Gremlin
109 AMER Eagle
110 AMER SX4/Kammback
198 AMER Other (automobile)
199 AMER Unknown (automobile)

02 Jeep (AMER)

201 AMER CJ-2/CJ-3/CJ-4
202 AMER CJ-5/CJ-6/CJ-7/CJ-8
271 AMER Cherokee
273 AMER Pickup
276 AMER Wagoneer
278 AMER Other (SUV/light truck)
279 AMER Unknown (SUV/light truck)
298 AMER Other (automobile)
299 AMER Unknown (automobile)
200 AMER Unknown (**JEEP**)

03 AM General (AMGN)

301 AMGN Dispatcher
375 AMGN Dispatcher (DJ-Series)
387 AMGN Bus (rear engine)
388 AMGN Other (truck)
389 AMGN Unknown (truck)
398 AMGN Other (automobile)
399 AMGN Unknown (automobile)
300 AMGN Unknown (**AM GENERAL**)

06 Chrysler (CHRY)

607 CHRY LeBaron
609 CHRY Cordoba
610 CHRY Newport/NewYorker
698 CHRY Other (automobile)
699 CHRY Unknown (automobile)

07 Dodge (DODG)

701 DODG Dart
702 DODG Coronet/Charger/Magnum
703 DODG Polara/Monaco
704 DODG Royal Monaco
705 DODG Challenger
706 DODG Aspen

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

07 Dodge (DODG)

707 DODG Diplomat
708 DODG Omni
709 DODG Mirada
710 DODG St. Regis
711 DODG Aries
732 DODG Arrow
733 DODG Challenger - Import
734 DODG Colt
771 DODG Ramcharger
772 DODG D50/Colt Pickup
773 DODG D, W-Series Pickup
774 DODG Van
778 DODG Other (SUV/light truck)
779 DODG Unknown (SUV/light truck)
781 DODG CBE (medium/heavy truck)
782 DODG COE low-entry (medium/heavy truck)
783 DODG COE high-entry (medium/heavy truck)
784 DODG Unknown engine location (medium/heavy truck)
785 DODG Medium Bus (not van-based)
788 DODG Other (truck)
789 DODG Unknown (truck)
798 DODG Other (automobile)
799 DODG Other (automobile)
700 DODG Unknown (**DODGE**)

08 Imperial (CHRY)

810 CHRY Imperial
898 CHRY Other (automobile)
899 CHRY Unknown (automobile)

09 Plymouth (PLYM)

901 PLYM Valiant/Duster/Scamp
902 PLYM Satellite/Belvedere
903 PLYM Fury
904 PLYM Gran Fury
905 PLYM Barracuda
906 PLYM Volare
907 PLYM Caravelle
908 PLYM Horizon
911 PLYM Reliant
931 PLYM Cricket
932 PLYM Arrow
933 PLYM Sapporo
934 PLYM Champ
971 PLYM Trailduster
972 PLYM Arrow pickup
974 PLYM Van (Voyager)
978 PLYM Other (SUV/light truck)
979 PLYM Unknown (SUV/light truck)
998 PLYM Other (automobile)
999 PLYM Unknown (automobile)
900 PLYM Unknown (**PLYMOUTH**)

12 Ford (FORD)

1201 FORD Falcon
1202 FORD Fairlane
1203 FORD Mustang/Mustang II
1204 FORD Thunderbird
1205 FORD LTD II
1206 FORD LTD/Galaxy/Custom
1207 FORD Ranchero
1208 FORD Maverick
1209 FORD Pinto

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

12 Ford (Cont.) (FORD)

1210 FORD Torino/Gran Torino
1211 FORD Granada
1212 FORD Fairmont
1213 FORD Escort
1231 FORD English Ford
1232 FORD Fiesta
1233 FORD Pantera
1271 FORD Bronco
1272 FORD Courier Pickup
1273 FORD F-Series Pickup
1274 FORD Van
1275 FORD Van derivative
1278 FORD Other (SUV/light truck)
1279 FORD Unknown (SUV/light truck)
1281 FORD CBE (medium/heavy truck)
1282 FORD COE low-entry (medium/heavy truck)
1283 FORD COE high-entry (medium/heavy truck)
1284 FORD Unknown engine location (medium/heavy truck)
1285 FORD Medium Bus
1288 FORD Other (truck)
1289 FORD Unknown (truck)
1298 FORD Other (automobile)
1299 FORD Unknown (automobile)
1200 FORD Unknown (**FORD**)

13 Lincoln (LINC)

1301 LINC Continental
1302 LINC Mark
1311 LINC Versailles
1398 LINC Other (automobile)
1399 LINC Unknown (automobile)

14 Mercury (MERC)

1402 MERC Cyclone
1403 MERC Capri-Domestic
1404 MERC Cougar
1405 MERC Cougar XR7
1406 MERC Marquis/Monterey
1408 MERC Comet
1409 MERC Bobcat
1410 MERC Montego
1411 MERC Monarch
1412 MERC Zephyr
1413 MERC Lynx
1431 MERC Capri-Import
1498 MERC Other (automobile)
1499 MERC Unknown (automobile)

18 Buick (BUIC)

1801 BUIC Regal/Century/Special
1802 BUIC LeSabre/Wildcat/Centurion
1803 BUIC Electra, Electra 225
1805 BUIC Riviera
1808 BUIC Apollo
1812 BUIC Skyhawk
1815 BUIC Skylark
1831 BUIC Opel Kadette
1832 BUIC Opel Manta/1900
1833 BUIC Opel GT
1834 BUIC Opel Isuzu
1898 BUIC Other (automobile)
1899 BUIC Unknown (automobile)

19 Cadillac (CADI)

1903 CADI DeVille/Brougham
1904 CADI Limousine
1905 CADI Eldorado

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

19 Cadillac (Cont.) (CADI)

1906 CADI Commercial Series
1914 CADI Seville
1916 CADI Cimarron
1998 CADI Other (automobile)
1999 CADI Unknown (automobile)

20 Chevrolet (CHEV)

2001 CHEV Malibu/Chevelle
2002 CHEV Caprice/Impala
2004 CHEV Corvette
2006 CHEV Corvair
2007 CHEV El Camino
2008 CHEV Nova
2009 CHEV Camaro
2010 CHEV Monte Carlo
2011 CHEV Vega
2012 CHEV Monza
2013 CHEV Chevette
2015 CHEV Citation
2016 CHEV Cavalier
2071 CHEV Blazer
2072 CHEV LUV pickup
2073 CHEV C, K-Series pickup
2074 CHEV G-Series Van
2075 CHEV Van Derivatives
2076 CHEV Sururban
2078 CHEV Other (SUV/light truck)
2079 CHEV Unknown (SUV/light truck)
2081 CHEV CBE (medium/heavy truck)
2082 CHEV COE low-entry (medium/heavy truck)
2083 CHEV COE high-entry (medium/heavy truck)

20 Chevrolet (Cont.) (CHEV)

2084 CHEV Unknown engine location (medium/heavy truck)
2085 CHEV Bus
2088 CHEV Other (truck)
2089 CHEV Unknown (truck)
2098 CHEV Other (automobile)
2099 CHEV Unknown (automobile)
2000 CHEV Unknown (**CHEVROLET**)

21 Oldsmobile (OLDS)

2101 OLDS Cutlass
2102 OLDS Delta 88
2103 OLDS Ninety-Eight
2105 OLDS Toronado
2106 OLDS Commercial Series
2112 OLDS Starfire
2115 OLDS Omega
2198 OLDS Other (automobile)
2199 OLDS Unknown (automobile)

22 Pontiac (PONT)

2201 PONT LeMans/Tempest
2202 PONT Bonneville, Catalina
2208 PONT Ventura
2209 PONT Firebird/Trans Am
2210 PONT Grand Prix
2211 PONT Astra
2212 PONT Sunbird
2215 PONT Phoenix
2216 PONT J-2000
2298 PONT Other (automobile
2299 PONT Unknown (automobile)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

23 GMC (GMC)

2307 GMC Caballero/Sprint
2371 GMC Jimmy
2373 GMC C, K-Series Pickup
2374 GMC G Van/Vandura, Rally Van
2375 GMC Van Derivatives
2376 GMC Suburban
2378 GMC Other (SUV/light truck)
2379 GMC Unknown (SUV/light truck)
2381 GMC CBE (medium/heavy truck)
2382 GMC COE low-entry (medium/heavy truck)
2383 GMC COE high-entry (medium/heavy truck)
2384 GMC Unknown engine location (medium/heavy truck)
2385 GMC Bus
2388 GMC Other (truck)
2389 GMC Unknown (truck)
2398 GMC Other (automobile)
2399 GMC Unknown (automobile)
2300 GMC Unknown (**GMC**)

Other Domestic (--------)

2901 -------- Studebaker/Avanti
2902 -------- Checker
2998 -------- Other (automobile)

30 Volkswagen (VOLK)

3001 VOLK Karmann Ghia
3002 VOLK Beetle
3003 VOLK Super Beetle
3004 VOLK 411/412
3005 VOLK Squareback/Fastback
3006 VOLK Rabbit

30 Volkswagen (VOLK)

3007 VOLK Dasher
3008 VOLK Scirocco
3009 VOLK The Thing
3010 VOLK Jetta
3072 VOLK Rabbit pickup
3074 VOLK Van/Vanagon/Camper
3078 VOLK Other (SUV/light truck)
3079 VOLK Unknown (SUV/light truck)
3098 VOLK Other (automobile)
3099 VOLK Unknown (automobile)
3000 VOLK Unknown (**VOLKSWAGEN**)

31 Alfa Romeo (ALFA)

3101 ALFA Spider
3102 ALFA Sports Sedan
3103 ALFA Sprint Veloce
3198 ALFA Other (automobile
3199 ALFA Unknown (automobile)

32 Audi (AUDI)

3201 AUDI Super 90
3202 AUDI 100
3203 AUDI Fox
3204 AUDI 4000
3205 AUDI 5000
3298 AUDI Other (automobile)
3299 AUDI Unknown (automobile)

33 Austin/Austin Healey (AUST)

3301 AUST Marina
3302 AUST America
3303 AUST Healey Sprite
3304 AUST Healey 3000

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

33 Austin/Austin Healey (AUST)

3305 AUST Mini
3398 AUST Other (automobile)
3399 AUST Unknown (automobile)

34 BMW (BMW)

3401 BMW 1600, 2002
3402 BMW Coupe
3403 BMW Bavaria Sedan
3404 BMW 630, 633
3405 BMW 320i
3406 BMW 528i, 530i
3407 BMW 733i
3461 BMW 0-50 cc
3462 BMW 51-124 cc
3463 BMW 125-349 cc
3464 BMW 350-449 cc
3465 BMW 450-749 cc
3466 BMW 750 cc or over
3469 BMW Unknown (cc)
3498 BMW Other (automobile)
3499 BMW Unknown (automobile)
3400 BMW Unknown (**BMW**)

35 Datsun (DATS)

3501 DATS F-10
3502 DATS 200 SX
3503 DATS B210/210/1200
3504 DATS 240/260/280
3505 DATS 310
3506 DATS 510
3507 DATS 610
3508 DATS 710
3509 DATS 810
3510 DATS Roadster (SPL 311/SRL 311)

35 Datsun (Cont.) (DATS)

3511 DATS PL 411/RL 411
3572 DATS Pickup
3578 DATS Other (SUV/light truck)
3579 DATS Unknown (SUV/light truck)
3598 DATS Other (automobile)
3599 DATS Unknown (automobile)
3500 DATS Unknown (**DATSUN**)

36 Fiat (FIAT)

3601 FIAT 124 (Coupe/Sedan)
3602 FIAT 124 (Spider)
3603 FIAT Brava/131
3604 FIAT 850 (Coupe/Spyder)
3605 FIAT 128
3606 FIAT X-1/9
3607 FIAT Strada
3698 FIAT Other (automobile)
3699 FIAT Unknown (automobile)

37 Honda (HOND)

3701 HOND Civic
3702 HOND Accord
3703 HOND Prelude
3704 HOND 600
3761 HOND 0-50 cc
3762 HOND 51-124 cc
3763 HOND 125-349 cc
3764 HOND 350-449 cc
3765 HOND 450-749 cc
3766 HOND 750 cc or over
3769 HOND Unknown (cc)
3798 HOND Other (automobile)
3799 HOND Unknown (automobile)
3700 HOND Unknown (**HONDA**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

38 Isuzu (ISU)

3801 ISU Gemini
3872 ISU Rodeo (pickup)
3878 ISU Other (SUV/light truck)
3879 ISU Unknown (SUV/light truck)
3898 ISU Other (automobile)
3899 ISU Unknown (automobile)
3800 ISU Unknown (**ISUZU**)

39 Jaguar (JAGU)

3901 JAGU XJ-S Coupe
3902 JAGU XJ6/XJ12 Sedan/Coupe
3903 JAGU XK-E
3998 JAGU Other (automobile)
3999 JAGU Unknown (automobile)

40 Lancia (LNCI)

4001 LNCI Beta Sedan/HPE
4002 LNCI Beta Coupe/Zagato
4003 LNCI Scorpion
4098 LNCI Other (automobile)
4099 LNCI Unknown (automobile)

41 Mazda (MAZD)

4101 MAZD RX2
4102 MAZD RX3
4103 MAZD RX4
4104 MAZD RX7
4105 MAZD GLC
4106 MAZD Cosmo
4107 MAZD 626
4108 MAZD 808
4109 MAZD Mizer
4110 MAZD R-100

41 Mazda (MAZD)

4111 MAZD 618/616
4112 MAZD 1800
4172 MAZD Pickup
4178 MAZD Other (SUV/light truck)
4179 MAZD Unknown (SUV/light truck)
4198 MAZD Other (automobile)
4199 MAZD Unknown (automobile)
4100 MAZD Unknown (**MAZDA**)

42 Mercedes-Benz (MERZ)

4201 MERZ 200/220/230/240/250/280/300 (Sedan and 5-passenger Coupe “C” only)
4202 MERZ 230 SL/280 SL (2-passenger)
4203 MERZ 350 SL/450 SL/380 SL
4204 MERZ 350 SLC/450 SLC/380 SLC
4205 MERZ 300 SEL/280 SEL
4206 MERZ 450 SEL/380 SEL
4207 MERZ 450 SE
4208 MERZ 600/6.9 Sedan
4281 MERZ CBE (medium/heavy truck)
4282 MERZ COE low-entry (medium/heavy truck)
4283 MERZ COE high-entry (medium/heavy truck)
4284 MERZ Unknown engine location (medium/heavy truck)
4285 MERZ Medium Bus
4288 MERZ Other (truck)
4289 MERZ Unknown (truck)
4298 MERZ Other (automobile)
4299 MERZ Unknown (automobile)
4200 MERZ Unknown (**MERCEDES-BENZ**)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

43 MG (MG)

4301 MG MG Midget
4302 MG MGB
4303 MG MGB-GT
4304 MG MGA
4305 MG TA/TC/TD/TF
4306 MG MGC
4398 MG Other (automobile)
4399 MG Unknown (automobile)

44 Peugeot (PEUG)

4401 PEUG 304
4402 PEUG 403
4403 PEUG 404
4404 PEUG 505/504
4405 PEUG 604
4498 PEUG Other (automobile)
4499 PEUG Unknown (automobile)

45 Porsche (PORS)

4501 PORS 911
4502 PORS 912/912E
4503 PORS 914
4504 PORS 924
4505 PORS 928
4506 PORS 930/Turbo
4598 PORS Other (automobile)
4599 PORS Unknown (automobile)

46 Renault (RENA)

4601 RENA LeCar
4602 RENA 10/Dauphine/Caravelle/R-8
4603 RENA 12

46 Renault (Cont.) (RENA)

4604 RENA 15
4605 RENA 16
4606 RENA 17
4607 RENA Rl8i
4698 RENA Other (automobile)
4699 RENA Unknown (automobile)

47 Saab (SAA)

4701 SAA 99/99E/900
4702 SAA Sonnet
4703 SAA 95/96/97
4772 SAA Pickup
4774 SAA Chinook
4778 SAA Other (SUV/light truck)
4779 SAA Unknown (SUV/light truck)
4798 SAA Other (automobile)
4799 SAA Unknown (automobile)

48 Subaru (SUBA)

4801 SUBA FE/GF/DL/STD/GL/G/GLF
4802 SUBA Star
4803 SUBA 360
4872 SUBA Brat
4878 SUBA Other (SUV/light truck)
4879 SUBA Unknown (SUV/light truck)
4898 SUBA Other (automobile)
4899 SUBA Unknown (automobile)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

49 Toyota (Cont.) (TOYT)

4901 TOYT Corona
4902 TOYT Corolla
4903 TOYT Celica
4904 TOYT Celica Supra
4905 TOYT Cressida
4906 TOYT Crown
4907 TOYT Carina
4908 TOYT Tercel
4909 TOYT Starlet
4971 TOYT Land Cruiser
4998 TOYT Other (automobile)
4999 TOYT Unknown (automobile)
4900 TOYT Unknown (**TOYOTA**)

50 Triumph (TRIU)

5001 TRUI Spitfire
5002 TRUI GT6
5003 TRUI TR4
5004 TRUI TR6
5005 TRUI TR7/TR8
5006 TRUI Herald
5007 TRUI Stag
5061 TRUI 0-50 cc
5062 TRUI 51-124 cc
5063 TRUI 125-349 cc
5064 TRUI 350-449 cc
5065 TRUI 450-749 cc
5066 TRUI 750 cc or more
5069 TRUI Unknown (cc)
5098 TRUI Other (automobile)
5099 TRUI Unknown (automobile)
5000 TRUI Unknown (**TRIUMPH**)

51 Volvo (VOLV)

5101 VOLV 122

51 Volvo (Cont.) (VOLV)

5102 VOLV 142/144/145
5103 VOLV 164
5104 VOLV 242/244/245
5105 VOLV 262/264/265
5106 VOLV 1800
5107 VOLV P-544
5181 VOLV CBE (medium/heavy truck)
5182 VOLV COE low-entry (medium/heavy truck)
5183 VOLV COE high-entry (medium/heavy truck)
5184 VOLV Unknown engine location (medium/heavy truck)
5185 VOLV Medium Bus
5188 VOLV Other (truck)
5189 VOLV Unknown (truck)
5198 VOLV Other (automobile)
5199 VOLV Unknown (automobile)
5100 VOLV Unknown (**VOLVO**)

59 Other Import (--------)

5931 -------- Aston Martin
5932 -------- Bricklin
5933 -------- Citroen
5934 -------- DeLorean
5935 -------- Ferrari
5936 -------- Hillman
5937 -------- Jensen
5938 -------- Lamborghini
5939 -------- Lotus
5940 -------- Maserati
5941 -------- Morris
5942 -------- Rolls-Royce/Bentley
5943 -------- Rover
5944 -------- Simca
5945 -------- Sunbeam

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

59 Other Import (Cont.) (--------)

5946 -------- TVR
5998 -------- Other (automobile) (e.g., Morgan, Singer)

60 BSA (BSA)

6061 BSA 0-50 cc
6062 BSA 51-124 cc
6063 BSA 125-349 cc
6064 BSA 350-449 cc
6065 BSA 450-749 cc
6066 BSA 750 cc and over
6069 BSA Unknown (cc)

61 Ducati (DUCA)

6161 DUCA 0-50 cc
6162 DUCA 51-124 cc
6163 DUCA 125-349 cc
6164 DUCA 350-449 cc
6165 DUCA 450-749 cc
6166 DUCA 750 cc and over
6169 DUCA Unknown (cc)

62 Harley-Davidson (HD)

6261 HD 0-50 cc
6262 HD 51-124 cc
6263 HD 125-349 cc
6264 HD 350-449 cc
6265 HD 450-749 cc
6266 HD 750 cc and over
6269 HD Unknown (cc)

63 Kawasaki (KAWK)

6361 KAWK 0-50 cc
6362 KAWK 51-124 cc
6363 KAWK 125-349 cc
6364 KAWK 350-449 cc
6365 KAWK 450-749 cc
6366 KAWK 750 cc and over
6369 KAWK Unknown (cc)

64 Moto Guzzi (MOGU)

6461 MOGU 0-50 cc
6462 MOGU 51-124 cc
6463 MOGU 125-349 cc
6464 MOGU 350-449 cc
6465 MOGU 450-749 cc
6466 MOGU 750 cc and over
6469 MOGU Unknown (cc)

65 Norton (NORT)

6561 NORT 0-50 cc
6562 NORT 51-124 cc
6563 NORT 125-349 cc
6564 NORT 350-449 cc
6565 NORT 450-749 cc
6566 NORT 750 cc and over
6569 NORT UNKNOWN (cc)

66 Suzuki (SUZI)

6661 SUZI 0-50 cc
6662 SUZI 51-124 cc
6663 SUZI 125-349 cc
6664 SUZI 350-449 cc

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

66 Suzuki (Cont.) (SUZI)

6665 SUZI 450-749 cc
6666 SUZI 750 cc and over
6669 SUZI Unknown (cc)

67 Yamaha (YAMA)

6761 YAMA 0-50 cc
6762 YAMA 51-124 cc
6763 YAMA 125-349 cc
6764 YAMA 350-449 cc
6765 YAMA 450-749 cc
6766 YAMA 750 cc and over
6769 YAMA Unknown (cc)

69 Other Motored Cycle (--------)

6961 -------- 0-50 cc
6962 -------- 51-124 cc
6963 -------- 125-349 cc
6964 -------- 350-449 cc
6965 -------- 450-749 cc
6966 -------- 750 cc and over
6969 -------- unknown (cc)

70 Mo-Ped (--------)

7061 -------- 0-50 cc
7062 -------- 51-124 cc
7069 -------- Unknown (cc)

80 Brockway (BROC)

8080 BROC Motorhome
8081 BROC CBE (medium/heavy truck)
8082 BROC COE low-entry (medium/heavy truck)
8083 BROC COE high-entry (medium/heavy truck)
8084 BROC Unknown engine location (medium/heavy truck)
8085 BROC Bus
8086 BROC Bus (flat front, front engine)
8087 BROC Bus (flat front, rear engine)
8088 BROC Other (truck)
8089 BROC Unknown (truck)

81 Diamond Reo (DIAR)

8180 DIAR Motorhome
8181 DIAR CBE (medium/heavy truck)
8182 DIAR COE low-entry (medium/heavy truck)
8183 DIAR COE high-entry (medium/heavy truck)
8184 DIAR Unknown engine location (medium/heavy truck)
8185 DIAR Bus
8186 DIAR Bus (flat front, front engine)
8187 DIAR Bus (flat front, rear engine)
8188 DIAR Other (truck)
8189 DIAR Unknown (truck)

82 Freightliner or White Freightliner (FRHT)

8280 FRHT Motorhome
8281 FRHT CBE (medium/heavy truck)
8282 FRHT COE low-entry (medium/heavy truck)
8283 FRHT COE high-entry (medium/heavy truck)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

82 Freightliner or White Freightliner (Cont.) (FRHT)

8284 FRHT Unknown engine location (medium/heavy truck)8285 FRHT Bus
8286 FRHT Bus (flat front, front engine)
8287 FRHT Bus (flat front, rear engine)
8288 FRHT Other (truck)
8289 FRHT Unknown (truck)

83 FWD (FWD)

8380 BWD Motorhome
8381 BWD CBE (medium/heavy truck)
8382 BWD COE low-entry (medium/heavy truck)
8383 BWD COE high-entry (medium/heavy truck)
8384 BWD Unknown engine location (medium/heavy truck)
8385 BWD Bus
8386 BWD Bus (flat front, front engine)
8387 BWD Bus (flat front, rear engine)
8388 BWD Other (truck)
8389 BWD Unknown (truck)

84 International Harvester (INTL)

8471 INTL Scout
8473 INTL Pickup/Panel
8475 INTL Multistop
8476 INTL Travellall
8478 INTL Other (SUV/light truck)
8479 INTL Unknown (SUV/light truck)
8480 INTL Motorhome
8481 INTL CBE (medium/heavy truck)
8482 INTL COE low-entry (medium/heavy truck)

84 International Harvester (Cont.) (INTL)

8483 INTL COE high-entry (medium/heavy truck)
8484 INTL Unknown engine location (medium/heavy truck)
8485 INTL Bus
8486 INTL Bus (flat front, front engine)
8487 INTL Bus (flat front, rear engine)
8488 INTL Other (truck)
8489 INTL Unknown (truck)
8400 INTL Unknown (**INTERNATIONAL HARVESTER**)

85 Kenworth (KW)

8580 KW INTL Motorhome
8581 KW CBE (medium/heavy truck)
8582 KW COE low-entry (medium/heavy truck)
8583 KW COE high-entry (medium/heavy truck)
8584 KW Unknown engine location (medium/heavy truck)
8585 KW Bus
8586 KW Bus (flat front, front engine)
8587 KW Bus (flat front, rear engine)
8588 KW Other (truck)
8589 KW Unknown (truck)

86 Mack (MACK)

8680 MACK Motorhome
8681 MACK CBE (medium/heavy truck)
8682 MACK COE low-entry (medium/heavy truck)

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

86 Mack (Cont.) (MACK)

8683 MACK COE high-entry (medium/heavy truck)
8684 MACK Unknown engine location (medium/heavy truck)
8685 MACK Bus
8686 MACK Bus (flat front, front engine)
8687 MACK Bus (flat front, rear engine)
8688 MACK Other (truck)
8689 MACK Unknown (truck)

87 Peterbilt (PTRB)

8780 PTRB Motorhome
8781 PTRB CBE (medium/heavy truck)
8782 PTRB COE low-entry (medium/heavy truck)
8783 PTRB COE high-entry (medium/heavy truck)
8784 PTRB Unknown engine location (medium/heavy truck)
8785 PTRB Bus
8786 PTRB Bus (flat front, front engine)
8787 PTRB Bus (flat front, rear engine)
8788 PTRB Other (truck)
8789 PTRB Unknown (truck)

88 White (WHIT)

8880 WHIT Motorhome
8881 WHIT CBE (medium/heavy truck)
8882 WHIT COE low-entry (medium/heavy truck)

88 White (Cont.) (WHIT)

8883 WHIT COE high-entry (medium/heavy truck)
8884 WHIT Unknown engine location (medium/heavy truck)
8885 WHIT Bus
8886 WHIT Bus (flat front, front engine)
8887 WHIT Bus (flat front, rear engine)
8888 WHIT Other (truck)
8889 WHIT Unknown (truck)

95 Other (Truck or Bus) (--------)

9501 -------- Autocar
9502 -------- Auto-Union-DKW
9503 -------- Divco
9504 -------- Western Star
9578 -------- Other (SUV/light truck)
9588 -------- Other (truck)

98 Other Make (--------)

9800 -------- Unknown
9899 -------- Unknown (automobile)

99 Unknown Make (--------)

9900 -------- Unknown (as to automobile, motored cycle, light truck, or truck)
9979 -------- Unknown (SUV/light truck)
9989 -------- Unknown (truck)
9999 -------- Unknown (automobile)

Vehicle Number

This is repeated in the Person File.

1975 and later

Variable = VEH_NO

Element = 00 - Used for People who are not Motor Vehicle Occupants
01 - 99

All vehicles will have a positive integer value. The value 0 is only used for pedestrians, cyclists, etc., in the Person File.

This variable is in each Vehicle and Person record. Together with the State Case, ST_CASE, it forms a unique identifier for the vehicle within the year. VEH_NO and ST_CASE **ARE OFTEN** used together as a key, when a Vehicle File and Person File, are merged, from the same year. This is done to insure that the correct occupants are placed in the proper vehicle. When nonoccupants must be counted one should merge by VEH_NO, but do not merge with the VEHICLE File. For example, to obtain information on the day of the week, injury severity, and race merge the Accident File with the Person File using ST_CASE and merge that result with the Multiple Cause of Death (MCD) data [this data is generally not available to the public] using ST_CASE, VEH_NO and PER_NO. Note: If this data is merged with the Vehicle File, then one looses all nonoccupants. So there is a difference between merging with the VEH_NO and with the Vehicle File.

Also see: ST_CASE, State Case, in any file.

Nonoccupants have VEH_NO = 00, in this case see N_MOT_NO under Nonmotorist Striking Vehicle Number in the Person File.

Vehicle Role

This is repeated in the Person File.

1975 and later

Variable = IMPACTS

Element = Blank
- 0 - Non-Collision
- 1 - Striking
- 2 - Struck
- 3 - Both
- 9 - Unknown

Note when a vehicle is both striking and struck, i.e., Value = 3, the event cannot simultaneously be at the same point of the vehicle. A vehicle must have at least one striking impact point and a struck impact point. A classic example is a chain reaction rear-end crash, where a vehicle which is both striking and struck is located within the chain.

VIN Body Type

This is repeated in the Person File.

1982 and later
except as noted

Variable = VIN_BT

This is a **CHARACTER** variable in **UPPER CASE**.

The VINA program decodes these data and partitions vehicles into three classes, passenger vehicles, trucks, and motorcycles.

Element =

2D - Passenger Vehicle Sedan 2-Door
2F - Passenger Vehicle Formal Hardtop 2-Door
2H - (81-03) Passenger Vehicle 2-Door
2L - Passenger Vehicle Liftback 3-Door
2P - Passenger Vehicle Pillard Hardtop 2-Door
2T - Passenger Vehicle Hardtop 2-Door
2W - Truck 2-Door Wagon/Sport Utility
2W - Passenger Vehicle Wagon 2-Door
3D - Passenger Vehicle Runabout 3-Door
4D - Passenger Vehicle Sedan 4-Door
4H - (81-03) Passenger Vehicle Hatchback 4-Door
4L - Passenger Vehicle Liftback 5-Door
4P - Passenger Vehicle Pillard Hardtop 4-Door
4T - Passenger Vehicle Hardtop 4-Door
4W - Truck 4-Door Wagon/Sport Utility
4W - Passenger Vehicle Wagon 4-Door
5D - Passenger Vehicle Sedan 5-Door
8V - Truck 8-Passenger Sport Van
AC - Truck Auto Carrier
AM - Passenger Vehicle Ambulance
AR - Truck Armored Truck
AT - Motorcycle All-Terrain
BU - Bus
CB - Truck Chassis and Cab
CB - Passenger Vehicle Cab & Chassis (Luv)
CC - Truck Conventional Cab
CG - Truck Cargo Van
CH - Truck Crew Chassis
CL - Truck Club Chassis
CM - Truck Concrete or Transit Mixer
CP - Truck Crew Pickup
CP - Passenger Vehicle Coupe
CR - Truck Crane
CS - Truck Super Cab/Chassis Pickup
CU - Truck Custom Pickup
CV - Truck Convertible (Jeep Commando, Suzuki Samurai, Dodge Dakota)
CV - Passenger Vehicle Convertible
CY - Truck Cargo Cutaway
DP - Truck Dump
DS - Truck Tractor Truck (diesel)
EC - Truck Extended Cargo Van
EN - Motorcycle Enduro
ES - Truck Extended Sport Van
EV - Truck Extended Van
EW - Truck Extended Window Van
FB - Truck Flat-bed or Platform

(Continued on Next Page)

VIN Body Type (Continued)

This is repeated in the Person File.

1982 and later

except as noted

FC - Truck Forward Control
FT - Truck Fire Truck
GG - Truck Garbage or Refuse
GL - Truck Gliders
GN - Truck Grain
HB - Passenger Vehicle Hatchback number doors unknown
HO - Truck Hopper
HR - Passenger Vehicle Hearse
HT - Passenger Vehicle Hardtop number doors unknown
IC - Truck Incomplete Chassis
IE - Truck Incomplete Ext Van
LB - Passenger Vehicle Liftback
LG - Truck Logger
LL - Truck Suburban & Carry-All
LM - Passenger Vehicle Limousine
MH - Truck Motorized Home
MK - Motorcycle Mini-Bike
MN - Motorcycle Mini Moto Class
MP - Motorcycle Moped
MP - Truck Multipurpose
MR - Motorcycle Mini Road/Trail
MS - Motorcycle Motor Scooter
MV - Truck Maxi-Van
MX - Motorcycle Moto Cross
MY - Truck Motorized Cutaway
MY - Motorcycle Mini-Cycle
NB - Passenger Vehicle Notchback
PC - Truck Club Cab Pickup
PD - Truck Parcel Delivery
PK - Truck Pickup
PK - Passenger Vehicle Pickup, Truck commonly registered passengers
PM - Truck Pickup with Camper Mounted on Bed
PN - Truck Panel
PS - Truck Super Cab Pickup
RC - Motorcycle Racer
PN - Passenger Vehicle Panel, Truck commonly registered as passengers
RD - Truck Roadster (Jeep, Jeep Commando)
RD - Passenger Vehicle Roaster
RS - Motorcycle Road/Street
RT - Motorcycle Road/Trail
S1 - Truck One-Seat
S2 - Truck Two-Seat
SB - Passenger Vehicle Sport Hatchback
SC - Passenger Vehicle Sport Coupe
SD - Passenger Vehicle Sedan, number doors unknown
SN - Truck Step Van
SP - Truck Sport Pickup
ST - Truck Stake or Rack
SV - Truck Sports Van
SV - Passenger Vehicle Sport Van
SW - Passenger Vehicle Station Wagon
SW - Truck Station Wagon (Jeep Wagoneer etc.)
T - Motorcycle Dirt
TB - Truck Tilt Cab
TL - Truck Tilt Tandem
TL - Motorcycle Trail/Dirt
TM - Truck Tandem
TN - Truck Tank
TR - Motorcycle Trails
TR - Truck Tractor (gasoline)

(Continued on Next Page)

VIN Body Type (Continued)

This is repeated in the Person File.

1982 and later

except as noted

UT - Passenger Vehicle Utility, truck commonly registered as passenger
UT - Truck Utility (Blazer, Jimmy, Scout, etc.)
VC - Truck Van Camper
VD - Truck Display Van
VN - Truck Van
VT - Truck Vanette (includes Metro and Handy Van)
VW - Truck Window Van
WK - Truck Tow Truck Wrecker
WW - Truck Wide Wheel Wagon
WW - Passenger Vehicle Wide-Wheel Wagon
XT - Truck Travel-all
YY - Truck Cutaway

99 - Unknown

VIN Chassis-Truck

1975 to 1981

Variable = CHAS_TR

Element = 99

This seems to be a useless variable in FARS. When it has a value, the value is 99. This variable may have had a use in the early versions of FARS, but I have not been able to find any documentation on its use

VIN Model

This is repeated in the Person File.

1975 and later

Variable = VINA_MOD

The VIN Model, for automobiles, is obtained from the VINA program for automobiles of model year 1966 and later that have verifiable VIN numbers. If one needs to select cars based on make and model the variable of choice is VINA_MOD rather than MAK_MOD.

This is a **CHARACTER** variable in **UPPER CASE** three characters long.

The VINA_MOD is only unique within the vehicle make. That is, different makes of vehicles can have the same VINA_MOD. To ensure that the correct vehicle is selected the variable MAKE must be used in conjunction with VINA_MOD. Both variables, VINA_MOD and MAKE, are in both the Vehicle file and the Person File.

The values for VINA_MOD are contained in Appendix F of *PC VINA User's Manual, and are* 183 pages long in the 1994 edition.

There are two columns headed VINA CODE. For passenger cars, or what Polk calls passenger vehicles, the FARS variable VINA_MOD can be set to either the VINA code for the series name, i.e., the first column, or it can be set to the value of the sub-series name, the last column. Therefore one must search for values in both columns.

For trucks the first column labeled VINA CODE, series name, is the FARS variable SER_TR. When using the variable SER_TR all model names, last column are included. If one wishes to select a specific truck model one uses the FARS variable VINA_MOD set to the value in the last VINA CODE column.

(Continued on Next Page)

VIN Series Truck

This is repeated in the Person File.

1975 and later

Variable = SER_TR

This is an element that identifies the type of truck, i.e., body style. This material comes from analysis of the Vehicle Identification Number.

This is a CHARACTER variable in UPPER CASE three characters long.

The values for SER_TR are contained in Appendix F of *PC VINA User's Manual, and are* 183 pages long in the 1994 edition. The values for SER_TR are in the truck section of Appendix F. They are the first column headed VINA CODE for the series name. When using the variable SER_TR all model names, in the last column are included. If one wishes to select a specific truck model one uses the FARS variable VINA_MOD set to the value in the last column headed VINA CODE.

Violations Charged

1997 and later

Variables = VIOLCHG1 or VIOLCHG2 or VIOLCHG3

Element =

RECKLESS/CARELESS/HIT-AND-RUN OFFENSES

01 - Manslaughter or Homicide
02 - Willful Reckless Driving; Driving to Endanger; Negligent Driving
03 - Unsafe Reckless (*Not Willful, Wanton Reckless*) Driving
04 - Inattentive, Careless, Improper Driving
05 - Fleeing or Eluding Police
06 - Fail to Obey Police, Fireman, Authorized Person Directing Traffic
07 - Hit-and-Run, Fail to Stop After Crash
08 - Fail to Give Aid, Information, Wait for Police after Crash
09 - Serious Violation Resulting in Death

IMPAIRMENT OFFENSES

11 - Driving While Intoxicated (*Alcohol or Drugs*) or BAC above Limit (*Any Detectable BAC for CDLs*)
12 - Driving While Impaired; Driving Under Influence of Substance Not Intended to Intoxicate
13 - Driving under Influence of Substance not intended to intoxicate
14 - Drinking While Operating
15 - Illegal Possession of Alcohol or Drugs
16 - Driving With Detectable Alcohol
18 - Refusal to Submit to Chemical Test
19 - Alcohol, Drug, or Impairment Violations Generally

SPEED-RELATED OFFENSES

21 - Racing
22 - Speeding (*Above the Speed Limit*)
23 - Speed Greater Than Reasonable and Prudent (*Not Necessarily Over the Limit*)
24 - Exceeding Special Speed Limit (*e.g., for Trucks, Buses, Cycles, or on Bridge, in School Zone, etc.*)
25 - Energy Speed (*Exceeding 55 mph, Non-Pointable*)
26 - Driving Too Slowly
29 - Speed-Related Violations Generally

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Violations Charged (Continued)

1997 and later

Variables = VIOLCHG1 or VIOLCHG2 or VIOLCHG3

Element =

RULES OF THE ROAD – TRAFFIC SIGN & SIGNALS

31 - Fail to Stop for Red Signal
32 - Fail to Stop for Flashing Red
33 - Violation of Turn on Red (*Fail to Stop & Yield, Yield to Pedestrians before Turning*)
34 - Fail to Obey Flashing Signal (*Yellow or Red*)
35 - Fail to Obey Signal Generally
36 - Violate RR Grade Crossing Device/Regulations
37 - Fail to Obey Stop Sign
38 - Fail to Obey Yield Sign
39 - Fail to Obey Traffic Control Device Generally

RULES OF THE ROAD – TURNING, YIELDING, SIGNALING

41 - Turn in Violation of Traffic Control (*Disobey Signs, Turn Arrow or Pavement Markings; this is not a Right-on-Red violation*)
42 - Improper Method & Position of Turn (*Too Wide, Wrong Lane*)
43 - Fail to Signal for Turn or Stop
45 - Fail to Yield to Emergency Vehicle
46 - Fail to Yield Generally
48 - Enter Intersection When Space Insufficient
49 - Turn, Yield, Signaling Violations Generally

RULES OF THE ROAD – WRONG SIDE, PASSING & FOLLOWING

51 - Driving Wrong Way on One-Way Road
52 - Driving on Left, Wrong Side of Road Generally
53 - Improper, Unsafe Passing
54 - Pass on Right (*Drive off Pavement to Pass*)
55 - Pass Stopped School Bus
56 - Fail to Give Way When Overtaken
58 - Following Too Closely
59 - Wrong Side, Passing, Following Violations Generally

(Continued on Next Page)

Violations Charged (Continued)

1997 and later

Variables = VIOLCHG1 or VIOLCHG2 or VIOLCHG3

Element =

RULES OF THE ROAD – LANE USAGE

61 - Unsafe or Prohibited Lane Change
62 - Improper Use of Lane (*Enter of 3-Lane Road, HOV Designated Lane*)
63 - Certain Traffic to Use Right Lane (*Trucks, Slow Moving, etc.*)
66 - Motorcycle Lane Violations (*More than two per Lane, Riding Between Lanes, etc.*)
67 - Motorcyclist Attached to another Vehicle
69 - Lane Violations Generally

NON-MOVING – LICENSE & REGISTRATION VIOLATIONS

71 - Driving While License Withdrawn
72 - Other Driver License Violations
73 - Commercial Driver Violations
74 - Vehicle Registration Violations
75 - Fail to Carry Insurance Card
76 - Driving Uninsured Vehicle
79 - Non-Moving Violations Generally

EQUIPMENT

81 - Lamp Violations
82 - Brake Violations
83 - Failure to Require Restraint Use (*by Self or Passenger*)
84 - Motorcycle Equipment Violations (*Helmet, Special Equipment*)
85 - Violation of Hazardous Cargo Regulations
86 - Size, Weight, Load Violations
89 - Equipment Violations Generally

OTHER VIOLATIONS

91 - Parking
92 - Theft, Unauthorized Use of Motor Vehicle
93 - Driving Where Prohibited (*Sidewalk, Limited Access, Off Truck Route*)
98 - Other Moving Violation
99 - Unknown Violation

(Continued on Next Page)

Violations Charged (Continued)

1982 to 1996

Variable = VIOL_CHG

Element =
0 - None
1 - Alcohol or Drugs
2 - Speeding
3 - Alcohol or Drugs and Speeding
4 - Reckless Driving
5 - Driving With Suspended or Revoked License
6 - Other Moving Violation
7 - Non-Moving Violation
8 - Violation, Type Unknown or Other Violation
9 - Unknown

1975 to 1981

Variable = VIOL_CHG

Element =
0 - None
1 - Yes
2 - Pending
9 - Unknown

Weight (Auto)

This is repeated in the Person File.

1975 and later

Variable = VIN_WGT

Element =	0	- Not available
	Up to 9998	- Actual weight of automobile in pounds
	9999	- Value not coded

The Fatality Analysis Reporting System collects information on the weight of cars involved in fatal crashes. Vehicle weight is not generally available for light trucks, however, the weight element, WGTCD_TR, is. NHTSA often partitions car weight into six classes. This has been done in *An Analysis of Fires in Passenger Cars, Light Trucks, and Vans*, Tessmer, DOT HS 808 208, 1994; *Passenger Car Weight and Injury Severity in Single-Vehicle Nonrollover Crashes*, Partyka and Boehly, 1989; ESV Report 89-2b-O-005 and *Development of Databases in Support of an Analysis of Fire Incidence Using the Fatal Accident Reporting System*, Walz and Klein, September 14, 1993. The partition is defined as:

CAR WEIGHT CLASSES

Class	Weight Range in Pounds
Class 1	Car Weight < 1,950
Class 2	1,950 ≤ Car Weight < 2,450
Class 3	2,450 ≤ Car Weight < 2,950
Class 4	2,950 ≤ Car Weight < 3,450
Class 5	3,450 ≤ Car Weight < 3,950
Class 6	3,950 ≤ Car Weight

Note: If you are going to use this variable as a continuous variable, consider defining a new variable, say AUTO_WT as AUTO_WT = VIN_WT/1000. That is, AUTO_WT is the weight of the car in 1,000s of lbs. Its coefficient is less likely to be zero.

Weight Element (Trucks)

This is repeated in the Person File.

1975 and later

Variable = WGTCD_TR (for model year 1966 and newer trucks)

Element =
1 - 6,000 lbs or less
2 - 6,001 – 10,000 lbs
3 - 10,001 – 14,000 lbs
4 - 14,001 – 16,000 lbs
5 - 16,001 – 19,500 lbs
6 - 19,501 – 26,000 lbs
7 - 26,001 – 33,000 lbs
8 - 33,001 and up
9 - Unknown

WGTCD_TR is often coded as 9 for buses.

Wheelbase (Auto)

This is repeated in the Person File.

1975 and later

Variables = WHLBS_LG (longest wheelbase)
WHLBS_SH (shortest wheelbase)

The longest and shortest wheelbase respectively for the manufactured model as determined by the VINA program for automobiles made since 1966.

Element =	0000	- Value not available from the VINA program
	Up to 9998	- Actual value in inches
	9999	- Value not coded

THE

PERSON

FILE

Person File X-Ref

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Variable (Bold)	**Heading**	**Page #**	**Name**		**Page**
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Year	AGE	AIR_BAG	ALC_DET	ACL_RES	AUT_REST	ATST_TYP	BODY_TYP	CERT_NO	COUNTY	DAY	DEATH_DA	DEATH_HR
1975		-	-	-	A	-	A	-	A	A	A	A
1976		-	-	-	A	-	A	-	A	A	A	A
1977	A	-	-	-	B	-	A	-	A	A	A	A
1978	A	-	-	-	B	-	A	-	A	A	A	A
1979	A	-	-	-	B	-	A	-	A	A	A	A
1980	A	-	-	-	C	-	A	-	A	A	A	A
1981	A	-	-	-	C	-	A	-	A	A	A	A
1982	A	-	-	-	C	-	B	-	A	A	A	A
1983	A	-	-	-	C	-	B	-	A	A	A	A
1984	A	-	-	-	C	-	B	-	A	A	A	A
1985	A	-	-	-	C	-	B	-	A	A	A	A
1986	A	-	-	-	C	-	B	-	A	A	A	A
1987	A	-	A	-	C	-	B	-	A	A	A	A
1988	A	-	A	-	C	-	B	-	A	A	A	A
1989	A	-	A	-	C	-	B	-	A	A	A	A
1990	A	-	A	-	D	-	B	-	A	A	A	A
1991	A	A	A	A	-	-	C	A	A	A	A	A
1992	A	A	A	A	-	-	C	A	A	A	A	A
1993	A	A	A	A	-	-	D	A	A	A	A	A
1994	A	A	A	A	-	-	D	A	A	A	A	A
1995	A	A	A	B	-	-	D	A	A	A	A	A
1996	A	A	A	B	-	-	D	A	A	A	A	A
1997	A	A	A	B	-	-	D	A	A	A	A	A
1998	A	B	A	B	-	A	D	A	A	A	A	A
1999	A	B	A	B	-	A	D	A	A	A	A	A
2000	A	B	A	B	-	A	D	A	A	A	A	A
2001	A	B	A	B	-	B	D	A	A	A	A	A
2002	A	B	A	B	-	B	D	A	A	A	A	A
2003	A	B	B	B	-	B	D	A	A	A	A	A
2004	A	B	C	C	-	C	D	A	A	A	A	A
2005	A	B	C	C	-	C	D	A	A	A	A	A
2006	A	B	C	C	-	C	D	A	A	A	A	A
2007	A	B	C	C	-	C	D	A	A	A	A	A
2008	A	B	C	C	-	C	D	A	A	A	A	A

Year	DEATH_MN	DEATH_MO	DEATH_TM	DEATH_YR	DOA	DRINKING	DRUGRES1	DRUGRES2	DRUGRES3	DRUGS	DRUGTEST
1975	A	A	A	A	-	A	-	-	-	-	-
1976	A	A	A	A	-	A	-	-	-	-	-
1977	A	A	A	A	-	A	-	-	-	-	-
1978	A	A	A	A	-	A	-	-	-	-	-
1979	A	A	A	A	-	A	-	-	-	-	-
1980	A	A	A	A	-	A	-	-	-	-	-
1981	A	A	A	A	-	A	-	-	-	-	-
1982	A	A	A	A	-	A	-	-	-	-	-
1983	A	A	A	A	-	A	-	-	-	-	-
1984	A	A	A	A	-	A	-	-	-	-	-
1985	A	A	A	A	-	A	-	-	-	-	-
1986	A	A	A	A	-	A	-	-	-	-	-
1987	A	A	A	A	-	A	-	-	-	-	-
1988	A	A	A	A	-	A	-	-	-	-	-
1989	A	A	A	A	-	A	-	-	-	-	-
1990	A	A	A	A	-	A	-	-	-	-	-
1991	A	A	A	A	-	A	-	-	-	A	A
1992	A	A	A	A	-	A	-	-	-	A	A
1993	A	A	A	A	-	A	A	A	A	A	-
1994	A	A	A	A	-	A	A	A	A	A	-
1995	A	A	A	A	-	A	A	A	A	A	-
1996	A	A	A	A	-	A	A	A	A	A	-
1997	A	A	A	A	-	A	A	A	A	A	-
1998	A	A	A	B	-	A	A	A	A	A	-
1999	A	A	A	B	-	A	A	A	A	A	-
2000	A	A	A	B	-	A	A	A	A	A	-
2001	A	A	A	B	A	A	A	A	A	A	-
2002	A	A	A	B	A	A	A	A	A	A	-
2003	A	A	A	B	A	A	A	A	A	A	-
2004	A	A	A	B	A	A	A	A	A	A	-
2005	A	A	A	B	A	A	A	A	A	A	-
2006	A	A	A	B	A	A	A	A	A	A	-
2007	A	A	A	B	A	A	A	A	A	A	-
2008	A	A	A	B	A	A	A	A	A	A	-

Year	DRUGTST1	DRUGTST2	DRUGTST3	DRUG_DET	DRUG_RES	EJECTION	EJ_PATH	EMER_USE	EXTRICAT	FIRE_EXP	HARM_EV	HISPANIC
1975	-	-	-	-	93	A	-	-	A	A	A	-
1976	-	-	-	-	93	A	-	-	A	A	A	-
1977	-	-	-	-	-	A	-	A	A	A	A	-
1978	-	-	-	-	-	A	-	A	A	A	A	-
1979	-	-	-	-	-	A	-	A	A	A	A	-
1980	-	-	-	-	-	A	-	A	A	A	A	-
1981	-	-	-	-	-	A	-	A	A	A	A	-
1982	-	-	-	-	-	A	-	A	A	A	B	-
1983	-	-	-	-	-	A	-	A	A	A	B	-
1984	-	-	-	-	-	A	-	A	A	A	B	-
1985	-	-	-	-	-	A	-	A	A	A	B	-
1986	-	-	-	-	-	A	-	A	A	A	B	-
1987	-	-	-	-	-	A	-	A	A	A	B	-
1988	-	-	-	-	-	A	-	A	A	A	B	-
1989	-	-	-	-	-	A	-	A	A	A	B	-
1990	-	-	-	-	-	A	-	A	A	A	B	-
1991	-	-	-	A	A	A	A	A	A	A	B	-
1992	-	-	-	A	A	A	A	A	A	A	B	-
1993	A	A	A	A	-	A	A	A	A	A	C	-
1994	A	A	A	A	-	A	A	A	A	A	D	-
1995	A	A	A	A	-	A	A	A	A	A	D	-
1996	A	A	A	A	-	A	A	A	A	A	D	-
1997	A	A	A	A	-	A	A	A	A	A	E	-
1998	A	A	A	A	-	A	A	A	A	A	F	-
1999	A	A	A	A	-	A	A	A	A	A	F	A
2000	A	A	A	A	-	A	A	A	A	A	F	B
2001	A	A	A	A	-	A	A	A	A	A	F	C
2002	A	A	A	A	-	A	A	A	A	A	F	C
2003	A	A	A	A	-	A	A	A	A	A	F	C
2004	A	A	A	A	-	A	A	A	A	A	G	C
2005	A	A	A	A	-	A	A	A	A	A	H	C
2006	A	A	A	A	-	A	A	A	A	A	H	C
2007	A	A	A	A	-	B	A	A	A	A	H	C
2008	A	A	A	A	-	C	A	A	A	A	H	C

Year	HOSPITAL	HOUR	IMPACT1	IMPACT2	IMPACTS	INJ_SEV	LAG_HRS	LAG_MINS	LOCATION	MAKE	MAK_MOD
1975	-	A	A	A	A	A	A	A	A	A	A
1976	-	A	A	A	A	A	A	A	A	A	A
1977	A	A	A	A	A	A	A	A	A	A	A
1978	A	A	A	A	A	A	A	A	A	A	A
1979	A	A	A	A	A	A	A	A	A	A	A
1980	A	A	A	A	A	A	A	A	A	A	A
1981	A	A	A	A	A	A	A	A	A	A	A
1982	A	A	A	A	A	A	A	A	B	B	B
1983	A	A	A	A	A	A	A	A	B	B	B
1984	A	A	A	A	A	A	A	A	B	B	B
1985	A	A	A	A	A	A	A	A	B	B	B
1986	A	A	A	A	A	A	A	A	B	B	B
1987	A	A	A	A	A	A	A	A	B	C	C
1988	A	A	A	A	A	A	A	A	B	C	C
1989	A	A	A	A	A	A	A	A	B	C	C
1990	A	A	A	A	A	A	A	A	B	D	C
1991	A	A	A	A	A	A	A	A	B	E	D
1992	A	A	A	A	A	A	A	A	B	E	D
1993	A	A	A	A	A	A	A	A	B	E	D
1994	A	A	B	B	A	A	A	A	B	E	D
1995	A	A	B	B	A	A	A	A	B	E	D
1996	A	A	B	B	A	A	A	A	B	E	D
1997	A	A	B	B	A	A	A	A	B	E	D
1998	A	A	B	B	A	A	A	A	B	E	D
1999	B	A	B	B	A	A	A	A	B	E	D
2000	B	A	B	B	A	A	A	A	B	E	D
2001	C	A	B	B	A	A	A	A	B	E	D
2002	C	A	B	B	A	A	A	A	B	E	D
2003	C	A	B	B	A	A	A	A	B	E	D
2004	C	A	B	B	A	A	A	A	B	E	D
2005	C	A	B	B	A	A	A	A	B	E	D
2006	C	A	B	B	A	A	A	A	C	E	D
2007	D	A	B	B	A	A	A	A	C	E	D
2008	D	A	B	B	A	A	A	A	C	E	D

Year	MAN_COLL	MAN_REST	MCYCL_DS	MINUTE	MOD_YEAR	MONTH	N_MOT_NO	PER_NO	PER_TYP	P_CF1	P_CF2	P_CF3
1975	A	A	A	A	A	A	-	A	A	A	A	A
1976	A	A	A	A	A	A	-	A	A	B	B	B
1977	A	A	A	A	A	A	-	A	A	B	B	B
1978	B	A	A	A	A	A	-	A	A	B	B	B
1979	B	A	A	A	A	A	-	A	A	B	B	B
1980	B	A	A	A	A	A	-	A	A	B	B	B
1981	B	A	A	A	A	A	-	A	A	B	B	B
1982	B	A	A	A	A	A	A	A	B	C	C	C
1983	B	A	A	A	A	A	A	A	B	C	C	C
1984	B	A	A	A	A	A	A	A	B	C	C	C
1985	B	A	A	A	A	A	A	A	B	C	C	C
1986	B	A	A	A	A	A	A	A	B	C	C	C
1987	B	A	A	A	A	A	A	A	B	C	C	C
1988	B	A	A	A	A	A	A	A	B	C	C	C
1989	B	A	A	A	A	A	A	A	B	C	C	C
1990	B	A	A	A	A	A	A	A	B	C	C	C
1991	B	-	A	A	A	A	A	A	B	C	C	C
1992	B	-	A	A	A	A	A	A	B	C	C	C
1993	B	-	A	A	A	A	A	A	B	C	C	C
1994	B	-	A	A	A	A	A	A	C	C	C	C
1995	B	-	A	A	A	A	A	A	C	D	D	D
1996	B	-	A	A	A	A	A	A	C	D	D	D
1997	B	-	A	A	A	A	A	A	C	D	D	D
1998	B	-	A	A	B	A	A	A	C	D	D	D
1999	B	-	A	A	B	A	A	A	C	D	D	D
2000	B	-	A	A	B	A	A	A	C	E	E	E
2001	B	-	A	A	B	A	A	A	C	F	F	F
2002	C	-	A	A	B	A	A	A	C	G	G	G
2003	C	-	A	A	B	A	A	A	C	G	G	G
2004	C	-	A	A	B	A	A	A	C	G	G	G
2005	C	-	A	A	B	A	A	A	C	G	G	G
2006	C	-	A	A	B	A	A	A	C	G	G	G
2007	C	-	A	A	B	A	A	A	D	H	H	H
2008	C	-	A	A	B	A	A	A	D	I	I	I

Year	RACE	REST_USE	ROAD_FNC	ROLLOVER	SCH_BUS	SEAT_POS	SER_TR	SEX	SPEC_USE	STATE	ST_CASE	TEST_RES
1975	-	-	-	-	-	A	S	A	A	A	A	A
1976	-	-	-	-	-	A	E	A	A	A	A	A
1977	-	-	-	-	A	A	E	A	A	A	A	A
1978	-	-	-	A	A	A	-	A	A	A	A	A
1979	-	-	-	A	A	A	V	A	A	A	A	A
1980	-	-	-	A	A	A	I	A	A	A	A	A
1981	-	-	A	A	A	A	N	A	A	A	A	A
1982	-	-	A	A	A	B	-	A	A	A	A	A
1983	-	-	A	A	A	B	M	A	A	A	A	A
1984	-	-	A	A	A	B	A	A	A	A	A	A
1985	-	-	A	A	A	B	N	A	A	A	A	A
1986	-	-	A	A	A	B	U	A	A	A	A	A
1987	-	-	B	A	A	B	A	A	A	A	A	A
1988	-	-	B	A	A	B	L	A	A	A	A	A
1989	-	-	B	A	A	B	-	A	A	A	A	A
1990	-	-	B	A	A	B	F	A	A	A	A	A
1991	-	A	B	A	A	B	O	A	A	A	A	-
1992	-	A	B	A	A	B	R	A	A	A	A	-
1993	-	A	B	A	A	B	-	A	A	A	A	-
1994	-	B	B	A	A	B	L	A	A	A	A	-
1995	-	B	B	A	A	B	E	A	A	A	A	-
1996	-	B	B	A	A	B	V	A	A	A	A	-
1997	-	B	B	A	A	B	E	A	A	A	A	-
1998	-	B	B	A	A	B	L	A	A	A	A	-
1999	A	B	B	A	A	B	-	A	A	A	A	-
2000	B	B	B	A	A	B	-	A	A	A	A	-
2001	C	B	B	A	A	B	-	A	A	A	A	-
2002	C	B	B	A	A	B	-	A	A	A	A	-
2003	G	B	B	A	A	B	-	A	A	A	A	-
2004	G	B	B	A	A	B	-	A	A	A	A	-
2005	G	B	B	A	A	B	-	A	A	A	A	-
2006	G	B	B	A	A	B	-	A	A	A	A	-
2007	G	B	B	A	A	B	-	A	A	A	A	-
2008	G	C	B	A	A	B	-	A	A	A	A	-

Year	TOW_VEH	TOXCLGY	VEH_NO	VE_FORMS	VINA_MOD	VIN_BT	VIN_WGT	WGTCD_TR	WHLBS_LG	WHLBS_SH	WORK_INJ
1975	-	-	A	-	A	-	A	A	A	A	-
1976	-	-	A	A	A	-	A	A	A	A	-
1977	A	-	A	A	A	-	A	A	A	A	-
1978	A	-	A	A	A	-	A	A	A	A	-
1979	A	-	A	A	A	-	A	A	A	A	-
1980	B	-	A	A	A	-	A	A	A	A	-
1981	B	-	A	A	A	-	A	A	A	A	-
1982	C	-	A	B	A	A	A	A	A	A	-
1983	C	-	A	B	A	A	A	A	A	A	-
1984	C	-	A	B	A	A	A	A	A	A	-
1985	C	-	A	B	A	A	A	A	A	A	-
1986	C	-	A	B	A	A	A	A	A	A	-
1987	C	A	A	B	A	A	A	A	A	A	A
1988	C	A	A	B	A	A	A	A	A	A	A
1989	C	A	A	B	A	A	A	A	A	A	A
1990	C	A	A	B	A	A	A	A	A	A	A
1991	C	-	A	B	A	A	A	A	A	A	A
1992	C	-	A	B	A	A	A	A	A	A	A
1993	C	-	A	B	A	A	A	A	A	A	A
1994	C	-	A	B	A	A	A	A	A	A	A
1995	C	-	A	B	A	A	A	A	A	A	A
1996	C	-	A	B	A	A	A	A	A	A	A
1997	C	-	A	B	A	A	A	A	A	A	A
1998	C	-	A	B	A	A	A	A	A	A	A
1999	C	-	A	B	A	A	A	A	A	A	A
2000	C	-	A	B	A	A	A	A	A	A	A
2001	C	-	A	B	A	A	A	A	A	A	A
2002	C	-	A	B	A	A	A	A	A	A	A
2003	C	-	A	B	A	A	A	A	A	A	A
2004	C	-	A	B	A	A	A	A	A	A	A
2005	C	-	A	B	A	A	A	A	A	A	A
2006	C	-	A	B	A	A	A	A	A	A	A
2007	C	-	A	B	A	A	A	A	A	A	A
2008	C	-	A	B	A	A	A	A	A	A	A

Age

1975 and later

Variable = AGE

Element = Blanks

00	- Up to one year
01 – 96	- Age of the Individual in Years
97	- 97 Years Old or Older
99	- Unknown

Alcohol

1987 and later

Variable = ALC_DET *(Method of Alcohol Determination by Police)*

Element =
- 1 - Evidential Test (*Breath, Blood, Urine*)
- 2 - Preliminary Breath Test (*PBT*)
- 3 - Behavioral
- 4 - Passive Alcohol Sensor (*PAS*)
- 5 - Observed
- 8 - Other (*e.g., saliva test*)
- 9 - Not Reported

1991 and later

Variable = ALC_RES *(Alcohol Test Result)*

Element =
- Blanks
- 00 – 93 - Actual Value of blood alcohol concentration (BAC) test, *(A value of 10 is a BAC of .10. The decimal is implied before first digit. The BAC is expressed as grams per deciliter or a clinical evaluation of the same.)*
- 94 - .94 or Greater *(since 1995 the value 94 should be interpreted as .94 or greater)*
- 95 - Test Refused
- 96 - None Given
- 97 - AC Test Performed, Results Unknown
- 98 - PBT Positive Reading with No Actual Value *(since 2004)*
- 99 - Unknown if Tested

1975 to 1990

Variable = TEST_RES *(Alcohol Test Result)*

Element =
- 00 – 94 - Actual Value of BAC test, A value of 10 is a BAC of .10. The decimal is implied before first digit. The BAC is expressed as grams per deciliter or a clinical evaluation of the same.
- 95 - Test Refused
- 96 - None Given
- 97 - AC Test Performed, Results Unknown
- 99 - Unknown

(Continued on Next Page)

Alcohol (Continued)

2004 and later

Variable = ATST_TYP *(Alcohol Test Type)*

Element =
- 00 - Not Tested for Alcohol
- 01 - Whole Blood
- 02 - Breathalyzer "BAC"
- 03 - Urine
- 04 - Vitreous
- 05 - Blood Plasma/Serum
- 06 - Blood Clot
- 07 - Liver
- 08 - Other Test Type
- 09 - Unknown/Not Reported
- 10 - Preliminary Breath Test (*PBT*)
- 98 - Positive Reading with No Actual Value (since 2006)

1998 to 2003

Variable = ATST_TYP *(Alcohol Test Type)*

Element =
- 0 - Not Tested for Alcohol
- 1 - Whole Blood
- 2 - Breath "BAC"
- 3 - Urine
- 4 - Vitreous
- 5 - Blood Plasma/Serum
- 6 - Blood Clot
- 7 - Liver
- 8 - Other Test Type
- 9 - Unknown/Not Reported (since 2001)

1975 and later

Variable = DRINKING

Element =
- 0 - No (*Alcohol Not Involved*)
- 1 - Yes (*Alcohol Involved*)
- 8 - Not Reported
- 9 - Unknown (*Police Reported*)

(Continued on Next Page)

Alcohol (Continued)

Alcohol Multiple Imputation Code Example:

Alcohol data in FARS is often missing. NHTSA uses an imputation process to scientifically create sound statistical estimates for the missing ALCOHOL values. NHTSA uses a variety of characteristics including police-reported drinking, age, gender, Protection system use, type of crash, time of day, and driver of striking or struck vehicle to determine a distribution of alcohol consumption for each missing data point.

The program below is an example of how NHTSA uses the imputed values.

```
/*    THIS PROGRAM CREATES    */
/*    FIGURE 2 OF ALCOHOL REPORT    */
/*    ALCOHOL-RELATED FATALITIES BY YEAR  */
/*    NATIONAL ESTIMATES      */
/*    PATH NAMES AER SYSTEM SPECIFIC */

OPTIONS NODATE NONUMBER PS=66 LS=165 MISSING='0' nofmterr;

PROC DATASETS LIBRARY=WORK;
DELETE MIDATA;
RUN;
QUIT;

** THE BY VARIABLE LIST, CAN BE YEAR STATE, ETC.;
%LET DO_VAR=YEAR;

/*USE YOUR PATH NAME FOR THE LOCATION OF THE DRIVER IMPUTED BAC DATA */
libname drvbac 'O:\TONJAL\DRVBAC';

%MACRO RUN_FATALS;

/*    This example is for a single year 2004 to 2004  */


%LET YR=%SUBSTR(&Y,3,2);

/*   USE YOUR PATH NAMES FOR THE FARS ACCIDENT DATA */
LIBNAME FARS&YR "L:\FARSSAS\FARS&YR";


/*    STEP 1: MERGE FARS ACCIDENT FILE WITH THE */
/*    DRIVER IMPUTED BAC DATA */
```

(Continued on Next Page)

Alcohol (Continued)

```
DATA MULT_IMP;
      MERGE FARS&YR..ACCIDENT (KEEP=ST_CASE FATALS &DO_VAR month IN=A)
drvbac.drvbac&yr (IN=B);
      BY ST_CASE;
      IF A AND B;
      WEIGHT=FATALS;
      %MACRO MI;
      %DO I=1 %TO 10;
      IF A&I=0 THEN APC&I=1;          /*(BAC = 0.00)          */
      ELSE APC&I=0;
      IF (1<=A&I<=14) THEN BPC&I=1;    /*(0.01<=BAC<=0.04)     */
      ELSE BPC&I=0;
      IF (A&I>=15) THEN CPC&I=1;    /*(0.05<=BAC<=0.07)     */

      YEAR=&Y;
      %END;
      %MEND MI;
      %MI;
RUN;

**    STEP 2: APPEND FOR MULTIPLE YEARS;

PROC APPEND BASE=MIDATA DATA=MULT_IMP FORCE;
RUN;

%END;

PROC SORT DATA=MIDATA;
BY &DO_VAR;
RUN;

**    STEP 3: SUMMARY STATS ALONG THE BY VARIABLES;


%MACRO MI;
%DO I=1 %TO 10;
PROC MEANS NOPRINT DATA=MIDATA;
      VAR APC&I BPC&I CPC&I;
      BY &DO_VAR;
      FREQ FATALS;
      OUTPUT OUT=CASE&I N=TOTAL SUM=ASBAC&I BSBAC&I CSBAC&I
            MEAN=AS_PP&I BS_PP&I CS_PP&I;
RUN;
%END;
%MEND MI;
%MI;
RUN;
```

(Continued on Next Page)

Alcohol (Continued)

```
**    STEP 4: COMBINE RESULTS FROM 10 ESTIMATES;


DATA COMBINE_IMPS;
      %MACRO COMBINE;
      %DO I=1 %TO 10;
            SET CASE&I;

      SBAC0=MEAN(ASBAC1,ASBAC2,ASBAC3,ASBAC4,ASBAC5,ASBAC6,ASBAC7,ASBAC8,ASBA
C9,ASBAC10);

      SBAC1=MEAN(BSBAC1,BSBAC2,BSBAC3,BSBAC4,BSBAC5,BSBAC6,BSBAC7,BSBAC8,BSBA
C9,BSBAC10);

      SBAC2=MEAN(CSBAC1,CSBAC2,CSBAC3,CSBAC4,CSBAC5,CSBAC6,CSBAC7,CSBAC8,CSBA
C9,CSBAC10);
            SBAC3=SBAC1+SBAC2;
      %END;
      %MEND COMBINE;
      %COMBINE;
      FATALS=1;   /*SINCE THIS HAS FINAL RESULTS, SET WEIGHT TO 1 */
RUN;

DATA FINAL;
      SET COMBINE_IMPS;
RUN;


**    STEP 5: TABULATE RESULTS;

/*    USE YOUR PATH NAME FOR THE OUTPUT PDF FILE  */
ODS PDF FILE='C:\ANALYSIS\ALCOHOL\RUNS\ALCOHOL-RELATED FATALITIES.PDF';
PROC TABULATE DATA=FINAL MISSING out=test;
      CLASS &DO_VAR;
      VAR SBAC0 SBAC1 SBAC2 SBAC3 TOTAL;
      TABLE (YEAR=''),(TOTAL='Total'*(sum*f=comma6.)
                                    (SBAC2='0.15+')*(SUM*F=COMMA6.
PCTSUM<TOTAL>*F=5.1))/

      RTS=20 BOX='';
      KEYLABEL N=' ' ALL='Total' SUM='Num' PCTSUM='Percent';
      TITLE1 'FATALITIES IN MOTOR VEHICLE TRAFFIC CRASHES';
      TITLE2 'alcohol-related ';
RUN;
ODS PDF CLOSE;

%MEND RUN_FATALS;

%RUN_FATALS;
```

Body Type

This comes from the Vehicle File
(Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.)

1991 and later

Except as noted
By numerical order

Variable = BODY_TYP

Element =
01 - Convertible (excludes sunroof, T-bar)
02 - 2-Door Sedan/Hardtop/Coupe
03 - 3-Door/2-Door Hatchback
04 - 4-Door Sedan/Hardtop
05 - 5-Door/4-Door Hatchback
06 - Station Wagon (excluding van and truck-based)
07 - Hatchback, number of doors unknown
08 - Other auto (1991 – 93 only)
08 - Sedan/Hardtop, number of doors unknown (since 1994)
09 - Unknown auto type (1991 – 93 only)
09 - Other or Unknown automobile type (since 1994)
10 - Auto-Based Pickup
11 - Auto-Based Panel (cargo station wagon, auto-based ambulance or hearse)
12 - Large Limousine - more than four side doors or stretch chassis
13 - Three-Wheel Automobile or Automobile Derivative
14 - Compact Utility (ANSI D-16 Utility Vehicle Categories “Small” and “Midsize”)
15 - Large Utility (ANSI D-16 Utility Vehicle Categories “Full Size” and “Large”)
16 - Utility Station Wagon
19 - Utility Unknown Body
20 - Minivan
21 - Large Van – Includes van-based buses
22 - Step Van or Walk-In Van
23 - Van Motorhome (deleted in 2003 and later)
24 - Van-Based School Bus (1993 – 02 only)
25 - Van-Based Transit Bus (1993 – 02 only)
28 - Other Van Type (Hi-Cube Van)
29 - Unknown Van Type
30 - Compact Pickup (Gross Vehicle Weight, GVWR, < 4,500 lbs)
31 - Standard Pickup (4,500 lbs □GVWR < 10,000 lbs)
32 - Pickup with Slide-In Camper
33 - Convertible Pickup

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1991 and later

Except as noted
By numerical order

39 - Unknown (pickup style) Light Conventional Truck Type
40 - Cab Chassis-Based (includes light stake, light dump, light tow, rescue vehicles)
41 - Truck-Based Panel
42 - Light-Truck-Based motorhome (chassis mounted)
45 - Other Light Conventional Truck Type (includes stretched suburban limousine)
48 - Unknown Light-Truck Type (not a pickup)
49 - Unknown Light-Vehicle Type (automobile, utility vehicle, van or light truck)
50 - School Bus
51 - Cross-Country/Intercity Bus (i.e., Greyhound)
52 - Transit Bus (city Bus)
58 - Other Bus Type
59 - Unknown Bus Type
60 - Step Van
61 - Single-Unit Straight Truck (10,000 lbs<GVWR< or =19,500 lbs.)
62 - Single-Unit Straight Truck (19,500 lbs<GVWR< or =26,000 lbs.)
63 - Single-Unit Straight Truck (GVWR>26,000 lbs)
64 - Single-Unit Straight Truck (GVWR unknown)
65 - Medium/Heavy Truck-Based Motorhome
66 - Truck/Tractor (cab only, or with any number of trailing units: any weight)
67 - Medium/Heavy Pickup (GVWR > 10,000 lbs, since 2001)
71 - Unknown if single-unit or combination-unit Medium Truck (10,000 lbs < GVWR < 26,000 lbs)
72 - Unknown if single-unit or combination-unit Heavy Truck (GVWR>26,000 lbs.)
73 - Camper or Motorhome, Unknown Truck Type
78 - Unknown Medium/Heavy Truck Type
79 - Unknown Truck Type
80 - Motorcycle
81 - Moped (motorized bicycle)
82 - Three-Wheel Motorcycle/Moped - Not All-Terrain Vehicle

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1991 and later

Except as noted
By numerical order

83 - Off-Road Motorcycle (2-wheel, since 1993)
88 - Other Motored Cycle Type (mini-bikes, motor scooters, pocket motorcycles, pocket bikes. since 2008)
88 - Other Motored Cycle Type (mini-bikes, motor scooters, 1991 – 07)
89 - Unknown Motored Cycle Type
90 - ATV (All-Terrain Vehicle; includes 3 or 4 wheels)
91 - Snowmobile
92 - Farm Equipment Other Than Trucks
93 - Construction Equipment Other Than Trucks (includes graders)
94 - Motorized Wheel Chair (since 1997)
97 - Other Vehicle Type (includes go-cart, fork-lift, city street sweeper, dune/swamp buggy, golf cart)
99 - Unknown Body Type

1982 to 1990

By numerical order

Variable = BODY_TYP

Element =
01 - Convertible
02 - 2-Door Sedan/HT/Coupe
03 - 3-Door/2-Door Hatchback
04 - 4-Door Sedan/HT
05 - 5-Door/4-Door Hatchback
06 - Station Wagon
07 - Hatchback/number of doors unknown
08 - Other Auto
09 - Unknown Auto Type
10 - Auto Pickup
11 - Auto Panel
12 - Short Utility/Not Truck-Based
13 - Large Limousine
14 - 3-Wheel vehicle unknown body type
20 - Motorcycle
21 - Moped
27 - 3-Wheel Motorcycle or Moped
28 - Other Cycle
29 - Unknown Cycle

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1982 to 1990

By numerical order

30 - School Bus
31 - Cross-Country/Intercity
32 - Transit Bus
38 - Other Bus
39 - Unknown Bus
40 - Van
41 - Van Commercial Cutaway
42 - Van Motorhome
48 - Other Van type
49 - Unknown Van type
50 - Pickup
51 - Pickup w/Slide-In Camper
52 - Pickup-Based Motorhome
53 - Cab Chassis Based
54 - Truck-Based Panel
55 - Truck-Based SW
56 - Truck-Based Utility
58 - Other Light Conventional Truck
59 - Unknown Light Convent Truck
67 - Utility, Base Body Unknown
69 - Unknown Light Truck
70 - Straight Truck, low GVW
71 - Straight Truck, medium GVW
72 - Straight Truck, high GVW
73 - Medium/Heavy Truck Motorhome
74 - Truck/Tractor
75 - Unknown Medium Truck
76 - Unknown Heavy Truck
77 - Camper/Motorhome
78 - Single Unit Straight Truck GVW Unknown
79 - Unknown Truck Type
80 - Snowmobile
81 - Farm Equipment/Not Trucks
82 - ATV, Dune/Swamp Buggy
83 - Construction Equipment/Not Trucks
88 - Other
89 - Unknown Other Vehicle
90 - 3-Wheel Vehicle Unknown Body Type
99 - Unknown Body Type

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

Also see V_CONFIG and CARGO_BT for trucks and buses as well as VIN_BT, VIN body type.

1975 to 1981

By numerical order

Variable = BODY_TYP

Element =
- 01 - Convertible
- 02 - 2-Door Sedan HT/Coupe
- 03 - 4-Door Sedan HT
- 04 - Hatchback
- 05 - Car-Pickup Body
- 06 - Station Wagon
- 07 - On/Off Road Vehicle – Jeep CJ-S, Bronco, Blazer, Scout, etc. (1975 – 79)
- 08 - Other Auto
- 09 - Unknown Auto Type
- 15 - Motorcycle
- 16 - Moped
- 17 - Other Cycle
- 18 - Unknown Cycle
- 25 - School Bus
- 26 - Cross-County
- 27 - Transit Bus
- 28 - Other Bus
- 29 - Unknown Bus
- 35 - Snowmobile
- 36 - Farm Equipment
- 37 - Dune/Swamp Buggy
- 38 - Construction Equipment
- 39 - Ambulance/Hearse Type
- 40 - Large Limousine
- 41 - Camper/Motorhome
- 42 - Fire Truck
- 43 - On/Off-Road Vehicle – Jeep CJ-S, Bronco, Blazer, Scout, etc. (1980 – 81)
- 44 - Other Special Vehicle
- 45 - Ambulance EMS
- 50 - Pickup
- 51 - Van
- 52 - Truck-Based Station Wagon
- 53 - Straight Truck, Low GVW
- 54 - Straight Truck, Medium GVW

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

1975 to 1981

By numerical order

55 - Straight Truck, High GVW
56 - Straight Truck, Unknown GVW
57 - Two-Unit Truck
58 - Multi-Unit Truck
59 - Truck-Tractor
60 - Unknown Type Truck
99 - Unknown

Vehicle (Body Type) Classification

Variable = BODY_TYP by NHTSA vehicle category

NHTSA has precise definitions for several vehicle categories, such as passenger cars, pickups, buses, etc. For some categories, one will also need the variable TOW_VEH.

LE is less than or equal
EQ is equal

Vehicle Body Type Classification	Data Year and Code		
	1975-1981 (BODY_TYP)	1982-1990 (BODY_TYP)	1991 and later (BODY_TYP)
Passenger Cars	01 LE BODY_TYP LE 09	01 LE BODY_TYP LE 11 OR BODY_TYP EQ 67	01 LE BODY_TYP LE 11
Light Trucks	BODY_TYP EQ 43 OR BODY_TYP EQ 50 OR BODY_TYP EQ 52 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 0)	BODY_TYP EQ 12 OR 50 LE BODY_TYP LE 51 OR 53 LE BODY_TYP LE 56 OR 58 LE BODY_TYP LE 59 OR 68 LE BODY_TYP LE 69 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])	14 LE BODY_TYP LE 19 OR 30 LE BODY_TYP LE 41 OR 45 LE BODY_TYP LE 49 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])
Utility Vehicles Note that utility vehicles are also part of the light-truck category	BODY_TYP EQ 43	14 LE BODY_TYP LE 19 BODY_TYP EQ 12 OR BODY_TYP EQ 56 OR BODY_TYP EQ 68	14 LE BODY_TYP LE 19

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

Vehicle (Body Type) Classification

Variable = BODY_TYP BY NHTSA vehicle category

Vehicle Body Type Classification	Data Year and Code		
	1975-1981 (BODY_TYP)	1982-1990 (BODY_TYP)	1991 and later (BODY_TYP)
Pickups	BODY_TYP EQ 50	50 LE BODY_TYP LE 51	30 LE BODY_TYP LE 39 {See BODY_TYP value 67 from 2001}
Vans	BODY_TYP EQ 51	40 LE BODY_TYP LE 41 OR 48 LE BODY_TYP LE 49	20 LE BODY_TYP LE 22 OR 28 LE BODY_TYP LE 29 {OR 24 LE BODY_TYP LE 25 since 1993}
Light Trucks & Vans	BODY_TYP EQ 43 OR 50 LE BODY_TYP LE 52 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 0)	BODY_TYP EQ 12 OR 40 LE BODY_TYP LE 41 OR 48 LE BODY_TYP LE 51 OR 53 LE BODY_TYP LE 56 OR 58 LE BODY_TYP LE 59 OR 68 LE BODY_TYP LE 69 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])	14 LE BODY_TYP LE 22 OR 28 LE BODY_TYP LE 41 OR 45 LE BODY_TYP LE 49 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9]) {OR 24 LE BODY_TYP LE 25 since 1993}
Passenger Vehicles	01 LE BODY_TYP LE 09 OR BODY_TYP EQ 43 OR 50 LE BODY_TYP LE 52 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 0)	01 LE BODY_TYP LE 12 OR 40 LE BODY_TYP LE 41 OR 48 LE BODY_TYP LE 51 OR 53 LE BODY_TYP LE 56 OR 58 LE BODY_TYP LE 59 OR 67 LE BODY_TYP LE 69 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9])	01 LE BODY_TYP LE 11 OR 14 LE BODY_TYP LE 22 OR 28 LE BODY_TYP LE 41 OR 45 LE BODY_TYP LE 49 OR (BODY_TYP EQ 79 AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9]) {OR 24 LE BODY_TYP LE 25 since 1993}
Medium Trucks	53 LE BODY_TYP LE 54 OR BODY_TYP EQ 56	70 LE BODY_TYP LE 71 OR BODY_TYP EQ 75 OR BODY_TYP EQ 78	60 LE BODY_TYP LE 62 OR BODY_TYP EQ 64 OR BODY_TYPEQ 67 BODY_TYP EQ 71

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

Vehicle (Body Type) Classification

Variable = BODY_TYP BY NHTSA vehicle category

Vehicle Body Type Classification	Data Year and Code		
	1975-1981 (BODY_TYP)	1982-1990 (BODY_TYP)	1991 and later (BODY_TYP)
Heavy Trucks	BODY_TYP EQ 55 OR 57 LE BODY_TYP LE 59 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 1)	BODY_TYP EQ 72 OR BODY_TYP EQ 74 OR BODY_TYP EQ 76 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])	BODY_TYP EQ 63 OR BODY_TYP EQ 66 OR BODY_TYP EQ 72 OR BODY_TYP EQ 78 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])
Large Trucks	53 LE BODY_TYP LE 59 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 1)	70 LE BODY_TYP LE 72 OR 74 LE BODY_TYP LE 76 OR BODY_TYP EQ 78 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])	60 LE BODY_TYP LE 64 OR 66 LE BODY_TYP LE 67 OR 71 LE BODY_TYP LE 72 OR BODY_TYP EQ 78 OR (BODY_TYP EQ 79 AND [1 LE TOW_VEH LE 4])
Combination Trucks	([53 LE BODY_TYP LE 56] AND TOW_VEH EQ 1) OR 57 LE BODY_TYP LE 59 OR (BODY_TYP EQ 60 AND TOW_VEH EQ 1)	(70 LE BODY_TYP LE 72) AND [1 LE TOW_VEH LE 4]) OR BODY_TYP EQ 74 OR (75 LE BODY_TYP LE 76) AND [1 LE TOW_VEH LE 4]) OR (78 LE BODY_TYP LE 79) AND [1 LE TOW_VEH LE 4])	(60 LE BODY_TYP LE 64 AND [1 LE TOW_VEH LE 4]) OR (71 LE BODY_TYP LE 72 AND [1 LE TOW_VEH LE 4]) OR (78 LE BODY_TYP LE 79 AND [1 LE TOW_VEH LE 4]) OR BODY_TYP EQ 66
Single-Unit Trucks		[70 LE BODY_TYP LE 72 OR 75 LE BODY_TYP LE 76 OR BODY_TYP EQ 78] AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9]	[60 LE BODY_TYP LE 64 OR 71 LE BODY_TYP LE 72 OR BODY_TYP EQ 78 OR BODY_TYP EQ 67] AND [TOW_VEH EQ 0 OR TOW_VEH EQ 9] *See V_CONFIG*
Motorcycles	15 LE BODY_TYP LE 18	20 LE BODY_TYP LE 29	80 LE BODY_TYP LE 89
Buses	25 LE BODY_TYP LE 29	30 LE BODY_TYP LE 39	50 LE BODY_TYP LE 59 *See V_CONFIG*

(Continued on Next Page)

Body Type (Continued)

1991 and later

* Within the yearly NHTSA publication Traffic Safety Facts, the term "Light Trucks" includes "Vans."

Note BODY_TYP 12, large limousines and BODY_TYP 13, three-wheel automobiles or automobile derivatives, are not included as part of Passenger Cars or Passenger Vehicles.

When defining **School Buses** 1993 and later be sure to include the **new** body type **24 (van-based school bus)**, However, body type 24 is not part of Buses

When defining **Transit Buses** 1993 and later be sure to include the **new** body type **25 (van-based transit bus)**, However, body type 25 is not part of Buses

Note: A single-unit truck that tows another vehicle, or a bobtail, is considered a combination truck.

1982 to 1990

* Within the yearly NHTSA report Fatal Accident Report System, the term "Light Truck" includes vans. Utility vehicles are also part of the light-truck category.

Note: BODY_TYP 13, large limousines and BODY_TYP 14, three-wheel automobiles or automobile derivatives, are not included as part of Passenger Cars or Passenger Vehicles.

Note: A single-unit truck that tows another vehicle, or a bobtail by itself, is considered a combination truck.

1975 to 1981

* Within the yearly NHTSA report Fatal Accident Reporting System, the term "Light Trucks" includes Vans.

** Note that utility vehicles are also part of the light truck category

The body type data does not track with the original documentation. For example, the documentation states that BODY_TYP EQ 7 is for utility vehicles. However, when the files are examined one sees that BODY_TYP EQ 43 is the value that will provide the desired result. The files have been modified to make the early years for this variable compatible with 1981.

Note: BODY_TYP 40, large limousines, are not included as part of Passenger Cars or Passenger Vehicles.

City/County

The city data are found in the Accident File

1975 and later

Variable = CITY

Element = Blanks

0000	- Not Applicable
0001 – 9996	- Use GSA Geographical Codes
9997	- Other
9999	- Unknown

Variable = COUNTY

Element = Blanks

000	- Not Applicable
001 – 996	- Use GSA Geographical Codes
997	- Other
999	- Unknown

Note: GSA geographical codes are some what stable. Occasionally one code will be divided into two codes.

If you need a copy of the current city/county codes contact GSA at 202-501-0176 or 202-219-0077.

Date

1975 and later

Variables = DAY (*of the crash/accident, also in the Accident File*)

DEATH_DA (*Day of the month of the death*)

Element = 01 – 31 - The Day of the Month
99 - Unknown

1975 and later

Variables = MONTH (*of the crash/accident also in the Accident file)*

DEATH_MO (*Month of the death*)

Element = 01 – 12 - The Month (01 = January ... 12 = December)
99 - Unknown (since 2008)

1998 and later

Variable = DEATH_YR

Element = ALL four digits of the year, e.g., 1998 for 1998.
Note that a person can die the year after the crash year.

1975 to 1997

Variable = DEATH_YR

Element = Last two digits of the year, e.g., 92 for 1992.
Note that a person can die the year after the crash year

Death Certificate Number

1991 and later

Variable = CERT_NO

Element = Blanks
000000000000 - Not Applicable *(not a fatality)* 12 0's
Any Numeric Characters
999999999999 - Unknown 12 9's

First four digits is the GSA City element where the death occurred

9997 - No element for this city

9999 - City where death occurred cannot be found on death certificate

Digits 5 & 6 is GSA State Element

Last 6 digits are Sequence Number *(as assigned by State Vital Statistics Department)*

Drugs

1993 and later

Note the FARS coder may have used any of the three variables to code a result of a drug test. One must test all three variables to insure that the selected result is included.

Variables = DRUGRES1, or DRUGRES2, or DRUGRES3

Element =
- 000 - Not Tested for Drugs
- 001 - No Drugs Reported
- 100 – 295 - Narcotic*
- 300 – 395 - Depressant*
- 400 – 495 - Stimulant*
- 500 – 595 - Hallucinogen*
- 600 – 695 - Cannabinol*
- 700 – 795 - Phencyclidine (*PCP*) *
- 800 – 895 - Anabolic Steroid*
- 900 – 995 - Inhalant*
- 996 - Other Drugs
- 997 - Tested for Drugs, Results Unknown
- 998 - Tested for Drugs, Drugs Found, Type Unknown
- 999 - Unknown if Tested for Drugs

***See Specific Drug Listing in the "FARS Coding and Validation Manual"**

1991 to 1992

Variable = DRUG_RES

Element =
- 00 - Not Tested for Drugs
- 01 - No Drugs Reported
- 02 - Narcotic
- 03 - Depressant
- 04 - Stimulant
- 05 - Hallucinogen
- 06 - Cannabinol
- 07 - Phencyclidine (*PCP*)
- 08 - Inhalant
- 09 - Multiple Drugs (*From elements 02 to 08*)
- 10 - Other Drugs (*all other drugs excluding nicotine, aspirin, alcohol*)
- 97 - Tested for Drugs, Results Unknown
- 98 - Tested for Drugs, Drugs Found, Type Unknown
- 99 - Unknown if Tested for Drugs

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Drugs (Continued)

1993 and later

Variables = DRUGTST1 or DRUGTST2 or DRUGTST3

Element = 0 - Not Tested for Drugs
1 - Blood Test
2 - Urine Test
3 - Both: Blood and Urine Tests (since 1993)
7 - Unknown Test Type
8 - Other Type Test
9 - Unknown if Tested for Drugs

1991 to 1992

Variable = DRUGTEST

Element = 0 - Not Tested For Drugs
1 - Blood Test
2 - Urine Test
7 - Unknown Test Type
8 - Other Type Test
9 - Unknown if Tested for Drugs

1991 and later

Variable = DRUGS (*Police - Reported Drug Involvement*)

Element = 0 - No *(Drugs Not Involved)*
1 - Yes *(Drugs Involved)*
8 - Not Reported
9 - Unknown *(Police Reported)*

1991 and later

Variable = DRUG_DET *(Method of Other Drug Determination by Police)*

Element = Blank
1 - Evidential Test (*Blood, Urine*)
2 - Drug Recognition Technician (*DRT*) determination
3 - Behavioral
7 - Other
8 - Not Reported

(Continued on Next Page)

Drugs (Continued)

1987 to 1990

Variable = TOXCLGY

Element = 0 - No blood test given

BLOOD TEST GIVEN, RESULTS KNOWN

1 - No Drugs Reported
2 - Drugs Reported (*excluding nicotine, aspirin*)
3 - Not tested for Drugs

BLOOD TEST GIVEN, RESULTS UNKNOWN

7 - Test for Drugs, Results, Unknown
8 - Unknown if Tested for Drugs
9 - Unknown if Drug Test Given

Ejection Extrication

2007 and later

Variable = EJECTION

Element = Blank
- 0 - Not Ejected
- 1 - Totally Ejected
- 2 - Partially Ejected
- 3 - Ejected – Unknown Degree (since 2008)
- 8 - Not Applicable
- 9 - Unknown

1975 to 2006

Variable = EJECTION

Element = Blank
- 0 - Not Ejected or Not Applicable
- 1 - Totally Ejected
- 2 - Partially Ejected
- 9 - Unknown

In the mid 70s there were a large number of people coded as ejection unknown and a corresponding small number of people coded as not ejected. However, the totally ejected and partially ejected counts are the same magnitude as in later years.

1991 and later

Variable = EJ_PATH

Element = Blank
- 0 - Not Ejected/Not Applicable
- 1 - Through Side Door Opening *(all side doors)*
- 2 - Through Side Window *(all side windows, bus side windows)*
- 3 - Through Windshield *(front windshield only)*
- 4 - Through Back Window *(standard rear window, back window of Bronco, van)*
- 5 - Through Back Door/Tailgate *(station wagon tailgate, back door of truck, back door of Bronco, van)*
- 6 - Through Roof Opening *(sun roof, convertible top down, t-top, targa top)*
- 7 - Through Roof *(convertible top up)*
- 8 - Other Path *(e.g., back of pickup truck, torn-off roof, car cut in half)*
- 9 - Unknown/Unknown Path

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Ejection Extrication (Continued)

1975 and later

Variable = EXTRICAT

Element = Blank

0 - Not Extricated

1 - Extricated

9 - Unknown

From 1975 to 1976 the EXTRICAT and EJECTION variables were combined in a single field. The files were changed in 1977 to the current format. In 1975 and 1976 there are fewer persons identified as not extricated than in later years. Both the count of extricated persons and unknowns seem high for these years. From 1977 to 1981 there was not an edit check to prevent one coding an occupant as being both ejected and extricated. There are 69, 48, 83, 98, and 88 persons coded as both totally ejected and extricated in the 1977, 1978, 1979, 1980, and 1981 respectively.

In Massachusetts, if an occupant is not injured, data for Protection system use and ejection are not coded on the police crash report.

NHTSA'S Ejection	
Classification	Data Year and Element
	1975 and later (EJECTION)
Not Ejected	0
Ejected	1-3
Not Applicable	8
Unknown	9

Emergency Use

This comes from the Vehicle file.

1977 and later

Variable = EMER_USE

Element = 0 - No
1 - Yes (*Only if the vehicle was being used as an emergency vehicle at the time of the crash.)*

Fatal Injury at Work

1987 and later

Variable = WORK_INJ

Element = Blank
- 0 - No *(the injury was not at work)*
- 1 - Yes *(the injury was on the job)*
- 8 - Not Applicable *(the victim was not a fatality use)*
- 9 - Unknown

Fire Occurrence

This comes from the Vehicle file

1975 and later

Variable = FIRE_EXP

Element = Blank
0 - No Fire
1 - Fire Occurred in Vehicle during Crash

From 1975 to 1979 if an explosion occurred in the vehicle, with or without a fire, this variable would also be set to 1.

Harmful Event

HARM_EV is from the Accident File and is repeated here

2004 and later

Variable = HARM_EV First harmful event applies to the crash. The most harmful event variable M_HARM applies to the vehicle. Harmful events are judgment calls of the FARS analysts based on the data within the police crash report. Note that Most Harmful Event M_HARM was not collected prior to 1979.

Element = 01 - Overturn/Rollover

This element is used if a vehicle rotates 90 degrees or more, side-to-side or end-to-end, producing the first damage or injury. For motorcycles, laying the motorcycle down on its side is sufficient to code overturn if damage or injury is produced.

02 - Fire/Explosion

03 - Immersion

04 - Gas Inhalation

This element includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

05 - Fell/Jumped from Vehicle

The element is used when falling or jumping (not suicide) from the vehicle is the first event causing damage or injury. For example, a passenger of a motor vehicle in transport leans against the car door, it opens and the passenger falls out and is injured by the fall.

06 - Injured in Vehicle

Use where an occupant is injured during an unstabilized situation without a collision, Examples: a pickup truck stops short and its load crashes through the passenger compartment, injuring or killing the driver, or a part of the engine comes loose and bounces back into its own vehicle.

07 - Other Non-Collision

As an example, driving off a cliff where damage is not the result of an overturn or collision with an object

08 - Pedestrian

09 - Pedalcycle

10 - Railway Train

11 - Animal

This element is used for collisions with animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart, or other transport device. See element 49 for ridden animals and animals drawing transport devices. **See Driver Level-Related Factor. - 83 – Live Animal in Road to determine if it applies.**

12 - Motor Vehicle in Transport on Same Roadway

Use this element when one motor vehicle collides with another motor vehicle on an undivided highway or the same side of a divided highway.

13 - Motor Vehicle in Transport on Other Roadway

This element differs from Element 12 in that it applies to events where a vehicle leaves one roadway and enters a different roadway, having a collision with a motor vehicle in transport in a different roadway. Example: one vehicle travels across the median of a divided highway, enters oncoming traffic, and is struck; or when a vehicle traveling on an overpass leaves the trafficway and strikes or is stuck by vehicle traveling on a trafficway below.

Element 13 should not be used in an “at intersection crash” (where the First Harmful Event occurs in the intersection).

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

2004 and later

14 - Parked Motor Vehicle *(not In Transport)*

This element refers to the collision of a motor vehicle in transport with a motor vehicle not in transport. Parked motor vehicle includes vehicles parked outside the roadway and those parked in the roadway in lanes not designed for travel at the time of crash. *(Do not include Vehicle/Driver Level information for the parked vehicle. Do include Person Level information if there were occupants in the vehicle.)*. Occupants of parked motor vehicles are coded Non-motorists.

15 - Nonmotorist on Personal Conveyance

A personal conveyance is (1) a human-powered, non-motorized device not propelled by pedaling, (2) such devices even when motorized. Includes ride-able *toys (roller skates, inline skates, skateboards, skates, baby carriages, scooters, toy wagons)*, motorized ride-able toys *(motorized skateboard, motorized scooter, motorized toy car)*, devices for personal mobility *assistance (Segway-style devices, motorized and non-motorized wheelchairs, handicapped scooters)*.

Exclusions: Golf carts, low-speed vehicles *(LSV)*, go-carts, mini-bikes are excluded because they are motor vehicles *(see Collision with Motor Vehicle Elements.)*

16 - Thrown or Falling Object

This element is a non-collision event and, unless there is another collision during the crash, IMPACT POINTS for the vehicle involved must be coded 00 Examples: falling tree/rock, dropping/throwing something off bridge, throwing a snowball. However, it does not have to come from above, excludes cataclysms.

17 - Boulder

This element is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

18 - Other Object *(not fixed)*

This element is used for fallen trees, already lying in roadway; construction cones or barrels on road *(temporary)*.

See Element 45- Working Construction, Maintenance or Utility Vehicles for transport devices used as equipment *(i.e., cherry picker at work, paint striper at work, etc.)*.

19 - Building

20 - Impact Attenuator/Crash Cushion

This element is used if a device for controlling the absorption of energy is released during vehicle collision *("crash cushions")*. Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

21 - Bridge Pier or Abutment

This element refers to support structures most likely to be struck by vehicles passing under bridges *(see element 43-Other Fixed Object for vehicles striking the bottom of a bridge while traveling on a trafficway underneath it).* If the vehicle first strikes a concrete barrier protecting a bridge pier or abutment, use element 25-Concrete Traffic Barrier.

Bridge Pier – a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments.

Bridge Abutment – wall supporting the ends of a bridge generally retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood. *(Includes wing-walls.)*

22 - Bridge Parapet End

This element is used for components of the upper portion of bridges. The end of a low wall which runs along the outer most edge of the roadway or sidewalk on the bridge and usually composed of brick, stone, or concrete. The term "balustrade" is often used synonymously with "parapet."

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

2004 and later

23 - Bridge Rail

This element is for components of the upper portion of bridges. A wooden, brick, stone, concrete, or metal fence-like wall which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet.

g) A bridge does not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

h) See bridge components diagram for bridge elements 21, 22 and 23.

i) Barriers as in elements 24, 25 and 26 refer to a physical structure such as a guardrail, a concrete safety barrier or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

Element 50 *(Bridge Overhead Structure)* is used when striking the bottom of a bridge while traveling on a trafficway underneath it.

24 - Guardrail Face

This element represents a low barrier running along the edge of a road shoulder either on the right or the left and which has the primary longitudinal structure composed of metal *(plates, cable, mesh, box beam, etc.)*. A guardrail is differentiated from element 25-Concrete Traffic Barrier by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, these are metal whereas in concrete barriers these are concrete *(including concrete rails)*.

Guardrails that serve as bridge rails should be coded 23 - Bridge Rail.

25 - Concrete Traffic Barrier

Refers to the longitudinal traffic barriers constructed of concrete and located on the outside of the road surface, in a median, or in gore areas. This includes all temporary concrete barriers regardless of location *(i.e., temporary Jersey barrier on a bridge being used to control traffic during bridge repair/construction)*. Concrete walls (vertical side surfaces) do not apply here; see element 39-Wall.

When a vehicle is traveling under a bridge and strikes a concrete barrier used to protect the bridge pier or abutment, use element 25.

26 - Other Traffic Barrier

This element is used for all other longitudinal barriers such as wood or rock and unknown barrier composition types.

27 - Highway/Traffic Sign Post

This element is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in transport. Includes mile markers. *(See element 46 for traffic signal supports.)*

28 - Overhead Sign Support/Sign

This element is used when the sign supported is above the highway. The difference between elements 27 and 28 is the location of the sign *(overhead or the side of the road)*.

29 - Luminary/Light Support

This element refers to supports for highway lighting systems, not including other private lighting systems *(e.g., parking lot lights)*. Support does not include other fixed objects to which lighting is affixed *(e.g., telephone poles)*.

30 - Utility Pole

Electrical, telephone, cable and other utility pole supports.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

2004 and later

31 - Other Post, Other Pole, or Other Support

This element is used for posts other than highway signs. (e.g., reflectors on poles along side of roadway, parking meters, flag poles, etc.). (For mailbox posts, use element 53 – Mail Box (since 2004))

32 - Culvert

This element is any structure entirely under the roadway *(driveway or entranceway)* and less than 20 feet in span measured along the center line of the roadway.

33 - Curb

This element is a concrete or asphalt structure up to 12 inches in height, which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Be careful that the PAR provides some indication that damage has occurred when a vehicle strikes a curb.

34 - Ditch

35 - Embankment - Earth

36 - Embankment - Rock, Stone, or Concrete

37 - Embankment - Material Type Unknown

Element 35-37 *(Embankments) are raised structures to hold back water, to carry a roadway, or the result of excavation or washout (including erosion)* that may be faced with earth *(element 35)* or rock *(sometimes called a berm)*, stone or concrete *(element 36)*. An embankment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

In crashes involving a field approach or crossing, if in doubt about when to use elements 32, 34 *(Culvert/Ditch)* or elements 35-37 *(Embankment)*, use this criteria:

m) Use element 32, 34 if the driver would not have been able to recover from the ditch even if there had been no field approach *(crossing)*.

n) Use element 35, 36, 37 if the driver would have been able to recover from the ditch, but struck the field approach *(crossing)* prior to doing so.

o) Use element 35, 36, 37 if it is not known whether or not the driver would have been able to recover from the ditch and a field approach *(crossing)* is involved.

38 - Fence

This element includes the fence posts. A fence can be made of wood, chain link, stone, etc. *(not shrub hedges serving as containment for property).*

39 - Wall

This element is a primarily vertical *(± 15 degrees from vertical)* structure composed of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas but not for containment as in the primary function of a fence. Also not included as walls are wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls should be coded as element 21.

40 - Fire Hydrant

41 - Shrubbery

42 - Tree (Standing Tree Only)

This element is used when a vehicle strikes a standing tree. If a vehicle strikes a tree lying in the roadway, use element 18 – Other Object (Not Fixed). If a tree falls on a vehicle as it is passing by, use element 16 – Thrown or Falling Object.

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

2004 and later

43 - Other Fixed Object

This is used when the object is fixed *(considered a permanent structure)* and is not described by any of the other fixed object elements, includes utility wires and guy wires attached to utility poles.

44 - Pavement Surface Irregularity

Potholes, grooves, and grates are examples.

45 - Working Construction, Maintenance or Utility Vehicles

This element is used when the motor vehicle in transport strikes a construction, maintenance, or utility vehicle, which is working and not "in transport." Examples: cherry picker working on the telephone lines, a paint striper vehicle painting lines on the road, a tractor mowing grass on trafficway, a county/state snow plow plowing snow, a highway dump truck dumping asphalt for a new travel lane, etc.

Note: Before 2004, this element was called "Transport Device Used as Equipment." It included other working activities in addition to construction, maintenance, and utility work on trafficways. From 2004 forward, element 45 excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, police vehicles at a construction work site, etc.). Use Related Factors Vehicle Level element 42-Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) to identify these vehicles.

If a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of a crash, at a traffic stop, as traffic control, or at a construction/maintenance site. The question becomes, Has its function changed from being a motor vehicle in transport to a working vehicle?" The answer is "No." These situations are treated as motor vehicles in transport striking another motor vehicle in transport (elements 12 or 13 are used). Use Related Factors – Vehicle Level element 41 – Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities to identify that this vehicle was struck while performing these work activities.

Taxis/limousines and commercial buses, etc., are always considered to be "in transport" because their primary work function is to transport people from one place to another. *(See elements 12, 13, or 14.)*

46 - Traffic Signal Support/Signal

47 - Vehicle Occupant Struck or Run Over by Own Vehicle (since 1997)

Use this element when an occupant falls or comes out of a vehicle and is struck or run over by that vehicle. This does not apply to occupants ejected during overturns.

48 - Collision With Snow Bank

Used when snowfall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

49 - Ridden Animal or Animal-Drawn Conveyance

This element is used for collisions with animals being used as transportation. This includes ridden animals and animals (or teams of animals) drawing a transport device *(e.g., a horse drawing a sleigh, a team of horses drawing a stagecoach, etc.)*.

50 - Bridge Overhead Structure

This element is used when a vehicle strikes the bottom of a bridge while traveling on a trafficway underneath the bridge.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

2004 and later

51 - Jackknife

This element applies to a condition that occurs to an articulated vehicle, *(any vehicle with a trailing unit(s) connected by a hitch, e.g., truck tractor or single-unit truck with one or more trailers, articulated bus, car pulling a boat on a trailer, etc.)* while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer*(s)* yaws from its normal straight-line path behind the power unit.

52 - Guardrail End

This element is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

53 - Mail Box

54 - Motor Vehicle Struck by Falling/Shifting Cargo or Anything Set in Motion by Another Motor Vehicle in Transport

55 - Other Not in-Transport Motor Vehicle (2005 – 07)

55 - Motor Vehicle in Motion Ouside the Trafficway (since 2008)

57 - Cable Barrier (since 2008)

60 - Cargo/Equipment Loss or Shift

This element should not be used for the vehicle setting the object in motion in a collision crash. Element 60 is only used as a first harmful event for non-collision crashes.

99 - Unknown

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

1982 to 2003

Variables = HARM_EV

Element = 01 - Overturn/Rollover

This element is used if a vehicle rotates 90 degrees or more, side-to-side or end-to-end, producing the first damage or injury. For motorcycles, laying the motorcycle down on its side is sufficient to code overturn if damage or injury is produced.

02 - Fire/Explosion

03 - Immersion

04 - Gas Inhalation

This element includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

05 - Fell from Vehicle *(Other Than Cargo/Equipment Loss or Shift)*

The element is used when falling or jumping (not suicide) from the vehicle is the first event causing damage or injury. For example, a passenger of a motor vehicle in transport leans against the car door, it opens, and the passenger falls out, and is injured by the fall.

06 - Injured in Vehicle *(Other Than Cargo/Equipment Loss or Shift)*

Use where an occupant is injured during an un-stabilized situation without a collision, Examples: a pickup truck stops short and its load crashes through passenger compartment, injuring or killing the driver, or a part of the engine comes loose and bounces back into its own vehicle.

07 - Other Non-Collision

As an example, driving off a cliff where damage is not the result of an overturn or collision with an object

08 - Pedestrian

09 - Pedalcycle

10 - Railway Train

11 - Animal

This element is used for collisions with animals (domesticated or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device. See element 49 for ridden animals and animals drawing transport devices. **See Driver Level-Related Factor. - 83 – Live Animal in Road to determine if it applies.**

12 - Motor Vehicle in Transport on Same Roadway

Use this element when one motor vehicle collides with another motor vehicle on an undivided highway or the same side of a divided highway.

13 - Motor Vehicle in Transport on Other Roadway

This element differs from element 12 in that it applies to events where a vehicle leaves one roadway and enters a different roadway, having a collision with a motor vehicle in transport in a different roadway. Example: One vehicle travels across the median of a divided highway, enters oncoming traffic and is struck; or, when a vehicle traveling on an overpass, leaves the trafficway and strikes or is stuck by a vehicle traveling on a trafficway below.

Element 13 should not be used in an “at intersection crash” (where the First Harmful Event occurs in the intersection).

14 - Parked Motor Vehicle *(Not in Transport)*

This element refers to the collision of a motor vehicle in transport with a motor vehicle not in transport. Parked motor vehicles include vehicles parked outside the roadway and those parked in the roadway in lanes not designed for travel at the time of crash. *(Do not include Vehicle/Driver Level information for the parked vehicle. Do include Person Level information if there were occupants in the vehicle.)* Occupants of parked motor vehicles are coded “Nonmotorists.”

15 - Other Type Nonmotorist

Wheelchair occupants, skateboarders, human-propelled sled riders, as an example.

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

1982 to 2003

16 - Thrown or Falling Object

This element is a non-collision event and, unless there is another collision during the crash, IMPACT POINTS for the vehicle involved must be coded "00" Examples: Falling tree/rock, dropping/throwing something off bridge, throwing a snowball. However, it does not have to come from above. Excludes Cataclysms

17 - Boulder

This element is a rock of sufficient mass that when struck by a motor vehicle moves very little and remains basically intact. It may be considered as a fixed object.

18 - Other Object *(not fixed)*

This element e.g., fallen tree, already laying in roadway; construction cones or barrels on road *(temporary)*. See element 45- Working Construction, Maintenance or Utility Vehicles for transport devices used as equipment *(i.e., cherry picker at work, paint striper at work, etc.)*.

19 - Building

20 - Impact Attenuator/Crash Cushion

This element is used if a device for controlling the absorption of energy is released during vehicle collision *("crash cushions")*. Its most common application involves the protection of fixed roadside objects such as bridge piers, elevated gores at exit ramps, etc. Examples include barrels filled with water or sand, and plastic collapsible structures.

21 - Bridge Pier or Abutment

This element refers to support structures most likely to be struck by vehicles passing under bridges *(see element 43-Other Fixed Object for vehicles striking the bottom of a bridge while traveling on a trafficway underneath it).* If the vehicle first strikes a concrete barrier protecting a bridge pier or abutment, use element 25-Concrete Traffic Barrier.

Bridge Pier – a square or round column of stone, concrete, brick, steel, or wood for supporting a bridge between abutments

Bridge Abutment – wall supporting the ends of a bridge generally retaining or supporting the embankment under bridge ends and composed of stone, concrete, brick, or wood, *(Includes wing-walls.)*

22 - Bridge Parapet End

This element is used for components of the upper portion of bridges. The end of a low wall which runs along the outer most edge of the roadway or sidewalk on the bridge and usually composed of brick, stone, or concrete. The term "balustrade" is often used synonymously with "parapet."

23 - Bridge Rail

This element is for components of the upper portion of bridges. A wooden, brick, stone, concrete, or metal fence-like wall which runs along the outermost edge of the roadway or sidewalk on the bridge or a rail constructed along the top of a parapet.

g) A Bridge does not need to support another roadway. It may be an overpass for a train or even for a viaduct (water conduit).

h) See bridge components diagram for bridge elements 21, 22 and 23.

i) Barriers as in elements 24, 25 and 26 refer to a physical structure such as a guardrail, a concrete safety barrier or a rock wall that has the primary function of preventing cross-median travel by deflecting and redirecting vehicles along the roadway on which they were traveling. Therefore, trees, curbing, rumble strips, and drain depressions are not barriers.

Element 50 *(Bridge Overhead Structure)* is used when striking the bottom of a bridge while traveling on a trafficway underneath it.

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

1982 to 2003

24 - Guardrail Face

This element represents a low barrier running along the edge of a road shoulder either on the right or the left and which has the primary longitudinal structure composed of metal *(plates, cable, mesh, box beam, etc.)*. A guardrail is differentiated from element 25-Concrete Traffic Barrier by the material making up the greatest part of the longitudinal portion of the structure. In the case of guardrails, this is metal whereas in concrete barriers this is concrete *(including concrete rails)*.
Guardrails, which serve as bridge rails, should be coded 23 – Bridge Rail.

25 - Concrete Traffic Barrier

Refers to the longitudinal traffic barriers constructed of concrete and located on the outside of the road surface, in a median, or in gore areas. This includes all temporary concrete barriers regardless of location *(i.e., temporary Jersey barrier on a bridge being used to control traffic during bridge repair/construction)*. Concrete walls (vertical side surfaces) do not apply here; see element 39-Wall.
When a vehicle is traveling under a bridge and strikes a concrete barrier used to protect the bridge pier or abutment, use element 25.

26 - Other Traffic Barrier

This element is used for all other longitudinal barriers such as wood or rock and unknown barrier composition types.

27 - Highway/Traffic Sign Post

This element is used when the post supporting a traffic sign, or the sign itself, is hit by a motor vehicle in transport, includes mile markers. *(See Element 46 for traffic signal supports.)*

28 - Overhead Sign Support/Sign

This element is used when the sign supported is above the highway. The difference between elements 27 and 28 is the location of the sign *(overhead or the side of the road)*.

29 - Luminary/Light Support

This element refers to supports for highway lighting systems, not including other private lighting systems *(e.g., parking lot lights)*. Support does not include other fixed objects to which lighting is affixed *(e.g., telephone poles)*.

30 - Utility Pole

Electrical, telephone, cable and other utility pole supports.

31 - Other Post, Other Pole, or Other Support

This element is used for posts other than highway signs (e.g., reflectors on poles along side of roadway, parking meters, flag poles, etc.). (For mailbox posts, use element 53 – Mail Box (since 2004).)

32 - Culvert

This element is any structure entirely under the roadway *(driveway or entranceway)* and less than 20 feet in span measured along the centerline of the roadway.

33 - Curb

This element is a concrete or asphalt structure up to 12 inches in height, which borders the roadway. It provides drainage control and pavement edge delineation. The face of the curb may be sloped or vertical. Be careful that the PAR provides some indication that damage has occurred when a vehicle strikes a curb.

34 - Ditch

35 - Embankment - Earth

36 - Embankment - Rock, Stone, or Concrete

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

1982 to 2003

37 - Embankment - Material Type Unknown

Element 35-37 *(Embankments are raised structures to hold back water, to carry a roadway, or the result of excavation or washout (including erosion)* that may be faced with earth *(element 35)* or rock *(sometimes called a berm)*, stone or concrete *(element 36)*. An embankment can usually be differentiated from a wall by its incline, whereas a wall is usually vertical. However, there are exceptions; such as a retaining wall which may be inclined or a vertical embankment caused by a natural event such as a washout.

In crashes involving a field approach or crossing, if in doubt about when to use elements 32, 34 *(Culvert/Ditch)* or elements 35-37 *(Embankment)* then use these criteria:

p) Use element 32, 34 if the driver would not have been able to recover from the ditch even if there had been no field approach *(crossing)*.

q) Use element 35, 36, 37 if the driver would have been able to recover from the ditch, but struck the field approach *(crossing)* prior to doing so.

r) Use element 35, 36, 37 if it is not known whether the driver would have been able to recover from the ditch and a field approach *(crossing)* is involved.

38 - Fence

This element includes the fence posts. A fence can be made of wood, chain link, stone, etc. *(not shrub hedges serving as containment for property).*

39 - Wall

This element is a primarily vertical *(± 15 degrees from vertical)* structure composed of concrete, metal, timber, or stone which is not part of a building or a fence but typically is used for retaining earth, abating noise, and separating areas but not for containment as in the primary function of a fence, also not included as walls are wing-walls, which are attached to ends of bridge abutments and extend back at an angle from the roadway. Wing-walls should be coded as element 21.

40 - Fire Hydrant

41 - Shrubbery

42 - Tree (Standing Tree Only)

This element is used when a vehicle strikes a standing tree. If a vehicle strikes a tree lying in the roadway, use element 18 – Other Object (Not Fixed). If a tree falls on a vehicle as it is passing by, use element 16 – Thrown or Falling Object.

43 - Other Fixed Object

This is used when the object is fixed *(considered a permanent structure)* and is not described by any of the other fixed object elements, includes utility wires and guy wires attached to utility poles.

44 - Pavement Surface Irregularity (1993 only)

Potholes, grooves, and grates, are examples.

45 - Transport Device Used as Equipment (1993 – 03)

This element includes a cherry picker at work, a paint striper vehicle striping road, tractor mowing grass on trafficway, snow plow plowing snow, etc.

45 - Working Construction, Maintenance or Utility Vehicles (since 2004)

This element is used when the motor vehicle in transport strikes a construction, maintenance or utility vehicle, which is working and not "in transport." Examples: cherry picker working on the telephone lines, a paint striper vehicle painting lines on the road, a tractor mowing grass on trafficway, a county/state snow plow plowing snow, a highway dump truck dumping asphalt for a new travel lane, etc.

Note: Before 2004, this element was called "Transport Device Used as Equipment." It included other working activities in addition to construction, maintenance and utility work on trafficways. From 2004 forward, element 45 excludes working activities other than highway construction, maintenance or utility vehicles (e.g., garage truck picking up trash, mail/delivery trucks while making deliveries, personal vehicles plowing snow, police vehicles at a construction work site, etc.).

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

1982 to 2003

Use Related Factors Vehicle Level element 42-Other Working Vehicle (Not Construction, Maintenance, Utility, Police, Fire, or EMS Vehicle) to identify these vehicles.
If a police, fire, or emergency medical vehicle is struck on the roadway while at the scene of an crash, at a traffic stop, as traffic control, or at a construction/maintenance site the question becomes, "Has its function changed from being a motor vehicle in transport to a working vehicle?" The answer is "No." These situations are treated as motor vehicles in transport striking another motor vehicle in transport (elements 12 or 13 are used.) Use Related Factors – Vehicle Level element 41 – Police, Fire, or EMS Vehicle Working at the Scene of an Emergency or Performing Other Traffic Control Activities to identify that this vehicle was stuck while performing these work activities.
Taxis/limousines and commercial buses, etc, are always considered to be "in transport" because their primary work function is to transport persons from one place to another. *(See elements 12, 13, or 14).*

46 - Traffic Signal Support/Signal

47 - Vehicle Occupant Struck or Run Over by Own Vehicle (since 1997)

Use this element when an occupant falls or comes out of a vehicle and is struck or run over by that vehicle. This does not apply to occupants ejected during overturns.

48 - Collision With Snow Bank (since 1997)

Used when snow fall and/or road plowing creates essentially fixed barriers of snow/ice which are not snow-covered earth or rock embankments.

49 - Ridden Animal or Animal-Drawn Conveyance (since 1998)

This element is used for collisions with animals being used as transportation. This includes ridden animals and animals (or teams of animals) drawing a transport device *(e.g., a horse drawing a sleigh, a team of horses drawing a stage coach, etc.)*.

50 - Bridge Overhead Structure

This element is used when a vehicle strikes the bottom of a bridge while traveling on a trafficway underneath the bridge.

51 - Jackknife *(causing injury or damage)* (since 2004)

This element applies to a condition that occurs to an articulated vehicle *(any vehicle with one or more trailing units connected by a hitch, e.g., truck tractor or single-unit truck with one or more trailers, an articulated bus, a car pulling a boat on a trailer, etc.)* while in motion. The condition reflects a loss of control of the vehicle by the driver in which the trailer yaws from its normal straight-line path behind the power unit.

52 - Guardrail End (since 2004)

This element is coded if a vehicle strikes the end of a guardrail. Guardrails can have a separate flat or rounded piece of metal attached to the end of an expanse of guardrail face.

53 - Mail Box (since 2004)

54 - Motor Vehicle Struck by Falling/Shifting Cargo or Anything Set in Motion by Another Motor Vehicle In Transport (since 2004)

60 - Cargo/Equipment Loss or Shift *(causing injury or damage, since 2004)*

This element should not be used for the vehicle setting the object in motion in a collision crash. Element "60" is only used as a first harmful event for non-collision crashes.

99 - Unknown

This is used when it is not known what the First Harmful Event was. For example, if a series of harmful events occurred, and it's unclear which one was first.

If either first harmful event, HARM_EV, or most harmful event, M_HARM, is used, it is often a good idea to construct a two-way table of harmful events by State and check for consistency. For example, in the 1989 FARS data in the cases where a vehicle fire was identified, that is FIRE_EXP =1, Virginia coded M_HARM as 02 Fire/Explosion for all cases.

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Harmful Event (Continued)

HARM_EV is from the Accident File and is repeated here

In the same year for the crashes where a vehicle fire was identified, that is FIRE_EXP =1, Connecticut, Delaware, Idaho, Kansas, Mississippi, New Hampshire, Oklahoma, Rhode Island, South Dakota, and Wyoming never coded M_HARM as 02 Fire/Explosion. That is, different states code harmful events differently.

1975 to 1981

Variable = HARM_EV

Element =
- 01 - Overturn
- 02 - Fire/Explosion
- 03 - Immersion
- 04 - Gas Inhalation
- 05 - Fell from Vehicle
- 06 - Injured in Vehicle
- 07 - Other Non-Collision
- 08 - Pedestrian
- 09 - Pedalcycle
- 10 - Railway Train
- 11 - Animal
- 12 - Motor Vehicle in Transport
- 13 - Motor Vehicle in Transport in Other Roadway
- 14 - Parked Motor Vehicle
- 15 - Other Type Nonmotorist
- 16 - Other Object
- 17 - Bridge or Overpass (1975 – 78 only)
- 18 - Building
- 19 - Culvert
- 20 - Curb or Wall
- 21 - Divider
- 22 - Embankment
- 23 - Fence
- 24 - Guard Rail
- 25 - Light Support
- 26 - Sign Post
- 27 - Tree/Shrubbery
- 28 - Utility Pole
- 29 - Other Pole/Support
- 30 - Impact Attenuator
- 31 - Other Fixed Object
- 32 - Bridge or Overpass *[Passing Under]* (1979 – 81 only)
- 33 - Bridge or Overpass *[Passing Over]* (1979 – 81 only)
- 99 - Unknown

Transported for Treatment By

2007 and later

Variable = HOSPITAL

Element = Blank
- 0 - No Transported
- 1 - Yes, EMS
- 2 - Yes, Law Enforcement
- 3 - Yes, Other
- 4 - Yes, Transported by Unknown Source
- 9 - Unknown

2001 to 2006

Variable = HOSPITAL

Element = Blank
- 0 - No
- 1 - Yes
- 9 - Unknown

Was the individual taken to a hospital or treatment facility?
See the section "Injury Severity" for Died at the Scene or Died En Route.

1977 to 2000

Variable = HOSPITAL

Element =
- 0 - No
- 1 - Yes
- 7 - Died at the Scene (1999 – 00)
- 8 - Died En Route (1999 – 00)
- 9 - Unknown

Was the individual taken to a hospital or treatment facility?

This field exists in the 1975 and 1976 file, but is not initialized, i.e., it has no values.

2001 and later

Died at Scene/En Route

Variable = DOA

Element = Blank
- 0 - Not Applicable
- 7 - Died at Scene
- 8 - Died En Route
- 9 - Unknown

Impact

This comes from the Vehicle file

1994 and later

Variables = IMPACT1 Initial (or first) impact point
IMPACT2 Principal impact point

Element = Blanks
00 - Non-Collision
01 – 12 - Clock Points (*See coding manual*)
13 - Top
14 - Undercarriage
18 - This Vehicle Set Something in Motion Causing Injury or Damage (Not a Clock Point, since 2004)

A vehicle that **propels part of its load or** has set something in motion striking another vehicle, person, or property and causing injury or damage may not have a normal impact point: **only the load has made contact with the person or other property**. However, a **value** must be coded. **Use Impact Point element 18 for these set-in-motion conditions.**

99 - Unknown

Note: The striking vehicle, not the vehicle struck, determines the underride/override condition. After the crash, in the case of an override or underride one vehicle is over the other. If the striking vehicle is over the other, then the crash is an override. If the striking vehicle is under the other, the crash is an underride. See Vehicle Role variable = IMPACTS.

See the note on the page about using and interpreting the variable UNDERIDE.

1975 to 1993

Variables = IMPACT1 Initial (*or first*) impact point
IMPACT2 Principal impact point

Element = 00 - Non-Collision
01-12 - Clock points (*See coding manual*)
13 - Top
14 - Undercarriage
15 - Underride (1980 – 93 only)
16 - Override (1982 – 93 only)
99 - Unknown

(Continued on Next Page)

Impact (Continued)

This is from the Vehicle File and is repeated here

Note the striking vehicle, not the vehicle struck, determines the underride/override condition. From 1975 to 1993 both the initial and principal impacts were counted. In the event and only in the event, that the initial or principal impact point was an underride/override were the variable IMPACT1 or IMPACT2 flagged/counted as such. However, all other underrides/overrides were not counted, nor should they have been counted. IMPACTS WERE COUNTED, NOT UNDERRIDES! Therefore, the variable UNDERIDE was added to the FARS system in 1994.

The variable UNDERIDE, like all FARS variables, is dependent on the data contained in police crash reports. The NASS/CDS system is based on the efforts of professional crash investigators performing detailed analysis of approximately 5,000 crashes a year. An analysis of the 1994-1996 FARS and NASS/CDS data systems and the 1997 Trucks in Fatal Accident file revealed that underrides and overrides are generally not identified on the police crash reports.

1994 and later

Variable = UNDERIDE

Element = 0 - No Underride or Override

WITH MOTOR VEHICLE IN TRANSPORT

1 - Underride *(Compartment Intrusion)*
2 - Underride *(No Compartment Intrusion)*
3 - Underride *(Compartment Intrusion Unknown)*

WITH OTHER VEHICLE

4 - Underride *(Compartment Intrusion)*
5 - Underride *(No Compartment Intrusion)*
6 - Underride *(Compartment Intrusion Unknown)*
7 - Override, Motor Vehicle in Transport

This element is used when a motor vehicle overrides another motor vehicle in transport.

8 - Override, Other Vehicle

This element is used when a motor vehicle overrides a parked motor vehicle or a transport device in use as equipment.

9 - Unknown if Underride or Override

Injury Severity

1975 and later

Variable = INJ_SEV

Element = Blank
- 0 - No Injury (O)
- 1 - Possible Injury (C)
- 2 - Nonincapaciting Evident Injury (B)
- 3 - Incapaciting Injury (A)
- 4 - Fatal Injury (K)
- 5 - Injured, Severity Unknown (since 1978)
- 6 - Died Prior to Crash

This code refers to non-motor vehicle fatalities that are involved in a crash resulting in a motor vehicle fatality. Examples include heart attack victims, homicide victims, and suicides.

- 9 - Unknown

Data from 1979 and earlier have been modified to conform to the structure above. It is important to realize that some States do not collect data on persons who were in a crash but were not injured. In particular, data for non-injured occupants for Indiana, Iowa, Maryland, and Virginia are often missing. If the analysis being performed depends on non-injured occupants -- for example some paired comparisons -- check the data at the State level.

Location (Nonmotorist)

1982 and later

Variable = LOCATION

Element = Blank
- 00 - Not Applicable - Vehicle Occupant (Includes Railway Train Occupants since 2006)
- 01 - Intersection - In Crosswalk
- 02 - Intersection - On Roadway, Not in Crosswalk
- 03 - Intersection - On Roadway, Crosswalk not Available
- 04 - Intersection - On Roadway, Crosswalk Availability Unknown
- 05 - Intersection - Not on Roadway
- 09 - Intersection - Unknown
- 10 - Non-Intersection - In Crosswalk
- 11 - Non-Intersection - On Roadway, Not in Crosswalk
- 12 - Non-Intersection - On Roadway, Crosswalk not Available
- 13 - Non-Intersection - On Roadway, Crosswalk Availability Unknown
- 14 - Non-Intersection - In Parking Lane
- 15 - Non-Intersection - On Road Shoulder
- 16 - Non-Intersection - Bike Path
- 17 - Non-Intersection - Outside Trafficway
- 18 - Non-Intersection - Other, Not a Roadway
- 19 - Non-Intersection - Unknown
- 99 - Unknown

1975 to 1981

Variable = LOCATION

Element =
- 00 - Not Applicable - Vehicle Occupant
- 01 - Intersection - In Crosswalk
- 02 - Intersection - Sidewalk, Median, Island, Shoulder, Other
- 03 - Intersection - On Roadway
- 04 - Intersection - Unknown
- 05 - Non-Intersection - In Crosswalk
- 06 - Non-Intersection - Sidewalk, Median, Island, Shoulder, Other
- 07 - Non-Intersection - Bike Path
- 08 - Non-Intersection - On Road Shoulder
- 09 - Non-Intersection - Outside Trafficway
- 10 - Non-Intersection - On Roadway
- 11 - Non-Intersection - In Parking Lane (since 1980)
- 12 - Non-Intersection - Unknown
- 99 - Unknown

Manner of Collision

This comes from the Accident File and is repeated in the Vehicle File.

See the note at the end of this section, on the change in the interpretation of Manner of Collision from 2001 to 2002

2002 and later

Variable = MAN_COLL

Element = Blanks

00 - Not Collision with Motor Vehicle (*in Transport 2002 – 04 only)*

Starting in 2005 crashes with any vehicle in transport or parked are coded 00.

01 - Front-to-Rear *(Includes Rear-End)*

A rear-end collision is one in which the front end of one vehicle collides with the back of another vehicle, while the two vehicles are traveling in the same direction. Use element 01 for all rear-end crashes and all crashes in which the front of one vehicle comes in contract with the rear of another in the First Harmful Event, regardless of the original direction of travel.

With these crashes a portion of the front bumper, grill, or headlights of one vehicle *(Clockpoint 12)* made contact with a portion of the rear bumper, taillights, or rear of the other vehicle *(Clockpoint 06)* in the First Harmful Event."

02 - Front-to-Front *(Includes Head-On)*

A "head-on" collision is one in which the front end of one vehicle collides with the front end of another vehicle, while the two vehicles are traveling in toward each other.

This element 02 is used for all head-on crashes and all crashes in which the fronts of both vehicles make contact as the First Harmful Event, regardless of the original direction of travel. Since 2002 direction of force is no longer used in determining head-on collisions.

03 - Angle - Front-to-Side, Same Direction

Used for angle crashes where the front of one vehicle makes contact with any point along the side of another in the First Harmful Event and the orientation of the vehicles at impact is in the same direction. This does not include right angles or broadside crashes *(See element 05)*.

04 - Angle - Front-to-Side, Opposite Direction

This element is used for angle crashes where the front of one vehicle makes contact with any point along the side of another in the First Harmful Event and the orientation of the vehicles at impact is in the opposing directions. This does not include right angles or broadside crashes *(See element 05)*.

05 - Angle - Front-to-Side, Right Angle *(Includes Broadside)*

Used for "broadside" or "T-bone" crashes in which front-to-side contact is made, and the vehicles are at a right-angle position. The front of one vehicle can make contact anywhere along the side of the other, not just Clockpoints 03 or 09.

06 - Angle - Front-to-Side/Angle-Direction Not Specified

Used when the police indicate that it is an "angle" crash without providing enough detail in the narrative and diagram to determine the orientation of the vehicles in the First Harmful Events.

07 - Sideswipe - Same Direction

(Continued on Next Page)

Manner of Collision *(Continued)*

This is repeated in the Vehicle and Person files.

See the note at the end of this section, on the change in the interpretation of Manner of Collision from 2001 to 2002

2002 and later

08 - Sideswipe - Opposite Direction

Sideswipe, elements 07 or 08 is used if the following are true for both vehicles involved in the First Harmful Event.

9 The initial engagement does not overlap the corner of either vehicle by more than four inches, so there is no significant involvement of the front or rear surface areas.

10 There is no pocketing of the impact in the suspension areas. The impact then swipes along the surface of the vehicle parallel to the direction of travel.

11 There is low retardation of the force along the surface of the vehicle.

12 End-swipes are coded as element 11 – Other.

09 - Rear-to-Side

This element is used for crashes where the rear of a vehicle, and not the front, makes contact with the side of another. This happens when a vehicle backs up into the side of another vehicle.

10 - Rear-to-Rear

11 - Other *(End-Swipes and Others)*

This element is used for collisions where one vehicle's end swipes another vehicle instead of their sides swiping. Also, this element is used for any collision between two motor vehicles where the collision is not described by elements 01-10. An example is when one vehicle is airborne and makes contact with its front to the other vehicle's hood or top.

99 - Unknown

(Continued on Next Page)

Manner of Collision *(Continued)*

This is repeated in the Vehicle and Person files.

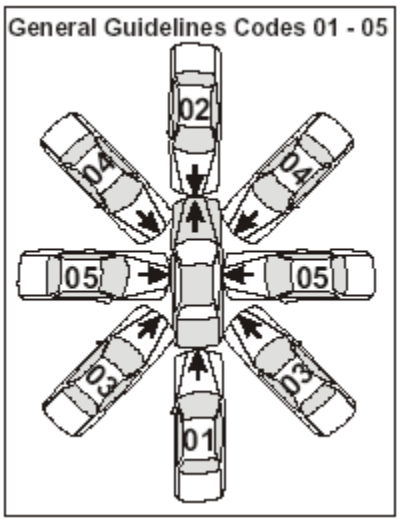
See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

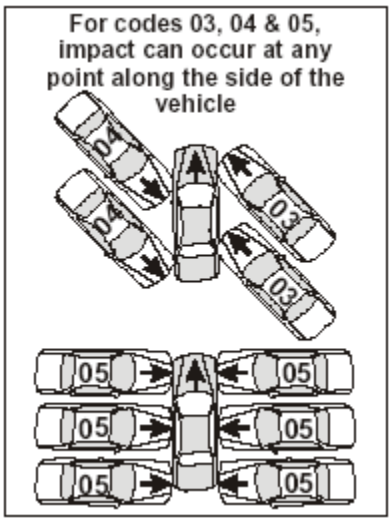
2002 and later

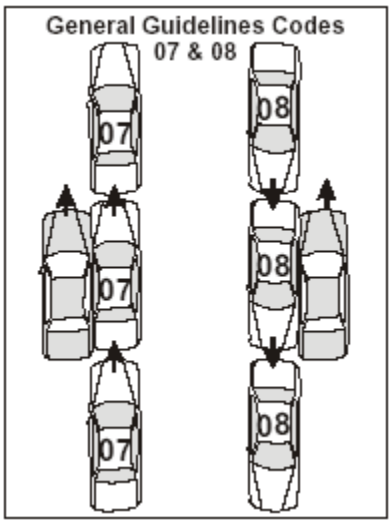
NOTES:

Refers only to crashes in which the FIRST HARMFUL EVENT is a collision between two motor vehicles in transport *(codes 12 and 13)*.

Use the Diagrams below to help determine Manner of Collision codes 01-05, 07-08







Since 2002, this element has been based on the impact location (front, side or rear) and vehicle orientation (facing in the same or opposite directions) of the contact vehicles in the First Harmful Event. The use of “direction of force” will no longer be used in determining this element. Prior to 2002, the “direction of force” immediately preceding the collision was allowed to be considered, especially in head-on collisions.

(Continued on Next Page)

Manner of Collision *(Continued)*
This is repeated in the Vehicle and Person files.

See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

1978 to 2001

Variable = MAN_COLL

Element = 0 - Not Collision With Motor Vehicle in Transport
1 - Rear-End
2 - Head-On
3 - Rear-to-Rear
4 - Angle
5 - Sideswipe, Same Direction
6 - Sideswipe, Opposite Direction
9 - Unknown

1975 to 1977

Variable = MAN_COLL

Element = 0 - Not Collision With Motor Vehicle in Transport
1 - Rear-End
2 - Head-On
3 - Rear-to-Rear
4 - Angle
7 - Sideswipe (May either be same or opposite direction)
9 - Unknown

Note in the original files, from 1975 to 1977 sideswipe was coded as 5 but has since been changed to 7. These years are not consistent with the documentation of the time.

(Continued on Next Page)

Manner of Collision *(Continued)*

This is repeated in the Vehicle and Person files.

See the note below on the change in the interpretation of Manner of Collision from 2001 to 2002

Note: From 1975 to 2001, the manner of collision is totally dependent on the directions of travel of the vehicles involved. The directions of travel of the vehicles is often misunderstood. The direction of a vehicle is determined by the **pre-crash condition** direction of travel, just before the vehicle goes out of control. Example (1): Assume two vehicles are heading toward each other on the same roadway, one going north and the other going south. If the southbound vehicle skids on a patch of ice and turns 180^{O} and immediately is struck in the rear by the vehicle going north, then the manner of collision is "Head-On" not "Rear-End." Example (2): Had the vehicle going north sideswiped the southbound vehicle, which after the ice skid was pointed north, the manner of collision would be "Sideswipe **Opposite** Direction," even though both vehicles are pointed north at the time of the sideswipe. **The pre-crash condition directions of travel, for both vehicles, determine the outcome.** These examples involve a rotation of a vehicle just before the crash and can account for 20 to 30 percent of the coded cases. See "Impact" in the vehicle section of this guide.

Starting in 2002 and later, the manner of collision is dependent on the geometry of the points of impact. That is, Example (1) above is now coded 01, Front-to-Rear (includes **Rear-End**) and Example (2), is now coded 07, Sideswipe, **Same** Direction. This is a major change in the MAN_COLL variable. Care must be taken when using this variable over a time period that spans 2001 to 2002.

NHTSA'S MANNER OF COLLISION CONVENTION			
Classification	**Data Year and Code (MAN_COLL)**		
	1975-1977	**1978-2001**	**2002 and later**
Not Collision with Motor Vehicle in Transport	0	0	00
Rear-End	1	1	01
Head-On	2	2	02
Angle	4	4	03-06
Sideswipe	7	5, 6	07-08
Other	3	3	09-11
Unknown	9	9	99

Model Year

This comes from the Vehicle File

1998 and later

Variable = MOD_YEAR

Element = 0000 - 9998 (A 4 Digit Field)
9999 - Unknown

A vehicle manufactured as a 1985 model is coded as 1985.

1975 to 1997

Variable = MOD_YEAR

Element = 00 - 98
99 - Unknown

A vehicle manufactured as a 1985 model is coded as 85.

Motorcycle Data

This comes from the Vehicle file

1975 and later

Variable = MCYCL_DS - This variable is repeated in the Person file.

Element = Motorcycle Displacement - This is the piston bore measured in cubic centimeters. This is a numeric value (*example, Honda 160 cc engine*). This field is 4 positions long.

1975 to 1981

Variable = MCYCL_TY

Element = Motorcycle Type (*or Bike Type*). This is the VINA Body Type (*example, Dirt Bike*). This information is in the VINA documentation.

Nonmotorist/Nonoccupant Striking Vehicle Number

This element applies only to nonmotorists/nonoccupants and reflects the vehicle that made contact with the nonmotorist/nonoccupant being coded.

The number must match the vehicle number of the striking vehicle. This number is similar to VEH_NO, except that the nonmotorist/nonoccupant was struck by the vehicle, rather than being within the vehicle.

1982 and later

Variable = N_MOT_NO

Element =	00	- Not Applicable - Vehicle Occupant
	01 – 98	- (Assigned Vehicle Number)
	99	- Unknown

Person Number

Each occupant of the vehicle is numbered and each nonoccupant is numbered, in the case of a nonoccupant the vehicle number is zero. The numbers for occupants are consecutive, for each vehicle, beginning with 01. Numbers are never skipped. Drivers do not have to be coded 01. Nonoccupants are identified by vehicle number 0 and are numbered consecutively starting with 01 for each nonmotorist. To get drivers see variable PER_TYP, under Person Type.

1975 and later

Variable = PER_NO

Element = 01 – 99

PER_NO can be used in merges, e.g., when merging the FARS person file with the multiple cause of death file.

Person Type

1994 and later

Variable = PER_TYP

Element =
- 01 - Driver
- 02 - Passenger of a Motor Vehicle in Transport
- 03 - Occupant of a Motor Vehicle Not in Transport
- 04 - Occupant of a Non-Motor Vehicle Transport Device
- 05 - Pedestrian
- 06 - Bicyclist
- 07 - Other Cyclist
- 08 - Persons on Personal Conveyances (since 2007)
- 08 - Other Pedestrian (includes Persons on Personal Conveyances, 1994 – 06)
- 09 - Unknown Occupant Type in a Motor Vehicle in Transport
- 10 - Persons In/On Buildings (since 2007)
- 19 - Unknown Type of Nonmotorist
- 99 - Unknown

1982 to 1993

Variable = PER_TYP

Element =
- 1 - Driver of a Motor Vehicle in Transport
- 2 - Passenger of a Motor Vehicle in Transport
- 3 - Occupant of a Motor Vehicle Not in Transport
- 4 - Occupant of a Nonmotor Vehicle Transport Device e.g., horse and buggy
- 5 - Nonoccupant Pedestrian
- 6 - Nonoccupant Bicyclist
- 7 - Nonoccupant Other Cyclist
- 8 - Nonoccupant Other or Unknown
- 9 - Unknown Occupant Type in a Motor Vehicle in Transport

1975 to 1981

Variable = PER_TYP

Element =
- 1 - Driver
- 2 - Passenger
- 3 - Nonmotorist: Pedestrian
- 4 - Nonmotorist: Pedalcylist
- 5 - Nonmotorist: Occupant of Non-Traffic-Unit Vehicle
- 8 - Nonmotorist: Other or Unknown
- 9 - Occupant: Unknown Type

(Continued on Next Page)

Person Type (Continued)

Note the early data has been modified to fit this format. For example, from 1975 to 1977 there was a value for fatal crashes involving a nonmotorist in an animal drawn vehicle. This data has been reclassified into one of the values above.

NHTSA'S Person Type			
Classification	Data Year and Element (PER_TYP)		
	1975-1981	1982-1993	1994 and later
Motorists (Occupants)			
Driver	1	1	01
Passenger	2, 9	2, 9	02, 09
Nonmotorists (Nonoccupants)			
Pedestrian	3	5	05
Pedalcyclist	4	6,7	06, 07
Other nonmotorist	5	3, 4	03, 04, 08
Other/Unknown nonmotorist	8	8	-
Unknown nonmotorist type	-	-	19
Unknown			
Unknown	-	-	99

Race/Hispanic Origin

2001 and later

Variable = HISPANIC
[This variable is only coded for fatalities]

Element = Blanks
- 00 - Not a Fatality (*Not Applicable*)
- 01 - Mexican
- 02 - Puerto Rican
- 03 - Cuban
- 04 - Central or South American
- 05 - European Spanish
- 06 - Hispanic - Origin Not Specified or Other Origin
- 07 - Non-Hispanic
- 99 - Unknown

2001 and later

Variable = RACE
[This variable is only coded for fatalities]

Element = Blanks
- 00 - Not a Fatality (*Not Applicable*)
- 01 - White
- 02 - Black
- 03 - American Indian (i*ncludes Aleuts and Eskimos*)
- 04 - Chinese
- 05 - Japanese
- 06 - Hawaiian (i*ncludes part-Hawaiian*)
- 07 - Filipino
- 18 - Asian Indian
- 19 - Other Indian (i*ncludes South and Central America*)
- 28 - Korean
- 38 - Samoan
- 48 - Vietnamese
- 58 - Guamanian
- 68 - Other Asian or Pacific Islander
- 78 - Asian or Pacific Islander, No Specific (*Individual*) Race
- 97 - Multiple Races (i*ndividual races not specified; ex., "mixed"*)
- 98 - All Other Races
- 99 - Unknown

(Continued on Next Page)

Race/Hispanic Origin (Continued)

1999 to 2000

Variable = HISPANIC
[This variable is only coded for fatalities]

Element = 00 - Not a Fatality, Not Applicable
01 - Mexican
02 - Puerto Rican
03 - Cuban
04 - Central or South American
05 - Other or Unknown Hispanic (*1999*)
05 - European Spanish (*2000*)
06 - Hispanic - Not Specified (*1999*)
06 - Other Hispanic Origin (*2000*)
07 - Non-Hispanic
99 - Unknown

1999 to 2000

Variable = RACE
[This variable is only coded for fatalities]

Element = 00 - Not a Fatality, Not Applicable
01 - White
02 - Black
03 - American Indian (includes Aleuts and Eskimos)
04 - Chinese
05 - Japanese
06 - Hawaiian (includes part-Hawaiian)
07 - Filipino
18 - Asian Indian
19 - Other Indian (includes South and Central America, 2000)
28 - Korean
38 - Samoan
48 - Vietnamese
58 - Guamanian
68 - Other Asian or Pacific Islander in Areas Reporting 18-58
78 - Combined Other Asian or Pacific Islander, includes elements 18-68 for areas that do not report them separately
97 - Multiple Races (individual races not specified; ex., “mixed”, 2000 only)
98 - All Other Races
99 - Unknown

Related Factors Person Level

Note: There are also vehicle-level-related factors in the Vehicle File, VEH_CF1 and VEH_CF2 and driver-related-factors, also in the Vehicle File, namely DR_CF1, DR_CF2, DR_CF3 and (DR_CF4 since 1997). There are also crash-related-factors CF1, CF2, and CF3 in the Accident File.

Note the FARS coder may have used any of the three variables to code a related factor. One must test all three variables to insure that the selected related factor is included.

Person-related-factors for all drivers are coded 00. Person-related-factors for non-drivers can have non-zero values as listed below.

1982 and later
except as noted

Variables = P_CF1 or P_CF2 or P_CF3

Element = 00 - Not Applicable – Driver/None

01 - Not Visible

Hidden by curve of road, vegetation, darkness, and glare, Dressed in dark clothing

02 - Darting, Running or Stumbling (since 1995) into Roadway

Condition denotes "entering from off roadway."
Walking included. Bicyclist can be used.

03 - Improper Crossing or Roadway or Intersection

The intention is to cross roadway and crossing improperly, Includes jaywalking

04 - Walking/Riding with or Against Traffic, Playing, Working, Sitting, Lying, Standing etc. in Roadway

Condition denotes "in the roadway"
Does not include "riding a bike in roadway, Does not include construction or maintenance personnel

05 - Interfering with Driver

Obstructing driver's view
Striking driver with body or object
Rambunctious individuals who make driver inattentive, even without touching driver or controls
Motorcycle passenger (*or other cyclist*) shifting weight or affecting driver control

06 - Ill, Passed Out (since 1995)/Blackout

Diabetic reactions, seizure, heart attack, high/low blood pressure, fainting

07 - Emotional (e.g., Depression, Angry, Disputed)

Fighting, disagreements, depressed, and emotionally upset.

08 - Mentally Challenged (since 1995)

Mental illness/retardation may be included.

09 - Construction/Maintenance/Utility Worker (since 1995) Highway department, contractor, utility company personnel, etc

10 - Inattentive

Reading, talking, eating

11 - Walking With Cane or Crutches

Can only be used to describe pedestrian or occupant of non-motor vehicle transport device

12 - Restricted to Wheelchair

This is primarily non-motorized wheelchair occupants outside of vehicle.
Only for occupants of non-motorized vehicle transport devices

13 - Paraplegic (1982 – 94)

(Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

13 - Motorized Wheelchair Rider (since 1998)

Pedestrian riding in a motorized wheelchair

14 - Impaired Due to Previous Injury

Includes only person injured from previous crash at this scene
See element 11 on Driver Level and element 17 on Related Factors-Person Level.
Element 19 on Crash Level is used with this element.

15 - Deaf (1982 – 94)

15 - Under the Influence of Alcohol, Drugs, or Medication (since 2008)

16 - Blind

Legally blind.

17 - Other Physical Impairment

Individuals missing a limb, an eye, or with hearing impairment/deaf
Also includes individuals with injuries resulting from previous incident, not a previous crash (at this scene) which is then coded under 14.
Paraplegic

18 - Mother of Dead Fetus

Fetus dies in or as a result of this crash.

19 - Pedestrian

This pedestrian is jogging.

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

20 - Leaving Vehicle Unattended in Roadway (1982 – 94)

20 - Running off Road (2000 and 2001 only)

21 - Overloading or Improper Loading of Vehicle with Passengers or Cargo

Overloading bicycle, passenger, or handlebars

22 - Towing or Pushing Vehicle Improperly (*before 2003*)

23 - Failing to [Dim Lights or, since 1995] Have Lights on When Required

Vehicle being used as equipment or bicyclist fails to have lights on when required.

24 - Operating Without Required Equipment

Bicyclists operating without required equipment; helmets, reflectors, lights, or equipment is defective.

25 - Creating Unlawful Noise or Using Equipment Prohibited by Law

26 - Following Improperly

Bicyclist following too closely or attempting to grab on to vehicle, Also applies to skateboard riders, rollerbladers, etc.

27 - Improper or Erratic Lane Changing

Bicyclists, rollerbladers, skateboard riders, etc., weaving in and out of traffic.

28 - Failure to Keep in Proper Lane or Running off Road (1982 – 99)

28 - Failure to Keep in Proper Lane (2000 and later)

Bicyclist fails to keep in bicycle lane.
Nonmotorist or a vehicle that is acting as equipment fails to stay in proper lane. Going straight in a turn lane

(Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

29 - Illegal Driving on Road Shoulder, in Ditch, on Sidewalk, on Median

Nonmotorists driving off pavement or roadway, physically driving on shoulder, etc

30 - Making Improper Entry to or Exit from Trafficway

Nonmotorist entering highway from adjacent pasture, field.
Nonmotorist entering highway on exit ramp, or exiting on entrance ramp, going the wrong way
Note: not to be confused with element50-Driving on Wrong Side of Road.

32 - Opening Vehicle Closure into Moving Traffic or While Vehicle is in Motion (since 2001)

Opening trunk while vehicle is moving
Opening door into moving traffic

33 - Passing where Prohibited by Posted Signs, Pavement Markings, Hill or Curve, or School Bus Displaying Warning not to Pass Line

Passing stopped school bus.
Crossing over solid line to pass
Passing uphill, mainly violations as designated by traffic controls

34 - Passing on Wrong Side

35 - Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle

Mainly passing violations based on faulty judgment.

36 - Operating the Vehicle in Other Erratic, Reckless, Careless or Negligent Manner (or Operating at Erratic or Suddenly Changing Speeds, since 1995)

Acceleration followed by sudden braking.

37 - Traveling on Prohibited Trafficway (since 1995)

Pedestrians and nonmotorists on areas prohibited by law, such as interstates

38 - Failure to Yield Right of Way

Primarily intersection-related
Care should be used to distinguish yield violations from lane violations.

39 - Failure to Obey Actual Traffic Signs, Traffic Control Devices or Traffic Officers; Failure to Obey Safety Zone Traffic Laws

Oftentimes incorrectly coded in conjunction with 38-Failure to Yield. Care must be used to distinguish from 38. When nonmotorist does not stop when required by traffic control, code in 39
When nonmotorist stops, but fails to yield, code as '38' (*4-way stops*)
Violating yield sign, code as 38 and 39.
Non-motorist passing around railroad gates

40 - Passing Through or Around Barrier Positioned to Prohibit or Channel Traffic

Denotes demarcated area

41 - Failure to Observe Warnings or Instructions on Vehicles Displaying Them

Failure to follow construction instructions (*i.e., arrows directing traffic mounted on vehicle), instructions on emergency vehicles (ambulances, fire trucks, police cars*).
Failure to observe right – turn warning on trucks, buses.
Failure to heed hazard lights on disabled vehicle, school bus arm

(Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

42 - Failure to Signal Intentions

Failure to signal either by vehicle turn signal or by hand

43 - Giving Wrong Signal

44 - Driving Too Fast for Conditions or in Excess of Posted Maximum

Conditions denote: weather, sharp curves, bridges, tunnels, school zone, traffic, person or road.
Speed greater than reasonable or prudent

45 - Driving Less Than Posted Maximum

Driving too slowly, so as to impede traffic

46 - Operating at Erratic or Suddenly Changing Speeds

47 - Making Right Turn From Left-Turn Lane, Left Turn From Right-Turn Lane

To distinguish from 27-Improper Lane Change; police officer must have knowledge of driver's intention.

48 - Making Other Improper Turn

To distinguish from 39-Failure to Obey Traffic Controls, element 48 implies judgment-oriented actions, not those explicitly stated by the law (too wide at right or left turn, unsafe U-turns).

49 - Driving Wrong Way on One-Way Trafficway

To distinguish from 50-Driving on Wrong Side of Road, On a divided highway, although each side is "one-way," driving against traffic should be coded as 50 not 49.

50 - Driving on Wrong Side of Road (intentional or unintentional, since 1995)

To distinguish from 28-Failure to Keep in Proper Lane; when a vehicle loses control, crosses a divided highway, it is coded as 28 not 50.

51 - Operator Inexperience

Nonmotorist unfamiliar with vehicle

52 - Unfamiliar with Roadway

Nonmotorist unfamiliar with roadway, based on the judgment of the police officer

53 - Stopping in Roadway (*vehicle not abandoned*)

53 signifies vehicles both in the process of stopping and already stopped. This code usually implies unusual condition and excludes stopping in traffic or stopping for a traffic control device.

54 - Underriding a Parked Truck

55 - Getting off/out of or on/Into Moving Transport Vehicle

Only describes passenger of a transport vehicle, occupant of a non-motor vehicle transport device, pedestrian, and "Other Pedestrian."

56 - Getting off/out of or on/Into Non-Moving Transport Vehicle (1982 – 01 only)

56 - Non-Driver Flees Scene (since 2005)

57 - Improper Tire Pressure (since 1995)

Signifies that improper tire pressure is not a defect, but rather the irresponsibility of nonmotorist

58 - Locked Wheel (since 1995)

Occurs when braking too suddenly as noted by police officer

59 - Overcorrecting (since 1995)

Based on the judgment of the police officer, with knowledge of nonmotorist' intention
Over steering

(Continued on Next Page)

Related Factors Person Level (*Continued*)

1982 and later

except as noted

VISION OBSCURED BY

60 - Rain, Snow, Fog, Smoke, Sand, Dust

61 - Reflected Glare, Bright Sunlight, Headlights

62 - Curve, Hill, or Other Design Features (including traffic signs, embankment)

63 - Building, Billboard, [other structure, since 1995]

64 - Trees, Crops, Vegetation

65 - Motor Vehicle (including load)

Vision obscured by: Car stopped on roadway.
Tractor-trailer moving on road and School bus stopped, loading or unloading children.

66 - Parked Vehicle

Vision obscured by: Vehicle stopped on shoulder, in parking lane.

67 - Splash or Spray or Passing Vehicle

68 - Inadequate Lighting System

69 - Obstructing Angles on Vehicle

Vision obscured by: Obstructing angles on the driver's vehicle
Not to be confused with visual obstructions from other vehicles. (See elements 65 and 66.)

70 - Mirrors

Vision obscured by: Rear view, Side mirrors, and Others

71 - Mirrors - Other

72 - Other Visual Obstruction

Example, trailer (only) left parked.

AVOIDING, SWERVING, OR SLIDING DUE TO

73 - Severe Crosswind

74 - Wind From Passing Truck

75 - Slippery or Loose Surface

Refers to actual condition of roadway surface, i.e., loose gravel roadway
Slippery or old worn blacktop, Newly paved surface

76 - Tire Blow-Out or Flat

77 - Debris or Objects in Road

Nails, glass, trash cans, tire retread, trash, dead animals, pile of sand, etc.

78 - Ruts, Holes, Bumps in Road

79 - Live Animals in Road

80 - Vehicle in Road

Includes both contact and non-contact vehicles that remain at the scene

81 - Phantom Vehicle

Non-contact vehicle that leaves the scene as described by the police officer

82 - Pedestrian, Pedalcyclist, or Other Nonmotorist

83 - Ice, Snow, Slush, Water, (s*and, dirt, oil, wet leaves, since 1995)* on Road

This is for the substances on roadway that causes roadway to be slick, which may interfere with traction. These are not part of the roadway design (*see* element *"75").*

(Continued on Next Page)

Related Factors Person level (Continued)

1982 and later

except as noted

OTHER NONMOTORIST FACTORS

84 - Jay Walk (1982 – 94)
85 - Jog (1982 – 94 only)
86 - Emergency Services Personnel (since 2007)
87 - Police or Law Enforcement Officer (since 2002)
Federal, State or local law enforcement officer working at the time of the accident
Includes: Military and Park Police, Border Patrol and all other sworn law enforcement officers
88 - Seat Back Not in Normal Upright Position, Seat Back Reclined (since 2002)
90 - Nonmotorist Pushing a Vehicle
Not part of "Avoiding, Swerving or Sliding" section.
91 - Portable Electronic Devices (since 2008)
99 - Unknown

1975 to 1981

Note Values 02 to 06 correspond to 01 to 05 for the 1982 and later data. Values of 20 and higher correspond directly the same values for 1982 and later.

Variables = P_CF1 or P_CF2 or P_CF3

Element =
00 - Not Applicable - Driver/None - All Other Persons
01 - Physical Impairments
02 - Not Visible
03 - Darting or Running into Road
04 - Improper Crossing of Roadway or Intersection
05 - Walking/Riding With or Against Traffic, Playing, Working, Sitting, Lying, Standing, etc., in Roadway
06 - Interfering with Driver (since 1976)

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

20 - Leaving Vehicle Unattended in Roadway
21 - Overloading or Improper Loading of Vehicle with Passengers or Cargo
22 - Towing or Pushing Vehicle Improperly
23 - Failing to Have Lights on When Required
24 - Operating Without Required Equipment
25 - Creating Unlawful Noise or Using Equipment Prohibited by Law
26 - Following Improperly
27 - Improper or Erratic Lane-Changing
28 - Failure to Keep in Proper Lane or Running off Road
29 - Illegal Driving on Road Shoulder, in Ditch, on Sidewalk, on Median

(Continued on Next Page)

Related Factors Person Level (Continued)

1975 to 1981
NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

30 - Making Improper Entry to or Exit from Trafficway
33 - Passing Where Prohibited by Posted Signs, Pavement Markings, Hill, or Curve, or School Bus Displaying Warning Not to Pass
34 - Passing on Wrong Side
35 - Passing with Insufficient Distance or Inadequate Visibility or Failing to Yield to Overtaking Vehicle
36 - Operating the Vehicle in Other Erratic, Reckless, Careless or Negligent Manner
38 - Failure to Yield Right of Way
39 - Failure to Obey Traffic Signs, Traffic Control Devices or Traffic Officers, Failure to Observe Safety Zone
40 - Passing Through or Around Barrier Positioned to Prohibit or Channel Traffic
41 - Failure to Observe Warnings or Instructions on Vehicles Displaying Them
42 - Failure to Signal Intentions
43 - Giving Wrong Signal
44 - Driving Too Fast for Conditions or in Excess of Posted Speed Limit
45 - Driving Less Than Posted Maximum
46 - Operating at Erratic or Suddenly Changing Speeds
47 - Making Right Turn From Left Turn Lane or Making Left Turn From Right Turn Lane
48 - Making Improper Turn
49 - Driving Wrong Way on One-Way Roadway
50 - Driving on Wrong Side of Road
51 - Operator Inexperience
52 - Unfamiliar with Roadway
99 - Unknown

Protection System Use

1994 and later

Variable = REST_USE

Element = Blanks
- 00 - None Used/Not Applicable – Not a Motor Vehicle Occupant (since 2005)
- 00 - None Used - Vehicle Occupant; Not Applicable (1994 – 04)
- 01 - Shoulder Belt
- 02 - Lap Belt
- 03 - Lap and Shoulder Belt
- 04 - Child Safety Seat (1994 – 07)
- 04 - Child Safety Seat/Booster Seat – Type Unknown/Not Reported (since 2008)
- 05 - Motorcycle Helmet
- 06 - Bicycle Helmet
- 08 - Restraint Used – Type Unknown
- 10 - Child Safety Seat – Forward Facing (since 2008)
- 11 - Child Safety Seat – Rear Facing (since 2008)
- 12 - Booster Seat with lap/shoulder belt used properly (since 2008)
- 13 - Safety Belt Used Improperly
- 14 - Child Safety Seat Used Improperly (1994 – 07)
- 14 - Child Safety Seat/Booster Seat Used Improperly (since 2008)
- 15 - Helmets Used Improperly
- 99 - Unknown

Note: Bicycle helmets are sometimes worn while riding a variety of personal conveyances.

1991 to 1993

Variable = REST_USE

Element =
- 0 - None Used - Vehicle Occupant/Not Applicable-Nonmotorist
- 1 - Shoulder Belt
- 2 - Lap Belt
- 3 - Lap and Shoulder Belt
- 4 - Child Safety Seat
- 5 - Motorcycle Helmet
- 8 - Restraint Used - Type Unknown or Other Including Other Helmet
- 9 - Unknown

(Continued on Next Page)

Protection System Use (Continued)

1998 and later

Air Bag Availability / Deployment

Variable = AIR_BAG

Element = Blanks
- 00 - Nonmotorist (Not a Motor Vehicle Occupant (since2005)

DEPLOYED (for This Seat)
- 01 - From Front (steering wheel, dashboard, since 2007)
- 01 - Deployed Air Bag From Front (1998 – 06)
- 02 - From Side (door, seat, canopy, since 2007)
- 02 - Deployed Air Bag From Side (1998 – 06)
- 07 - From Other Direction (knee, airbelt, etc, since 2007)
- 07 - Deployed Air Bag Other Direction (1998 – 06)
- 08 - Deployed Air Bag Multiple Directions
- 09 - Deployed Air Bag Direction Unknown

NOT DEPLOYED (for This Seat)
- 20 - Air Bag Available but Not Deployed for This Seat
- 28 - Air Bag Available and Switched Off

UNKNOWN IF DEPLOYED
- 29 - Air Bag Available, Deployment Not Known for This Seat

NOT AVAILABLE
- 30 - Air Bag Not Available for This Seat
- 31 - Air Bag Previously Deployed and Not Replaced
- 32 - Air Bag Disabled or Removed
- 99 - Unknown (*If Airbag Available*)

1991 to 1997

Variable = AIR_BAG

Element =
- 0 - Nonmotorist
- 3 - Deployed Air Bag
- 4 - Non-Deployed Air Bag
- 9 - Unknown or Not Applicable

1990 only

Variable = AUT_REST (Also see MAN_REST, manual restraint)

Element =
- 0 - Nonmotorist
- 3 - Deployed Air Bag
- 4 - Non-Deployed Air Bag
- 9 - Unknown

(Continued on Next Page)

Protection System Use (Continued)

1975 to 1989

Variable = AUT_REST (*Also see MAN_REST, manual restraint*)

Element =
0 - Nonmotorist or Not Applicable
1 - Automatic Belt in Use
2 - Automatic Belt Not in Use
3 - Deployed Air Bag (*no data 1983 – 85*)
4 - Non-Deployed Air Bag (*no data 1983 – 87*)
5 - Passive Belt (*i.e., Passive Belt in Use*, *1977 – 79 only*)
9 - Unknown

From 1975 to 1979 the variable AUT_REST had a different coding structure. It has since been changed to the structure above.

1975 to 1990

Variable = MAN_REST (Also see AUT_REST, automatic restraint above)

Element =
0 - None Used - Vehicle Occupant; Not Applicable - Nonmotorist
1 - Shoulder Belt
2 - Lap Belt
3 - Lap and Shoulder Belt
4 - Child Safety Seat
5 - Motorcycle Helmet
8 - Restraint Used - Type Unknown or Other Including Other Helmet
9 - Unknown

Note: From 1975 to 1985 in Mississippi MAN_REST was always coded as 0.
In Massachusetts, if an occupant is not injured, data for restraint use and ejection are not coded on the police crash report.

NHTSA'S Protection System Use			
Classification	Data Year and Element		
	1975-1981 (MAN_REST)	1982-1993 (REST_USE)	1994-and later (REST_USE)
Not Used	0	0	00, 15
Used	1-5, 8	1-5, 8	01-06, 08, 10-14
Unknown	9	9	99

Note: Historically, child safety seat used improperly was classified as "Not Used." In June 2003, this attribute was re-classified as USED. All other improperly used protection systems were placed in categories as appropriate.

Roadway Function Class

This comes from the Accident File

1987 and later

Variable = ROAD_FNC

Element = Blanks

00 - None
01 - Rural Principal Arterial - Interstate
02 - Rural Principal Arterial - Other
03 - Rural Minor Arterial
04 - Rural Major Collector
05 - Rural Minor Collector
06 - Rural Local Road or Street
09 - Rural Unknown

11 - Urban Principal Arterial - Interstate
12 - Urban Principal Arterial - Other Freeways or Expressways
13 - Urban Other Principal Arterial
14 - Urban Minor Arterial
15 - Urban Collector
16 - Urban Local Road or Street
19 - Urban Unknown

99 - Unknown

1987 and later

Variable = ROUTE

Element = 1 - Interstate
2 - U.S. Highway
3 - State Highway
4 - County Road

LOCAL STREET

5 - Township
6 - Municipality
7 - Frontage Road (since 1994)
8 - Other
9 - Unknown

(Continued on Next Page)

Roadway Function Class (Continued)

This comes from the Accident File

1981 to 1986

Variable = ROAD_FNC

Element = 1 - Principal Arterial - Interstate
2 - Principal Arterial - Other Urban Freeways and Expressways
3 - Principal Arterial - Other
4 - Minor Arterial
5 - Urban Collector
6 - Major Rural Collector
7 - Minor Rural Collector
8 - Local Road or Street
9 - Unknown

Variable = LAND_USE

Element = 1 - Urban
2 - Rural
9 - Unknown

1975 to 1980

Variable = ROAD_FNC

Element = This variable is included in the format, but is not initialized. Do not use it.

1982 to 1986

Variable = CL_TWAY (see LAND_USE next page)

Element = 1 - Interstate
2 - Other U.S. Route
3 - Other State Route
4 - County Road
5 - Local Street
8 - Other Road
9 - Unknown

1981

Variable = CL_TWAY

Data were not available for this variable in 1981

(Continued on Next Page)

Roadway Function Class (Continued)

This comes from the Accident File

1975 to 1980

Variable = CL_TWAY (see LAND_USE below)

Element = 1 - Interstate
2 - Other Limited Access
3 - Other U.S. Route
4 - Other State Route
5 - Other Major Artery
6 - County Road
7 - Local Street
8 - Other Road
9 - Unknown

1975 to 1980

Variable = LAND_USE

The variable LAND_USE is defined by the Federal Highway Administration and does not necessarily coincide with the U.S. Census Bureau's definition or any other definition of urban or rural. It has been determined there are errors in the 1975 and 1976 data for this variable; consequently, care should be taken when comparing data over several years.

Element = 1 - Urban
2 - Rural
9 - Unknown

An interesting visual of rural and urban roadways can be found at:

http://ntl.bts.gov/lib/23000/23100/23121/09RoadFunction.pdf

(Continued on Next Page)

Roadway Function Class (Continued)

This comes from the Accident File

NHTSA'S Roadway Function Class Convention		
Classification	**Data Year and Element (ROAD_FNC)**	
	1981-1986	**1987and later**
Interstate, principal arterial	1	01, 11
Freeway and expressway, principal arterial	2	12
Principal arterial, other	3	02, 13
Minor arterial	4	03, 14
Collector	5, 6, 7	04, 05, 15
Local	8	06, 16
Unknown	9	09, 19, 99

NHTSA'S Land Use (Rural/Urban) Convention		
Classification	**Data Year and Element**	
	1981-1986 (LAND_USE)	**1987and later (ROAD_FNC)**
Rural	2	01-06, 09
Urban	1	11-16, 19
Unknown	9	99

NHTSA'S Interstate and Non-Interstate Convention			
Classification	**Data Year and Element**		
	1975-1980 (CL_TWAY)	**1981-1986 (ROAD_FNC)**	**1987 and later (ROAD_FNC)**
Interstate	1	1	01, 11
Non-Interstate	2-8	2-8	02-06, 12-16
Unknown	9	9	09, 19, 99

Rollover

This comes from the Vehicle File

1978 and later

Variable = ROLLOVER

Element = 0 - No Rollover
1 - First Event
2 - Subsequent Event

1975 to 1977

DATA NOT AVAILABLE

NHTSA'S Rollover	
Classification	Data Year and Element
	1978 and later (REL_JUNC)
No Rollover	0
Rollover	1-2

School-Bus-Related

This comes from the Accident File

1977 and later

Variable = SCH_BUS

School Bus - refers to a motor vehicle which satisfies the following criteria:

- externally identifiable to other traffic units as a school/pupil transport vehicle;
- operated or owned by a public school or private school;
- where the institution's students may range from pre-school through high school;
- whose occupants, if any, are associated with the institution; and,
- the vehicle is in operations at the time of the crash to and from the school or on a school-sponsored activity or trip.

Element = 0 - No

This element is used if it cannot be determined that a school bus or a vehicle functioning as a school bus was involved or if the "school bus" was merely a "phantom" vehicle in the crash and was not engaged in activity or movement related to boarding or discharging passengers *(e.g., a motorist claims a school bus ran him off the road but made no contact; a school bus in the left lane blocks the view of a motorist making a right-turn-on-red; etc.)*

1 - Yes

Crashes in which a vehicle functioning as a school bus was directly or indirectly involved
This element applies to crashes in which a school bus or a **vehicle functioning as a school bus** was directly or indirectly involved. Vehicles functioning as a school bus may not be externally identifiable as a school/ pupil transport vehicle, but do meet all of the other criteria above and, therefore, qualify as vehicles used as school buses.

Examples:

1. A transit bus at the time of the crash, used exclusively *(no other passengers except students)* to transport students to/from school or school-related activity.

2. Vans or station wagons used by schools to pick up/drop off students only *(does not include parents in private vehicles picking up/dropping off students)*.

The "school bus" does not have to be a traffic unit in the crash, but it must have been involved in some school-related activity *(e.g., children boarding or alighting from the bus; bus stopping at or pulling away from the location of such activity; etc.)*.

Note: Also check the variable SPEC_USE in the Vehicle File. When the variable SPEC_USE is set to the value 2 then the vehicle is used as a school bus.

This element applies to crashes in which a vehicle functioning as a school bus was directly or indirectly involved. The "school bus" does not have to be a traffic unit in the crash, but it must have been involved in some school-related activity (e.g., children boarding or alighting from the bus, bus stopping at or pulling from a location of such activity, etc.)

(Continued on Next Page)

School-Bus-Related (Continued)

This comes from the Accident File

If school-bus-related is yes, then the crash and all fatalities in that crash are school-bus-related.

A school bus crash is (1) a motor vehicle crash in which a school bus, with or without a pupil on board, is involved directly as a contact vehicle, or (2) a motor vehicle crash or an other-road-vehicle crash in which a school bus, with or without a pupil or board, is involved indirectly as a non-contact vehicle.

Additional explanation inclusions:

A collision involving a motor vehicle in transport in which one (or more) school bus strike*s* or *is* struck by another road vehicle *(directly involved).*

A collision involving a pedestrian in which a child approaching or leaving a school bus, stopped and with its red lights flashing, is struck and injured by a motor vehicle *(indirectly involved)*.

A collision crash or non-collision crash involving a motor vehicle in transport passing a school bus stopped and with its red lights flashing *(the school bus is a non-contact vehicle indirectly involved)*.

A collision crash in which a child approaching or leaving a school bus, stopped and with its red light flashing, is struck and injured by a pedalcyclist *(school bus indirectly involved)*.

Additional explanation exclusions:

A collision crash or non-collision crash involving a motor vehicle which is normally used as a school bus, but is carrying only senior citizens when the collision occurs.

Seating Position

1982 and later

Variable = SEAT_POS

Element =
- 00 - Nonmotorist (1982 – 04)
- 00 - Not a Motor Vehicle Occupant (since 2005)
- 11 - Front Seat - Left Side (Driver's Side)
- 12 - Front Seat - Middle
- 13 - Front Seat - Right Side
- 18 - Front Seat - Other
- 19 - Front Seat - Unknown
- 21 - Second Seat - Left Side (Driver's Side)
- 22 - Second Seat - Middle
- 23 - Second Seat - Right Side
- 28 - Second Seat - Other
- 29 - Second Seat - Unknown
- 31 - Third Seat - Left Side (Driver's Side)
- 32 - Third Seat - Middle
- 33 - Third Seat - Right Side
- 38 - Third Seat - Other
- 39 - Third Seat - Unknown
- 41 - Fourth Seat - Left Side (Driver's Side)
- 42 - Fourth Seat - Middle
- 43 - Fourth Seat - Right Side
- 48 - Fourth Seat - Other
- 49 - Fourth Seat - Unknown
- 50 - Sleeper Section of Cab (Truck)
- 51 - Other Passenger in enclosed passenger or cargo area [Includes passengers in 5th row of 15-seat, 5-row vans - since 2002] [Includes injured full-size-bus occupants]
- 52 - Other Passenger in unenclosed passenger or cargo area
- 53 - Other Passenger in passenger or cargo area, unknown whether or not enclosed
- 54 - Trailing Unit
- 55 - Riding on Vehicle Exterior
- 99 - Unknown

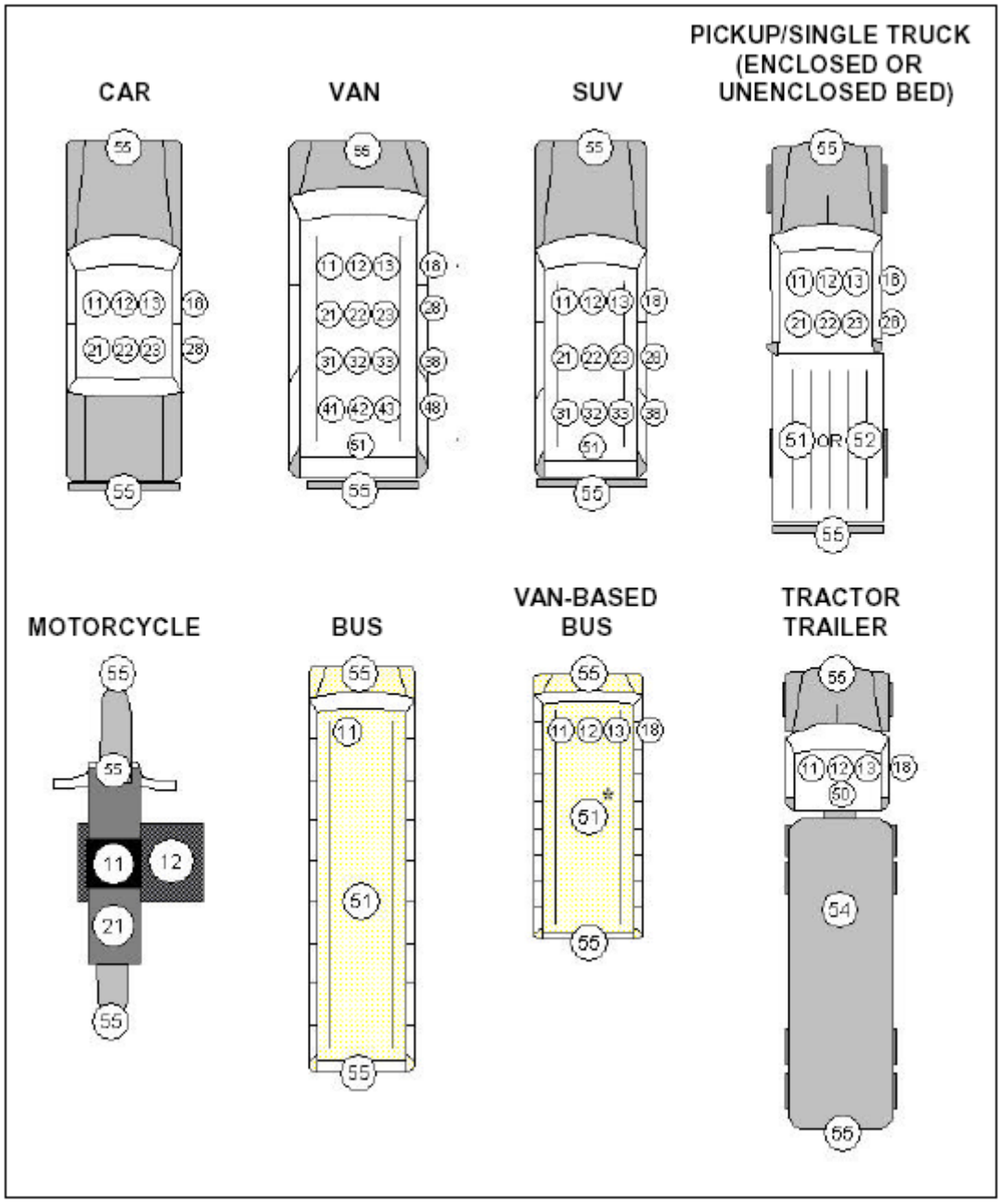
Note: Starting in 2003 Person Level Forms are submitted for uninjured occupants of van-based buses.

(Continued on Next Page)

Seating Position (Continued)

1982 and later

Seating Position



* For van-based buses, use the actual seating position if known, or use element 51 for the second, third, and fourth rows, if actual seating position is not known.

(Continued on Next Page)

Seating Position (Continued)

1975 to 1981

Variable = SEAT_POS

Element =
- 00 - Nonmotorist
- 01 - Front Seat - Left Side (Driver's Side)
- 02 - Front Seat - Middle
- 03 - Front Seat - Right Side
- 04 - Second Seat - Left Side (Driver's Side)
- 05 - Second Seat - Middle
- 06 - Second Seat - Right Side
- 07 - Third Seat - Left Side (Driver's Side)
- 08 - Third Seat - Middle
- 09 - Third Seat - Right Side
- 10 - Front Seat - Other
- 11 - Second Seat - Other
- 12 - Third Seat - Other
- 13 - Other Passenger
- 14 - Cab Sleeper
- 15 - Vehicle Exterior
- 99 - Unknown

Sex

1975 and later

Variable = SEX

Element = Blank
1 - Male
2 - Female
9 - Unknown

NOTE: From 1975 to 1981, if no information was known about the hit-and-run vehicle and/or driver, then neither the vehicle form nor the driver form were filled out and were not **counted** in the FARS census. Starting in 1982 both a vehicle and a driver form were filled out and the data were identified as unknown. This is why there were approximately only 20 to 40 drivers with unknown sex listed in the FARS data set from 1975 to 1981 and 700 to 1000 drivers with unknown sex from 1982 on.

On March 22, 1995, a quick review of the 1994 Annual Report File revealed that of the 768 persons in the 1994 file with unknown sex; over 90 percent were involved in hit-and-run crashes.

Special Use

This comes from the Vehicle File.

1975 and later

Except as noted

Variable = SPEC_USE

Element =
- 0 - No Special Use
- 1 - Taxi
- 2 - Vehicle Used as School Bus
- 3 - Vehicle Used as Other Bus
- 4 - Military
- 5 - Police
- 6 - Ambulance (since 1980)
- 7 - Firetruck (since 1982)
- 9 - Unknown

State

This comes from the Accident File.

1975 and later

Variable = STATE (State in which the *crash* occurred from Accident File)

Element = GSA state elements except for 43, Puerto Rico

If the object of the analysis is to examine the effects of the environment then use REG_STAT rather than STATE.

01 - Alabama
02 - Alaska
04 - Arizona
05 - Arkansas
06 - California
08 - Colorado
09 - Connecticut
10 - Delaware
11 - District of Columbia
12 - Florida
13 - Georgia
15 - Hawaii
16 - Idaho
17 - Illinois
18 - Indiana
19 - Iowa
20 - Kansas
21 - Kentucky
22 - Louisiana
23 - Maine
24 - Maryland
25 - Massachusetts
26 - Michigan
27 - Minnesota
28 - Mississippi
29 - Missouri
30 - Montana
31 - Nebraska
32 - Nevada
33 - New Hampshire
34 - New Jersey
35 - New Mexico
36 - New York
37 - North Carolina
38 - North Dakota
39 - Ohio
40 - Oklahoma
41 - Oregon
42 - Pennsylvania
43 - Puerto Rico
44 - Rhode Island
45 - South Carolina
46 - South Dakota
47 - Tennessee
48 - Texas
49 - Utah
50 - Vermont
52 - Virgin Islands (since 2004)
51 - Virginia
53 - Washington
54 - West Virginia
55 - Wisconsin
56 - Wyoming

State Case

1975 and later

Variable = ST_CASE

This variable is in each Accident, Vehicle and Person record. It is a combination of the GSA State code and an assigned consecutive number. It is a unique identifier for the crash within the year. It is used as the key, when any two of these files from the same year are merged.

This variable is stored as a numeric variable of six characters; the first two characters are the State code, and the next four characters are case number, with leading zeros if necessary.

Also see: VEH_NO, Vehicle Number, in the Vehicle File or Person File

Time

1975 and later

Variables = HOUR (from the Accident File) or DEATH_HR or LAG_HRS

Element = 00 – 24 - Valid Military Times
99 - Unknown

Variables = MINUTE (from the Accident File) or DEATH_MN or LAG_MINS

Element = 00 – 59 - The minute
99 - Unknown

Variable = DEATH_TM

Element = four digits; DEATH_HR followed by DEATH_MN, e.g., 0643 for 6:43 a.m.

HOUR and MINUTE are the time of the crash, hours and minutes.

DEATH_HR and DEATH_MN are the times, hours and minutes, of the death.

LAG_HRS and LAG_MINS are computed as the time, hours and minutes, between the time of the crash and the time of death.

Towed Trailing Unit

This comes from the Vehicle File

2004 and later

Variable = TOW_VEH

Element = Blank
- 0 - No
- 1 - Yes, One Trailer
- 2 - Yes, Two Trailers
- 3 - Yes, Three or More Trailers
- 4 - Yes, Number of Trailers Unknown (since 1984)
- 5 - Vehicle Towing another Motor Vehicle (since 2004)
- 9 - Unknown

1983 and 2003

Variable = TOW_VEH

Element = Blank
- 0 - No
- 1 - Yes, One Trailing Unit
- 2 - Yes, Two Trailing Units
- 3 - Yes, Three or More Trailing Units
- 4 - Yes, Number of Trailing Units Unknown (since 1984)
- 9 - Unknown

1982

Variable = TOW_VEH

Element =
- 0 - No
- 1 - Yes, One Trailing Unit
- 4 - Yes, Number of Trailing Units Unknown
- 5 - Yes, Two or More Trailing Units

1975 to 1981

Variable = TOW_VEH

Element =
- 0 - No
- 1 - Yes

Note that the number of unknowns is 0 until 1982. From 1982 to 1984 the number of unknowns is approximately 2,500 per year. Starting in 1985 the number of unknowns falls to about 300 per year.
This variable not only applies to tractor trailers, but also to boats, cars, and U-Haul-type vehicles that are towed with a trailer hitch. Vehicles pulled by a rope or chain are not counted as towed vehicles.

Unknowns

1982 and later

Starting in 1982, in the case of a hit-and-run crash, a vehicle-driver form and a person level form for the driver are filled out. When the information about the vehicle driver or person is not known -- which is often the case with hit-and-runs -- the values are coded as unknown.

Example: Between 1982 and 1994, the number of drivers coded with unknown sex fluctuated between 700 and 1,000, approximately 1.5 percent of all drivers involved in fatal crashes. Reviewing the 768 people with sex coded as unknown in the 1994 Annual Report file, all were drivers and 90 percent of them were involved in hit-and-run crashes.

1975 to 1981

In the event of a hit-and-run crash, if the vehicle information was not known, then a vehicle form was not filled out. Likewise, in a hit-and-run crash, if there was no known information at the person level, usually the driver of the unknown vehicle, then a person level form was not filled out. The result is that the number of unknowns is much smaller for this time period than 1982 and later.
Example: From 1975 to 1980, there were 30 to 40 drivers coded with unknown sex, approximately 0.05 percent of all drivers involved in fatal crashes. In 1981 the number of drivers with unknown sex rose to over 300, approximately 0.5 percent of all drivers involved in fatal crashes.

Vehicle Forms Submitted *(Number of)*

This comes from the Accident File and is repeated in the Vehicle File.

1982 and later

Variable = VE_FORMS

Element = 01 – 99

This counts the number of vehicles in transport involved in the crash. Legally parked vehicles are not included.

Note: In the case of a hit-and-run crash, a Vehicle-Driver form and a Person Level form for the driver are filled out. When the information about the vehicle-driver or person is not known -- which is often the case with hit-and-runs -- the values are coded as unknown.

1976 to 1981

Variable = VE_FORMS

Element = 00 – 99

This counts the Vehicle forms submitted, see note on vehicles below. It is unlikely that the number of vehicles involved in the crash is greater than the Number of Vehicle Forms plus two.

Note: In the event of a hit-and-run crash, if the vehicle information was not known, then **no** vehicle form was filled out. Likewise, if no information was known on the person level, usually the driver of the unknown vehicle, then a Person Level form was **not** filled out. The result is that the number of unknowns is much smaller for this time period than 1982 and later.

1976 to 1981

Variable = VEHICLES

Element = 01 – 99

This counts the number of vehicles in transport involved in the crash. Legally parked vehicles are not included.

Notes:

The count includes only motor vehicles in transport. Motor vehicles are considered to be "in transport" when they are in motion on the trafficway or on the roadway. **Do not include legally parked vehicles.** Be careful; the police officer may incorrectly refer to a vehicle stopped or left on the roadway as "parked."

The count must be the number of motor vehicles involved in the crash; that is, a Vehicle Level form must be submitted for all motor vehicles involved in the crash regardless of whether the motor vehicle was a hit-and-run vehicle, an involved motor vehicle that had left the scene of the crash, etc. Refer to the instructions under HIT-AND-RUN.

(Continued on Next Page)

Vehicle Forms Submitted (Continued)

This comes from the Accident File and is repeated in the Vehicle File

2005 and later

Variable = VE_TOTAL

Element = 01 – 99

This counts the all of vehicles in the crash. This includes the vehicles in transport which are documented in the Vehicle File and the vehicles not in transport which are documented in the Vehnit File. This variable only appears in the Accident File. The Vehnit File does not exist prior to 2005.

Vehicle Make

This comes from the Vehicle File

1991 and later

Variable = MAKE

Element = [In numerical order]

01 - American Motors
02 - Jeep
  Kaiser-Jeep
  Willys Jeep
03 - AM General
06 - Chrysler
07 - Dodge
08 - Imperial
09 - Plymouth
10 - Eagle
12 - Ford
13 - Lincoln
14 - Mercury
18 - Buick
18 - Opel
19 - Cadillac
20 - Chevrolet
21 - Oldsmobile
22 - Pontiac
23 - GMC
24 - Saturn
25 - Grumman
29 - Other Domestic
  Avanti
  Checker
  DeSoto
  Excalibur
  Hudson
  Packard
  Panoz
  Saleen
  Studebaker
  Stutz
30 - Volkswagen
31 - Alfa Romeo
32 - Audi
33 - Austin/Austin Healey
34 - BMW
35 - Datsun
  Nissan
36 - Fiat
37 - Honda
38 - Isuzu
39 - Jaguar
40 - Lancia
41 - Mazda
42 - Mercedes-Benz
43 - MG
44 - Peugeot
45 - Porsche
46 - Renault
47 - Saab
48 - Subaru
49 - Toyota
50 - Triumph
51 - Volvo
52 - Mitsubishi
53 - Suzuki
54 - Acura
55 - Hyundai
56 - Merkur
57 - Yugo
58 - Infiniti
59 - Lexus
60 - Daihatsu
61 - Sterling
62 - Land Rover
63 - KIA
64 - Daewoo
69 -Other Imports
  Aston Martin
  Bentley
  Bertone
  Bricklin
  Citroen
  DeLorean
  Desta
  Ferrari
  Gazelle
  Hillman
  Jensen
  Lada
  Lamborghini
  Lotus
  Maserati
  Maybach
  Mini Copper
  Morgan
  Morris
  Reliant (British)
  Rolls-Royce
  Simca
  Singer
  Sunbeam
  TVR
70 - BSA
71 - Ducati
72 - Harley-Davidson
73 - Kawasaki

(Continued on Next Page)

Vehicle Make (Continued)

This comes from the Vehicle File

1991 and later

74 - Moto Guzzi
75 - Norton
76 - Yamaha
80 - Brockway
81 - Diamond Reo
Reo
82 - Freightliner
83 - FWD
84 - International Harvester
Navistar
85 - Kenworth
86 - Mack
87 - Peterbilt
88 - Iveco Magirus
89 - White/Autocar
White GMC
90 - Bluebird
91 - Eagle Coach
92 - Gillig
93 - MCI
94 - Thomas Built
98 - Other Make
Auto-Union-DKW
Carpenter
Collins Bus
DINA
Divco
Hino
Mid Bus
Neoplan
Orion
Oshkosh
Scania
Sterling
UD
Van Hool
Western Star
99 - Unknown Make

(Continued on Next Page)

Vehicle Make (Continued)

This comes from the Vehicle File

1991 and later

Variable = MAKE

Element = [In alphabetical order]

54 - Acura
31 - Alfa Romeo
03 - AM General
01 - American Motors
69 - Aston Martin
32 - Audi
33 - Austin/Austin Healey
29 - Avanti
98 - Auto-Union-DKW
69 - Bentley
69 - Bertone
90 - Bluebird
34 - BMW
69 - Bricklin
80 - Brockway
70 - BSA
18 - Buick
19 - Cadillac
98 - Carpenter
29 - Checker
20 - Chevrolet
06 - Chrysler
69 - Citroen
98 - Collins Bus
64 - Daewoo
60 - Daihatsu
35 - Datsun
69 - DeLorean
29 - DeSoto
69 - Desta
81 - Diamond Reo
98 - DINA
98 - Divco
07 - Dodge
71 - Ducati
10 - Eagle
91 - Eagle Coach
29 - Excalibur
69 - Ferrari
36 - Fiat
12 - Ford
82 - Freightliner
83 - FWD
69 - Gazelle
92 - Gillig
23 - GMC
25 - Grumman
72 - Harley-Davidson
69 - Hillman
98 - Hino
37 - Honda
29 - Hudson
55 - Hyundai
08 - Imperial
58 - Infiniti
84 - International Harvester
38 - Isuzu
88 - Iveco Magirus
39 - Jaguar
69 - Jensen
02 - Jeep
02 - Kaiser-Jeep
73 - Kawasaki
85 - Kenworth
63 - KIA
69 - Lada
69 - Lamborghini
40 - Lancia
62 - Land Rover
59 - Lexus
13 - Lincoln
69 - Lotus
86 - Mack
69 - Maserati
69 - Maybach
41 - Mazda
93 - MCI
42 - Mercedes-Benz
14 - Mercury
56 - Merkur
98 - Mid Bus
69 - Mini Cooper
43 - MG
52 - Mitsubishi
69 - Morgan
69 - Morris
74 - Moto Guzzi
84 - Navistar
98 - Neoplan
35 - Nissan
75 - Norton
21 - Oldsmobile
18 - Opel
98 - Orion
98 - Oshkosh
69 - Other Imports
29 - Other Domestic
98 - Other Make
29 - Packard

(Continued on Next Page)

Vehicle Make (Continued)

This comes from the Vehicle File

1991 and later

29 - Panoz
87 - Peterbilt
44 - Peugeot
09 - Plymouth
22 - Pontiac
45 - Porsche
69 - Reliant (British)
46 - Renault
69 - Rolls-Royce
81 - Reo
47 - Saab
29 - Saleen
24 - Saturn
98 - Scania
69 - Simca
69 - Singer
61 - Sterling
98 - Sterling
29 - Studebaker
29 - Stutz
48 - Subaru
69 - Sunbeam
53 - Suzuki
94 - Thomas Built
49 - Toyota
50 - Triumph
69 - TVR
98 - UD
99 - Unknown Make
98 - Van Hool
30 - Volkswagen
51 - Volvo
98 - Western Star
89 - White/Autocar
89 - White GMC
02 - Willys Jeep
76 - Yamaha
57 - Yugo

(Continued on Next Page)

Vehicle Make (Continued)

This comes from the Vehicle File

1975 and 1990

Variable = MAKE

Element = [In numerical order]

01 - American Motors
02 - J eep
03 - AM General
06 - Chrysler
07 - Dodge
08 - Imperial
09 - Plymouth
10 - Eagle (not before 1988)
12 - Ford
13 - Lincoln
14 - Mercury
18 - Buick
19 - Cadillac
20 - Chevrolet
21 - Oldsmobile
22 - Pontiac
23 - GMC
29 - Other Domestic
30 - Volkswagen
31 - Alfa Romeo
32 - Audi
33 - Austin/Healey
35 - Datsun
36 - Fiat
37 - Honda
38 - Isuzu
39 - Jaguar
40 - Lancia
41 - Mazda
42 - Mercedes-Benz
43 - MG
44 - Peugeot
45 - Porsche
46 - Renault
47 - Saab
48 - Subaru
49 - Toyota
50 - Triumph
51 - Volvo
52 - Mitsubishi (not before 1982)
53 - Suzuki (not before 1987)
57 - Lexus (not before 1988)
58 - Infiniti (not before 1988)
59 - Other Imports
60 - BSA
61 - Ducati
62 - Harley-Davidson
63 - Kawasaki
64 - Moto Guzzi
65 - Norton
67 - Yamaha
69 - Other Motor Cycle
70 - Moped
80 - Brockway
81 - Diamond Reo
82 - Freightliner
83 - FWD
84 - International Harvester
85 - Kenworth
86 - Mack
87 - Peterbilt
88 - White
95 - Other Truck/Bus
98 - Other Make
99 - Unknown Make

Note: For 1986 and earlier data, one may have to refer to the first several values, 01-09, with a single digit rather than a double digit with a leading "0," zero, e.g., 6 for Chrysler rather than 06 for Chrysler. This may be system-dependent.

(Continued on Next Page)

Vehicle Make (Continued)

This comes from the Vehicle File

1975 and 1990

Variable = MAKE

Element = [In alphabetical order]

31 - Alfa Romeo
03 - AM General
01 - American Motors
32 - Audi
33 - Austin/Healey
34 - BMW
80 - Brockway
60 - BSA
18 - Buick
19 - Cadillac
20 - Chevrolet
06 - Chrysler
35 - Datsun
81 - Diamond Reo
07 - Dodge
61 - Ducati
10 - Eagle (not before 1988)
36 - Fiat
12 - Ford
82 - Freightliner
83 - FWD
23 - GMC
62 - Harley-Davidson
37 - Honda
08 - Imperial
58 - Infiniti (Not before 1990)
84 - International Harvester
38 - Isuzu
39 - Jaguar
02 - Jeep
63 - Kawasaki
85 - Kenworth
40 - Lancia
57 - Lexus (not before 1990)
13 - Lincoln
86 - Mack
41 - Mazda
42 - Mercedes-Benz
14 - Mercury
43 - MG
52 - Mitsubishi (not before 1982)
70 - Moped
64 - Moto Guzzi
65 - Norton
21 - Oldsmobile
29 - Other Domestic
59 - Other Imports
98 - Other Make
69 - Other Motor Cycle
95 - Other Truck/Bus
87 - Peterbilt
44 - Peugeot
09 - Plymouth
22 - Pontiac
45 - Porsche
46 - Renault
47 - Saab
48 - Subaru
53 - Suzuki (not before 1987)
49 - Toyota
50 - Triumph
99 - Unknown Make
30 - Volkswagen
51 - Volvo
88 - White
67 - Yamaha

Note: For 1986 and earlier data, one may have to refer to the first several values, 01-09, with a single digit rather than a double digit with a leading "0," zero, e.g., 6 for Chrysler rather than 06 for Chrysler. This may be system-dependent.

Vehicle Number

This comes from the Vehicle File.

1975 and later

Variable = VEH_NO

Element = 00 - Used for People who are not Motor Vehicle Occupants
01 - 99

All vehicles will have a positive integer value. The value 0 is only used for pedestrians, cyclists, etc., in the Person File.

This variable is in each Vehicle and Person record. Together with the State Case, ST_CASE, it forms a unique identifier for the vehicle within the year. VEH_NO and ST_CASE **ARE OFTEN** used together as a key, when a Vehicle File and Person File, are merged, from the same year. This is done to insure that the correct occupants are placed in the proper vehicle. When nonoccupants must be counted one should merge by VEH_NO, but do not merge with the VEHICLE File. For example, to obtain information on the day of the week, injury severity, and race merge the Accident File with the Person File using ST_CASE and merge that result with the Multiple Cause of Death (MCD) data [this data is generally not available to the public] using ST_CASE, VEH_NO and PER_NO. Note: If this data is merged with the Vehicle File, then one looses all nonoccupants. So there is a difference between merging with the VEH_NO and with the Vehicle File.

Also see: ST_CASE, State Case, in any file.

Nonoccupants have VEH_NO = 00, in this case see N_MOT_NO under Nonmotorist Striking Vehicle Number in the Person File.

Vehicle Role

This comes from the Vehicle File.

1975 and later

Variable = IMPACTS

Element = Blank
- 0 - Non-Collision
- 1 - Striking
- 2 - Struck
- 3 - Both
- 9 - Unknown

Note when a vehicle is both striking and struck, i.e., Value = 3, the event cannot simultaneously be at the same point of the vehicle. A vehicle must have at least one striking impact point and a struck impact point. A classic example is a chain reaction rear-end crash, where a vehicle which is both striking and struck is located within the chain.

VIN Body Type

This comes from the Vehicle File.

1982 and later
except as noted

Variable = VIN_BT

This is a **CHARACTER** variable in **UPPER CASE**.

The VINA program decodes these data and partitions vehicles into three classes, passenger vehicles, trucks and motorcycles.

Element =

2D - Passenger Vehicle Sedan 2-Door
2F - Passenger Vehicle Formal Hardtop 2-Door
2H - (81-03) Passenger Vehicle 2-Door
2L - Passenger Vehicle Liftback 3-Door
2P - Passenger Vehicle Pillard Hardtop 2-Door
2T - Passenger Vehicle Hardtop 2-Door
2W - Truck 2-Door Wagon/Sport Utility
2W - Passenger Vehicle Wagon 2-Door
3D - Passenger Vehicle Runabout 3-Door
4D - Passenger Vehicle Sedan 4-Door
4H - (81-03) Passenger Vehicle Hatchback 4-Door
4L - Passenger Vehicle Liftback 5-Door
4P - Passenger Vehicle Pillard Hardtop 4-Door
4T - Passenger Vehicle Hardtop 4-Door
4W - Truck 4-Door Wagon/Sport Utility
4W - Passenger Vehicle Wagon 4-Door
5D - Passenger Vehicle Sedan 5-Door
8V - Truck 8-Passenger Sport Van
AC - Truck Auto Carrier
AM - Passenger Vehicle Ambulance
AR - Truck Armored Truck
AT - Motorcycle All-Terrain
BU - Bus
CB - Truck Chassis and Cab
CB - Passenger Vehicle Cab & Chassis (Luv)
CC - Truck Conventional Cab
CG - Truck Cargo Van
CH - Truck Crew Chassis
CL - Truck Club Chassis
CM - Truck Concrete or Transit Mixer
CP - Truck Crew Pickup
CP - Passenger Vehicle Coupe
CR - Truck Crane
CS - Truck Super Cab/Chassis Pickup
CU - Truck Custom Pickup
CV - Truck Convertible (Jeep Commando, Suzuki Samurai, Dodge Dakota)
CV - Passenger Vehicle Convertible
CY - Truck Cargo Cutaway
DP - Truck Dump
DS - Truck Tractor Truck (diesel)
EC - Truck Extended Cargo Van
EN - Motorcycle Enduro
ES - Truck Extended Sport Van
EV - Truck Extended Van
EW - Truck Extended Window Van
FB - Truck Flatbed or Platform

(Continued on Next Page)

VIN Body Type (Continued)

This comes from the Vehicle File.

1982 and later

except as noted

FC - Truck Forward Control
FT - Truck Fire Truck
GG - Truck Garbage or Refuse
GL - Truck Gliders
GN - Truck Grain
HB - Passenger Vehicle Hatchback number doors unknown
HO - Truck Hopper
HR - Passenger Vehicle Hearse
HT - Passenger Vehicle Hardtop number doors unknown
IC - Truck Incomplete Chassis
IE - Truck Incomplete Ext Van
LB - Passenger Vehicle Liftback
LG - Truck Logger
LL - Truck Suburban & Carry-All
LM - Passenger Vehicle Limousine
MH - Truck Motorized Home
MK - Motorcycle Mini-Bike
MN - Motorcycle Mini Moto Class
MP - Motorcycle Moped
MP - Truck Multipurpose
MR - Motorcycle Mini Road/Trail
MS -Motorcycle Motor Scooter
MV - Truck Maxi-Van
MX - Motorcycle Moto Cross
MY - Truck Motorized Cutaway
MY - Motorcycle Mini-Cycle
NB - Passenger Vehicle Notchback
PC - Truck Club Cab Pickup
PD - Truck Parcel Delivery
PK - Truck Pickup
PK - Passenger Vehicle Pickup, Truck commonly registered passengers
PM - Truck Pickup with Camper Mounted on Bed
PN - Truck Panel
PS - Truck Super Cab Pickup
RC - Motorcycle Racer
PN - Passenger Vehicle Panel, Truck commonly registered as passengers
RD - Truck Roadster (Jeep, Jeep Commando)
RD - Passenger Vehicle Roaster
RS - Motorcycle Road/Street
RT - Motorcycle Road/Trail
S1 - Truck One-Seat
S2 - Truck Two-Seat
SB - Passenger Vehicle Sport Hatchback
SC - Passenger Vehicle Sport Coupe
SD - Passenger Vehicle Sedan, number doors unknown
SN - Truck Step Van
SP - Truck Sport Pickup
ST - Truck Stake or Rack
SV - Truck Sports Van
SV - Passenger Vehicle Sport Van
SW - Passenger Vehicle Station Wagon
SW - Truck Station Wagon (Jeep Wagoneer etc)
T - Motorcycle Dirt
TB - Truck Tilt Cab
TL - Truck Tilt Tandem
TL - Motorcycle Trail/Dirt
TM - Truck Tandem
TN - Truck Tank
TR - Motorcycle Trails
TR - Truck Tractor (gasoline)

(Continued on Next Page)

VIN Body Type (Continued)

This comes from the Vehicle File.

1982 and later

except as noted

UT - Passenger Vehicle Utility, truck commonly registered as passenger
UT - Truck Utility (Blazer, Jimmy, Scout, etc)
VC - Truck Van Camper
VD - Truck Display Van
VN - Truck Van
VT - Truck Vanette (includes Metro and Handy Van)
VW - Truck Window Van
WK - Truck Tow Truck Wrecker
WW - Truck Wide-Wheel Wagon
WW - Passenger Vehicle Wide-Wheel Wagon
XT - Truck Travel-all
YY - Truck Cutaway

99 - Unknown

VIN Model

This comes from the Vehicle file.

1975 and later

Variable = VINA_MOD

The VIN Model, for automobiles, is obtained from the VINA program for automobiles of model year 1966 and later that have verifiable VIN numbers. If one needs to select cars based on make and model the variable of choice is VINA_MOD rather than MAK_MOD.

This is a **CHARACTER** variable in **UPPER CASE** three characters long.

The VINA_MOD is only unique within the vehicle make. That is, different makes of vehicles can have the same VINA_MOD. To ensure that the correct vehicle is selected the variable MAKE must be used in conjunction with VINA_MOD. Both variables, VINA_MOD and MAKE, are in both the Vehicle file and the Person File.

The values for VINA_MOD are contained in Appendix F of *PC VINA User's Manual, and are* 183 pages long in the 1994 edition.

There are two columns headed VINA CODE. For passenger cars, or what Polk calls passenger vehicles, the FARS variable VINA_MOD can be set to either the VINA code for the series name, i.e., the first column, or it can be set to the value of the sub-series name, the last column. Therefore one must search for values in both columns.

For trucks the first column labeled VINA CODE, series name, is the FARS variable SER_TR. When using the variable SER_TR all model names, last column are included. If one wishes to select a specific truck model one uses the FARS variable VINA_MOD set to the value in the last VINA CODE column.

(Continued on Next Page)

VIN Series Truck

This comes from the Vehicle File.

1975 and later

Variable = SER_TR

This is an element that identifies the type of truck, i.e., body style. This material comes from analysis of the Vehicle Identification Number.

This is a CHARACTER variable in UPPER CASE three characters long.

The values for SER_TR are contained in Appendix F of *PC VINA User's Manual, and are* 183 pages long in the 1994 edition. The values for SER_TR are in the truck section of Appendix F. They are the first column headed VINA CODE for the series name. When using the variable SER_TR all model names, in the last column are included. If one wishes to select a specific truck model one uses the FARS variable VINA_MOD set to the value in the last column headed VINA CODE.

Weight (Auto)

This comes from the Vehicle File.

1975 and later

Variable = VIN_WGT

Element = 0 - Not available
Up to 9998 - Actual weight of automobile in pounds
9999 - Value not coded

The Fatality Analysis Reporting System collects information on the weight of cars involved in fatal crashes. Vehicle weight is not generally available for light trucks, however, the weight element, WGTCD_TR, is. NHTSA often partitions car weight into six classes. This has been done in *An Analysis of Fires in Passenger Cars, Light Trucks, and Vans*, Tessmer, DOT HS 808 208, 1994; *Passenger Car Weight and Injury Severity in Single-Vehicle Nonrollover Crashes*, Partyka and Boehly, 1989; ESV Report 89-2b-O-005 and *Development of Databases in Support of an Analysis of Fire Incidence Using the Fatal Accident Reporting System*, Walz and Klein, September 14, 1993. The partition is defined as:

CAR WEIGHT CLASSES

Class	Weight Range in Pounds
Class 1	Car Weight < 1,950
Class 2	1,950 ≤ Car Weight < 2,450
Class 3	2,450 ≤ Car Weight < 2,950
Class 4	2,950 ≤ Car Weight < 3,450
Class 5	3,450 ≤ Car Weight < 3,950
Class 6	3,950 ≤ Car Weight

Note: If you are going to use this variable as a continuous variable, consider defining a new variable, say AUTO_WT as AUTO_WT = VIN_WT/1000. That is, AUTO_WT is the weight of the car in 1,000s of lbs. Its coefficient is less likely to be zero.

Weight Element (Trucks)

This comes from the Vehicle File.

1975 and later

Variable = WGTCD_TR (for model year 1966 and newer trucks)

Element =
1 - 6,000 lbs or less
2 - 6,001 – 10,000 lbs
3 - 10,001 – 14,000 lbs
4 - 14,001 – 16,000 lbs
5 - 16,001 – 19,500 lbs
6 - 19,501 – 26,000 lbs
7 - 26,001 – 33,000 lbs
8 - 33,001 and up
9 - Unknown

WGTCD_TR is often coded as 9 for buses.

Wheelbase (Auto)

This comes from the Vehicle File.

1975 and later

Variables = WHLBS_LG (longest wheelbase)
WHLBS_SH (shortest wheelbase)

The longest and shortest wheelbase respectively for the manufactured model as determined by the VINA program for automobiles made since 1966.

Element =	0000	- Value not available from the VINA program
	Up to 9998	- Actual value in inches
	9999	- Value not coded

THE

COMPACT

DISK

Traffic Safety CD-ROM

Fatality Analysis Reporting System (FARS): 1975-1994

BTS-CD-10

The FARS Compact Disk (CD)

The Fatality Analysis Reporting System is a collection of files documenting all qualifying fatal crashes since 1975. In 1996 the National Center for Statistics and Analysis in conjunction with the Bureau of Transportation Statistics issued the TRAFFIC SAFETY CD-ROM BTS-CD-10. This compact disk contains the working data sets for the first 20 years of FARS, 1975 - 1994. In addition, the NHTSA Traffic Safety Report 1994, Traffic Safety Fact Sheets, and data from the General Estimates System: 1988-1994 are included. The disk is in ASCII format and is available at no charge from the Bureau of Transportation Statistics.

The FARS data is contained in the FARS directory and its sub-directories. Each year of FARS data is contained in its own sub-directory. Each sub-directory has four files, the actual data, a program to create the SAS formats, a conversion program used at the National Center for Statistics and Analysis to create the SAS data sets, and a layout file that provides the flat-file layout for applications that are not based on SAS. Although SAS is the software used by NCSA, any statistical software that can process large data sets can be used to analyze the data. The sub-directories and associated file names are as follows:

Sub-Directory	Data	SAS Format Program	SAS Conversion Program	Layout
FARS94	FARS94.DAT	FORMAT91.SAS	FARSLD94.SAS	FARS94.DD
FARS93	FARS93.DAT	FORMAT91.SAS	FARSLD93.SAS	FARS93.DD
FARS92	FARS92.DAT	FORMAT91.SAS	FARSLD92.SAS	FARS91_92.DD
FARS91	FARS91.DAT	FORMAT91.SAS	FARSLD91.SAS	FARS91_92.DD
FARS90	FARS90.DAT	FORMAT87.SAS	FARSLD90.SAS	FARS87_90.DD
FARS89	FARS89.DAT	FORMAT87.SAS	FARSLD89.SAS	FARS87_90.DD
FARS88	FARS88.DAT	FORMAT87.SAS	FARSLD88.SAS	FARS97_90.DD
FARS87	FARS87.DAT	FORMAT87.SAS	FARSLD87.SAS	FARS87_90.DD
FARS86	FARS86.DAT	FORMAT87.SAS	FARSLD86.SAS	FARS82_86.DD
FARS85	FARS85.DAT	FORMAT87.SAS	FARSLD85.SAS	FARS82_86.DD
FARS84	FARS84.DAT	FORMAT87.SAS	FARSLD84.SAS	FARS82_86.DD
FARS83	FARS83.DAT	FORMAT87.SAS	FARSLD83.SAS	FARS82_86.DD
FARS82	FARS82.DAT	FORMAT87.SAS	FARSLD82.SAS	FARS82_86.DD
FARS81	FARS81.DAT	FORMAT87.SAS	FARSLD81.SAS	FARS75_81.DD
FARS80	FARS80.DAT	FORMAT87.SAS	FARSLD80.SAS	FARS75_81.DD
FARS79	FARS79.DAT	FORMAT87.SAS	FARSLD79.SAS	FARS75_81.DD
FARS78	FARS78.DAT	FORMAT87.SAS	FARSLD78.SAS	FARS75_81.DD
FARS77	FARS77.DAT	FORMAT87.SAS	FARSLD77.SAS	FARS75_81.DD
FARS76	FARS76.DAT	FORMAT87.SAS	FARSLD76.SAS	FARS75_81.DD
FARS75	FARS75.DAT	FORMAT87.SAS	FARSLD75.SAS	FARS75_81.DD

Note that there are two format programs, one for 1991 and later, FORMAT91.SAS and the other for 1990 and earlier, FORMAT87. There are also six file layouts.

If one is using SAS on a PC, the first task is to create the format libraries. At most this needs to be done twice, once for the years 1991-1994 and once for 1975-1990. Start by creating two sub-directories in which the formats will be placed. When the directories for the 91 and 87 formats have been created, the file/program FORMATxx.SAS must be modified. The first lines of FORMAT91.SAS and FORMAT87.SAS are:

FORMAT91.SAS	FORMAT87.SAS
libname library 'I:\farssas\formats\format91';	LIBNAME LIBRARY 'L:\FARSSAS\FORMAT87';

The parts that need to be changed are:

I:\farssas\formats\format91	L:\FARSSAS\FORMAT87

These first lines of code identify the complete paths, that is, the drive, in this case the I drive and gives the names of these sub-directories, namely: farssas\formats\format91 or FARSSAS\FORMAT87 respectively. Change the line of code so the program will point to the drive and the sub-directory created above. Depending on the year, one of these two directories will be used as PATH3, in the build programs, FARSLDxx.SAS, where xx are the last two digits of the year of interest. Submit the program for execution.

Once the format programs have been run and the format libraries created, the SAS conversion programs may be executed.

The programs to convert the flat files to SAS files are on the CD in the FARS\FARSxx sub-directory, where xx is the year. For example, **if your CD drive is the "K" drive** then the full file name of the 1985 conversion program is:

K:\FARS\FARS85\FARSLD85.SAS

The full file name of the data to be converted is:

K:\FARS\FARS85\FARS85.DAT

The conversion programs point to sub-directories identified as PATH1, PATH2, and PATH3. The sub-directories identified by PATH1 and PATH3 already exist and contain the ASCII data and formats, respectively. If the sub-directory for PATH2 does not exist, it must be created before the conversion program is run. This can be done by using the DOS command MKDIR.

Use the SAS program editor to read in the conversion program, in this example K:\FARS\FARS85\FARSLD85.SAS. Lines 20, 21, and 22, which point to PATH1, PATH2 and PATH3 respectively, need to be edited. Enter the path of the data to be converted. In this example, the term PATH1 is replaced with K:\FARS\FARS85. Change PATH2 to the directory, on your hard disk, which will hold the converted SAS data. Finally, change PATH3 to the directory in-which the formats for the year of interest were placed. The program is now ready to be submitted for processing.

When the files are built, the number of observations for each file appears in the upper right corner of the SAS output. The numbers of observations are as follows:

Number of Observations/Records

Year	Accident File	Person File	Vehicle File
1994	36,254	98,945	54,911
1993	35,780	97,589	53,777
1992	34,942	95,691	52,227
1991	36,937	99,369	54,795
1990	39,836	107,777	59,292
1989	40,741	109,866	60,870
1988	42,130	112,958	62,703
1987	41,438	111,457	61,836
1986	41,090	109,073	60,792
1985[1]	39,196	104,045	58,271
1984[2]	39,631	103,348	57,972
1983[2]	37,976	99,316	55,106
1982[2]	39,092	102,120	56,455
1981	44,000	112,460	62,699
1980	45,284	113,289	63,485
1979	45,223	114,885	64,762
1978	44,433	115,161	64,144
1977	42,211	111,108	60,516
1976	39,747	105,609	56,084
1975	39,161	104,889	55,534

[1] The program that creates the SAS files reports an error for state case 450445 in vehicle maneuver and state case 261297 for nonmotorist number. These were not corrected with the edit checks at the time, but are flagged here. Your data and software are correct.

[2] There are several cases of non-consistent data in mile point field. These "errors" are caused by improved edit checks that were not available when the original data was collected. Your data and software are correct.

References

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FARS 2008 Coding and Validation Manual, 2007, National Center for Statistics and Analysis, Washington, DC: National Highway Traffic Safety Administration.

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