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FARS Analytic Reference Guide 1975 to 2007

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Preface

The purpose of this reference guide is to present what Fatality Analysis Reporting System (FARS) coding manuals are up to in the year 2007. In other words, it introduces the historical FARS coding rules from 1975 to 2007. Anyone who also wants to know the historical data in FARS may try other references; such as “1975-2007 FARS Data User Manual,” yet the “FARS Data User Manual” has not been published at this time.

FARS, formally referred to as the Fatal Accident Reporting System, 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. The purpose of this document is to provide an analytic reference to individuals who wish to conduct crash and vehicle research using the FARS data.

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, the 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 analytic researcher. When doing longitudinal analysis (analysis across several years) to ensure accuracy, each variable of interest must be checked in each year's coding manual. Often experience with the system helps with the research, but errors are still possible.

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 FARS analyst needs the 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 the preference of most analysts is to work with a single file if possible; thus the second approach has been adopted.

The collection of the FARS data for over 25 years has been an outstanding accomplishment. The purpose behind collecting this data, however, is to make it available for future analysis. This analytic reference guide should improve the usefulness and accessibility of the data. However, it can only be an ongoing work-in-progress, with room for improvement.

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 text.

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 research.

Each edition corrects known errors of previous editions and your help is requested to identify problems with the current publication. With the exception of personal notes, there is no reason to keep older copies of this reference guide. All material in earlier editions has been retained.

The previous editions of this reference guide before 2007 were completed by Joseph M. Tessmer, Marilouise Burgess, and William Swanson. This reference guide for 2007 is done on the foundation that they built. 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 principal 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, etc., 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 preface/instructions start with "F-" followed by a lowercase roman numeral. The list of variables 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 compact disk is numbered with "C-" followed by an arabic numeral. The final section is the references, where each page is numbered with a "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 idiosyncrasies 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
UNDERRIDE		UNDERRIDE		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
WGTC_D_TR		WGTC_D_TR	WGTC_D_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**

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.

Variable	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ALIGNMNT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ARR_HOUR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B
ARR_MIN	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B
CF1, CF2, CF3	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	D	D	
CITY	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
CL_TWAY	A	A	A	A	A	A	-	B	B	B	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COUNTY	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
C_M_ZONE	-	-	-	-	-	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
DAY	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DAY_WEEK	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DRUNK_DR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FATALS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FED_AID	-	-	-	-	-	-	-	A	A	A	A	A	B	B	B	B	B	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
HARM_EV	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	C	D	D	E	F	F	F	F	F	F	F	F	G	H	H	H
HIT_RUN	A	A	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	D	E	F	F	F	F	
HOSP_HR	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	
HOSP_MIN	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	
HOUR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
LAND_USE	A	A	A	A	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LATTITUDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A

FARS ACCIDENT FILE VARIABLES																																			
Variable	Year																																		
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		
LGT_COND	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		
LONGITUD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A		
MAN_COLL	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C	
MILEPT	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
MINUTE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
MONTH	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
NHS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
NOT HOUR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
NOT_MIN	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
NO_LANES	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
PAVE_TYP	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
PEDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
PERSONS	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
PROFILE	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
RAIL	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
REL_JUNC	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C
REL_ROAD	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	C	C	C	C	C	C	C
ROAD_FLO	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROAD_FNC	-	-	-	-	-	-	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
ROUTE	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
SCH_BUS	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
SP_JUR	A	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
SP_LIMIT	A	A	B	B	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
STATE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B
ST_CASE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
SUR_COND	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
TA_1_CL	-	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRAF_FLO	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	C	C	C	C
TRA_CONT	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
TWAY_FLO	-	-	-	-	-	-	-	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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 = DAY (*Also in the PERSON file*)

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

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

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

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

1975 to 1997

Variable = YEAR

Element = The 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. 12/28/1990 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 = The 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 (<i>if State exempt</i>)
	99	Unknown

Where MM are Minutes:	Blank	
	00-59	Actual Value
	88	Not Available (<i>if State exempt</i>)
	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 (<i>if exempt from entering this data</i>)

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 (<i>if State exempt</i>)
	999	Unknown
Where MM are Minutes:	Blank	
	00-59	Actual Value
	88	Not Available (<i>if State exempt</i>)
	99	Unknown
Where SS.SS are Seconds	Blank	
	00.00-59.99	Actual Value
		Not Available (<i>if State exempt</i>)
	99.99	Unknown
For “Unknown” code	All 999 99 99.99	
For “Not Available code	888 88 88.88	<i>(If exempt from entering this data)</i>

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

Variables = 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.

(Continued on Next Page)

Harmful Event (*Continued*)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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 struck 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.

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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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."

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)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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

(Continued on Next Page)

Harmful Event (*Continued*)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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.*)

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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 (since 2005)

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.

61 - Equipment Failure (blown tire, brake failure, etc.)

62 - Separation of Units

This element is used when a trailing unit separates from its power unit or another trailing unit(s) This applies to truck tractors with trailers, a single-unit truck with a trailer, and other vehicles pulling trailers (e.g., car pulling a boat or motorhome).

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

63 - Ran Off Road - Right

64 - Ran Off Road - Left

These elements 63 and 64 are used if a driver loses control of vehicle and runs off road. Identification of running off road can be determined from diagram. These elements can be used anytime in the event sequence before or after any harmful events.

65 - Cross Median/Centerline

This element is used when a vehicle completely crosses the median and enters the shoulder or travel lanes on the opposite side of a divided highway. It also includes crossing over the enter line of a two-way, undivided highway.

66 - Downhill Runaway

67 - Vehicle Went Airborne

Officer must indicate by narrative or diagram that the vehicle left the ground (excludes simple rollover) because vehicle drove off cliff, propelled into air after striking another vehicle or traversing a berm. Officer states, "launched, vaulted or went airborne." Driving off bridge and landing on road or vehicle below.

99 - Unknown

(Continued on Next Page)

Harmful Event (*Continued*)

This is repeated in the Vehicle and Person files.

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.

Continued on Next Page)

Harmful Event (*Continued*)

This is repeated in the Vehicle and Person files.

1982 to 2003

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 struck 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.

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 stripper 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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

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.

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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

45 - Transport Device Used as Equipment (1993-2003)

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.). 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 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 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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

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. 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.

(Continued on Next Page)

Harmful Event (*Continued*)

HARM_EV is from the Accident Files and is repeated here

1975 to 1981

Variables = 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 to 1978 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 to 1981 only*)
 - 33 - Bridge or Overpass [*Passing Over*] (*1979 to 1981 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 (*2005-2006*)

(Continued on Next Page)

Hit-and-Run (*Continued*)

1977 to 1981

Variable = HIT_RUN

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

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 2002-2004 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.

(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

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

08 - Sideswipe - Opposite Direction

Sideswipe, elements 07 or 08 are 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.

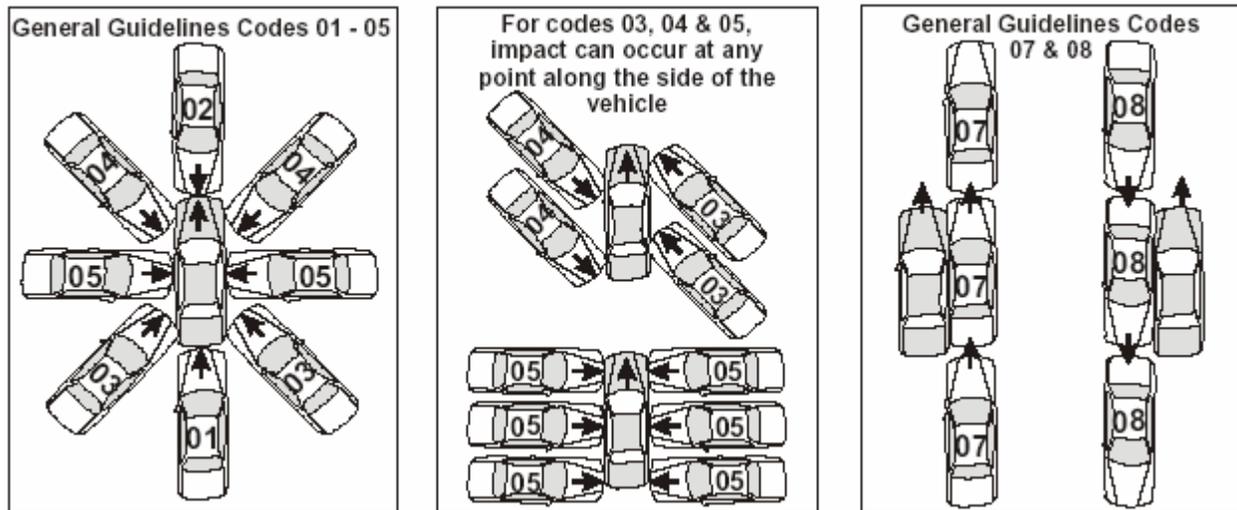
See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

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° 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 = # 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 – 2004 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*)
 - 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 & 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)	1991 and 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 (1998-2006)

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 or 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

(Continued on Next Page)

Relation to Trafficway (Continued)

1975 to 1997

Variable = REL_ROAD

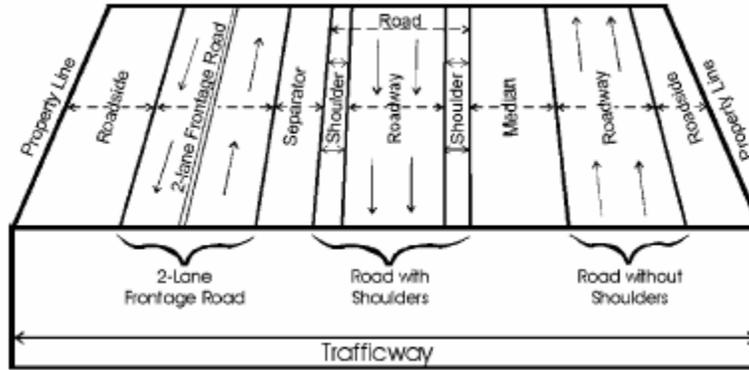
- Element =
- 1 - On Roadway
 - 2 - Shoulder
 - 3 - Median
 - 4 - Roadside
 - 5 - Outside Right-of-way
 - 6 - Off Roadway - Location Unknown
 - 7 - In Parking Lane (*since 1980*)
 - 8 - Gore (*since 1982*)
 - 9 - Unknown

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

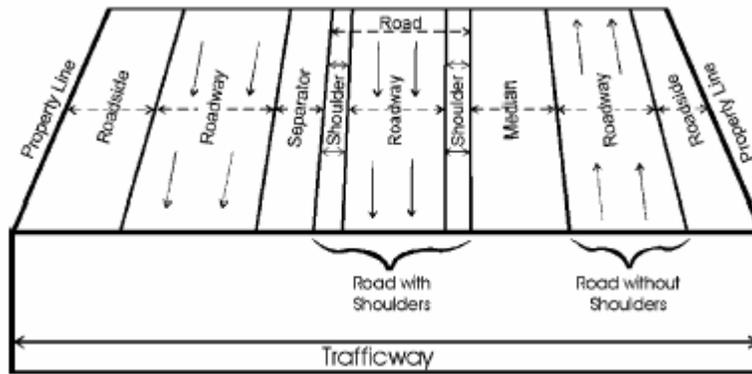
(Continued on Next Page)

Relation to Trafficway (Continued)

Trafficway with frontage road



Trafficway with multiple roadways in the same direction

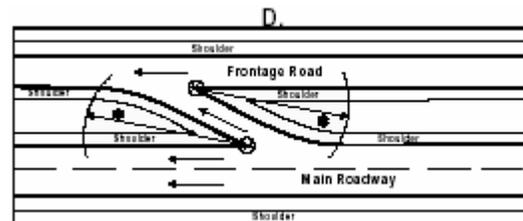
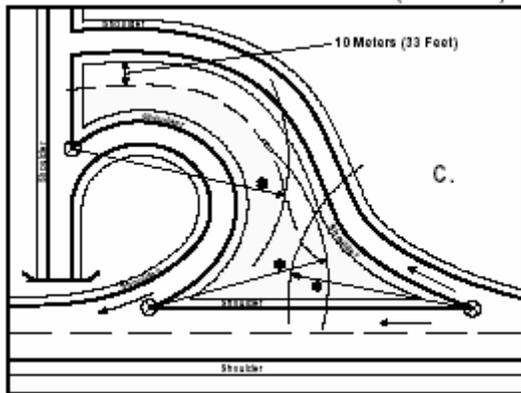
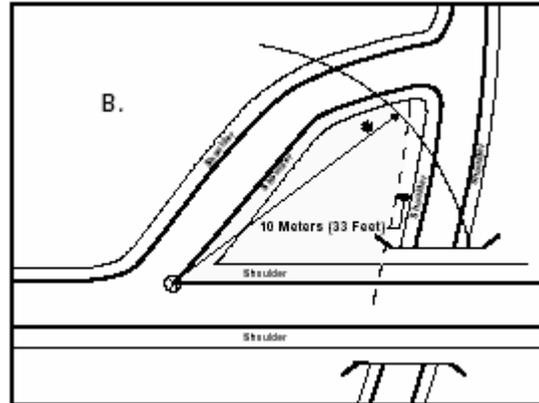
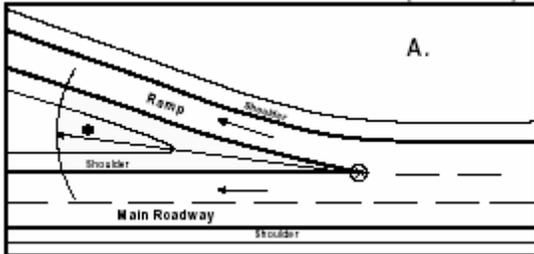


(Continued on Next Page)

Relation to Trafficway (Continued)

Gore

* Radius of 60 Meters
(About 200 Feet)



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	1987 and 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)	1987 and 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)	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

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

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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
	1 - National Park Service
	2 - Military
	3 - Indian Reservation
	4 - College/University Campus
	5 - Other Federal Properties (<i>since 1977</i>)
	8 - Other (<i>since 1976</i>)
	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 | 31 - Nebraska |
| 02 - Alaska | 32 - Nevada |
| 04 - Arizona | 33 - New Hampshire |
| 05 - Arkansas | 34 - New Jersey |
| 06 - California | 35 - New Mexico |
| 08 - Colorado | 36 - New York |
| 09 - Connecticut | 37 - North Carolina |
| 10 - Delaware | 38 - North Dakota |
| 11 - District of Columbia | 39 - Ohio |
| 12 - Florida | 40 - Oklahoma |
| 13 - Georgia | 41 - Oregon |
| 15 - Hawaii | 42 - Pennsylvania |
| 16 - Idaho | 43 - Puerto Rico |
| 17 - Illinois | 44 - Rhode Island |
| 18 - Indiana | 45 - South Carolina |
| 19 - Iowa | 46 - South Dakota |
| 20 - Kansas | 47 - Tennessee |
| 21 - Kentucky | 48 - Texas |
| 22 - Louisiana | 49 - Utah |
| 23 - Maine | 50 - Vermont |
| 24 - Maryland | 51 - Virginia |
| 25 - Massachusetts | 52 - Virgin Islands (since 2004) |
| 26 - Michigan | 53 - Washington |
| 27 - Minnesota | 54 - West Virginia |
| 28 - Mississippi | 55 - Wisconsin |
| 29 - Missouri | 56 - Wyoming |
| 30 - Montana | |

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

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.

(Continued on Next Page)

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.")
 (Continued on Next Page)

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 both a State Highway and 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 coded 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

This is repeated in the Vehicle and Person files.

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 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.

FARS VEHICLE FILE VARIABLES																																				
Variable	Year																																			
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007			
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TYP	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A		
_BT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	B	B	B	B	B	B	C	C	D	D	D	D	D	E		
TAT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		
TR	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
S	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
MED	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
DR_CF1	A	A	A	B	C	C	C	D	D	D	D	E	E	E	E	E	F	F	F	G	H	H	H	H	H	H	I	J	K	K	L	L	L	L		
DR_CF2	A	A	A	B	C	C	C	D	D	D	D	E	E	E	E	E	F	F	F	G	H	H	H	H	H	H	I	J	K	K	L	L	L	L		
DR_CF3	A	A	A	B	C	C	C	D	D	D	D	E	E	E	E	E	F	F	F	G	H	H	H	H	H	H	I	J	K	K	L	L	L	L		
DR_CF4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	H	H	H	I	J	K	K	L	L	L	L		
DR_DRIANK	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DR_HGT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	B	B	B	B	B	
DR_PRES	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	
DR_TRAIN	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DR_WGT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DR_ZIP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EMER_USE	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
FIRE_EXP	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FIRST_MO	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FIRST_YR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B
FLDCD_TR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GWVR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARM_EV	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	E	F	F	F	F	F	F	F	G	H	H	H	H	
HAZ_CARG	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	-
HAZ_INV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
HAZ_PLAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
HAZ_ID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
HAZ_CNO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A

FARS VEHICLE FILE VARIABLES																																				
Variable	Year																																			
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007			
HAZ_REL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A		
HIT_RUN	A	A	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
IMPACT1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C		
IMPACT2	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C		
IMPACTS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
J_KNIFE	-	-	-	-	-	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
LAST_MO	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
LAST_YR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
L_CL_VEH	-	-	-	-	-	-	-	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
L_COMPL	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
L_ENDORS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
L_RESTRI	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
L_STATE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
L_STATUS	A	A	A	A	A	A	A	B	B	B	B	B	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
L_TYPE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAKE	A	A	A	A	A	A	A	B	B	B	B	B	C	C	C	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
MAN_MOD	A	A	A	A	A	A	A	B	B	B	B	B	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
MAN_COLL	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
MCARR_ID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MCYCL_DS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MCYCL_TY	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MODEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MOD_YEAR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B
MONTH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
M_HARM	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	E	F	F	F	F	F	F	F	G	G	G	G	G	
OCUPANTS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
OWNER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PREV_ACC	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
PREV_DWI	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
PREV_OTH	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

FARS VEHICLE FILE VARIABLES																																		
Variable	Year																																	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
PREV_SPD	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B		
PREV_SUS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B		
REG_STAT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
ROLLOVER	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
SEQ1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	B	B		
SEQ2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	B	B		
SEQ3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	B	B		
SEQ4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	B	B		
SEQ5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	B	B		
SEQ6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	B	B		
SER_TR	See VIN Manual for level																																	
SPEC_USE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
STATE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
ST_CASE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
TOWAWAY	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
TOW_VEH	A	A	A	A	A	A	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	
TRAV_SP	A	A	A	A	A	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
UNDERRIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
UNITYTYPE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	
VEH_CF1	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	E	F	G	G	H	I	I	J	
VEH_CF2	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	E	F	G	G	H	I	I	J	
VEH_MAN	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VEH_NO	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VE_FORMS		A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
VIN	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VINA_MOD	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VIN_1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VIN_2	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VIN_3	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VIN_4	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
VIN_5	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

FARS VEHICLE FILE VARIABLES																																				
Variable	Year																																			
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007			
VIN_6	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
VIN_7	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
VIN_8	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
VIN_9	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
VIN_10	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
VIN_11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
VIN_12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
VIN_BT	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
VIN_LNGT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
VIN_WGT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
VIOLCHG1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
VIOLCHG2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
VIOLCHG3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
VIOL_CHG	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
V_CONFIG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WGTC_D_TR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
WHLBS_LG	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
WHLBS_SH	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

Axles

1995 and later

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

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 (*1991-1993 only*)
 - 08 - Sedan/Hardtop, number of doors unknown (*since 1994*)
 - 09 - Unknown auto type (*1991-1993 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 to 2002 only*)
 - 25 - Van-Based Transit Bus (*1993 to 2002 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)
- 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.

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.

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.
(1975-1979)
 - 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.
(1980-1981)
 - 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.

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 <i>Note that utility vehicles are also part of the light-truck category</i>	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.

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_TYP EQ 67 BODY_TYP EQ 71

(Continued on Next Page)

Body Type (Continued)

This is repeated in the Person 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] <i>See V_CONFIG</i>
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 <i>See V_CONFIG</i>

(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 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*) (*2001-2006*)

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 elements 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

1975 and later

Variables = FIRST_MO
LAST_MO

Month:

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

1998 and later**Year:**

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

Year:

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.

1995 and later

Variable = MONTH
From the Accident file

Element = 01-12 (*The Month of the Crash* 1 = January, 12 = December)

Driver Drinking

1975 and later

Variable = DR_DRINK

Element = 0 - No Drinking
 1 - Drinking
 9 - Unknown (1975-1981, 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

(Continued on Next Page)

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) (since 2005)
 - 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

1975 and later

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

Variables = 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 than 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, (SEQ_i, 1 ≤ i ≤ 6) have the same values. 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 SEQ_i
 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° 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.

(Continued on Next Page)

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 struck 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.

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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 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

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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 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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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.).

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later**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

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 (since 2005)****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.

61 - Equipment Failure (blown tire, brake failure, etc.)**62 - Separation of Units**

This element is used when a trailing unit separates from its power unit or another trailing unit(s). This applies to truck tractors with trailers, a single-unit truck with a trailer, and other vehicles pulling trailers (*e.g., car pulling a boat or motorhome*).

63 - Ran Off Road - Right**64 - Ran Off Road - Left**

These elements 63 and 64 are used if a driver loses control of vehicle and runs off road. Identification of running off road can be determined from diagram. These elements can be used anytime in the event sequence before or after any harmful events.

65 - Cross Median/Centerline

This element is used when a vehicle completely crosses the median and enters the shoulder or travel lanes on the opposite side of a divided highway. It also includes crossing over the enter line of a two-way, undivided highway.

66 - Downhill Runaway**67 - Vehicle Went Airborne**

Officer must indicate by narrative or diagram that the vehicle left the ground (excludes simple rollover) because vehicle drove off cliff, propelled into air after striking another vehicle or traversing a berm. Officer states, "launched, vaulted or went airborne." Driving off bridge and landing on road or vehicle below.

99 - Unknown

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

Variables = HARM_E and M_HARM

- Element =
- 01 - **Overturn/Rollover**
This element is used if a vehicle rotates 90° 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 unstabilized 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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003**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 struck 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.

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*).

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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

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.

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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003**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 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**

(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*) 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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003**45 - Transport Device Used as Equipment (1993-2003)**

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.). 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 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 stuck 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 (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.

(Continued on Next Page)

Harmful Event (Continued)

This is repeated in the Vehicle and Person files.

1982 to 2003

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 is. For example, if a series of harmful events occurred, and it's unclear which 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 event 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. 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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1975 to 1981

Variables = HARM_EV

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 Non-motorist
 - 16 - Other Object
 - 17 - Bridge or Overpass (*1975 to 1978 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 to 1981 only*)
 - 33 - Bridge or Overpass [*Passing Over*] (*1979 to 1981 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)

HAZ_INV Element = Blank
 1 - No
 2 - Yes

Variable = HAZ_PLAC (1- Digit Placard)

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

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

HAZ_ID Element = Blanks
 0000 – Not Applicable
 Actual 4-digit number - No
 8888 – Not Reported

Variable = HAZ_CNO: (1- Digit Hazardous Material Class Number)

HAZ_CNO Element = Blank
 0 – Not Applicable
 Actual 1-digit number
 8 – Not Reported

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

HAZ_REL 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

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 (*2005-2006*)

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 (*1980-1993 only*)
 16 - Override (*1982-1993 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.

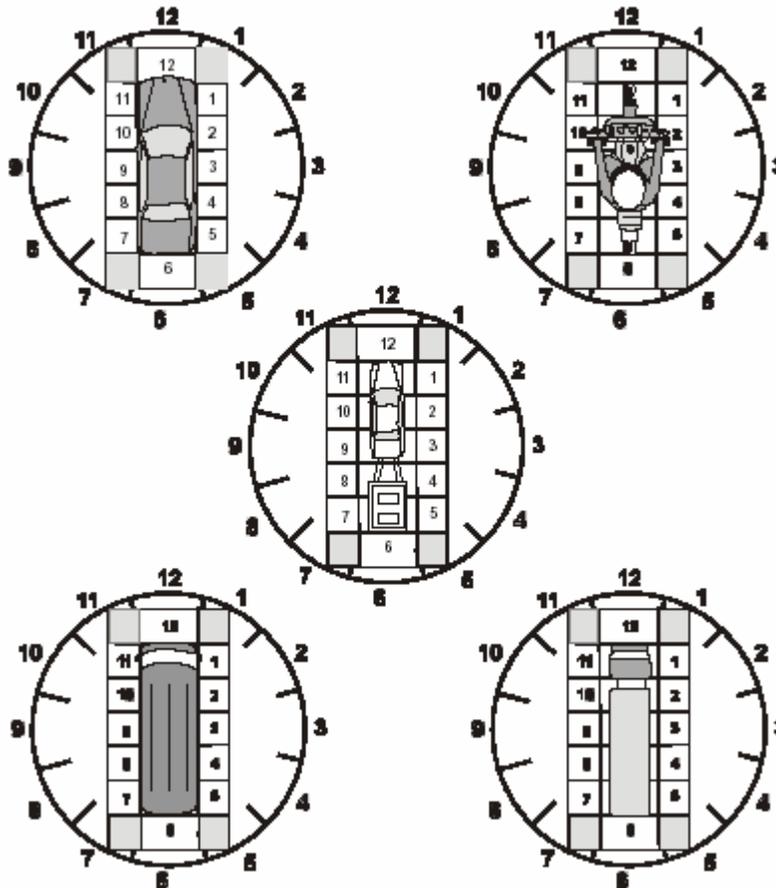
9 - Unknown if Underride or Override

(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

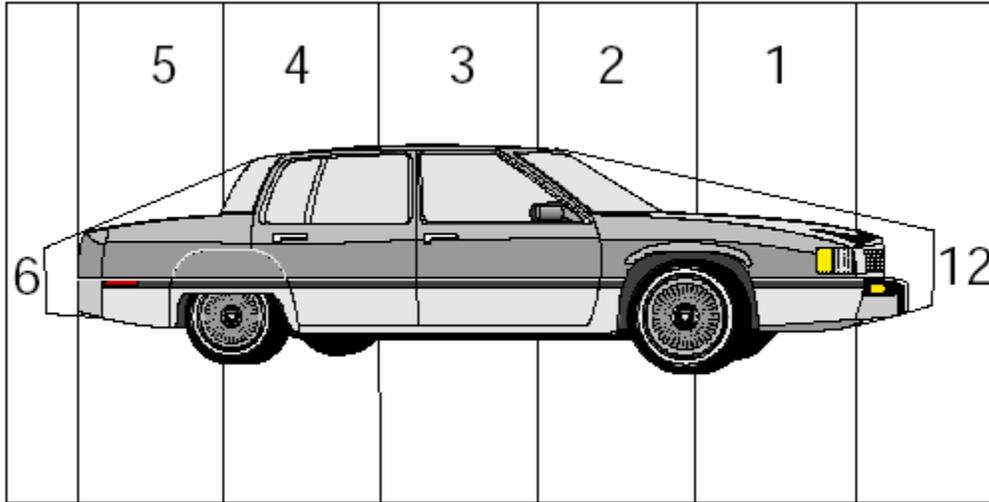
CLOCKPOINT DIAGRAM



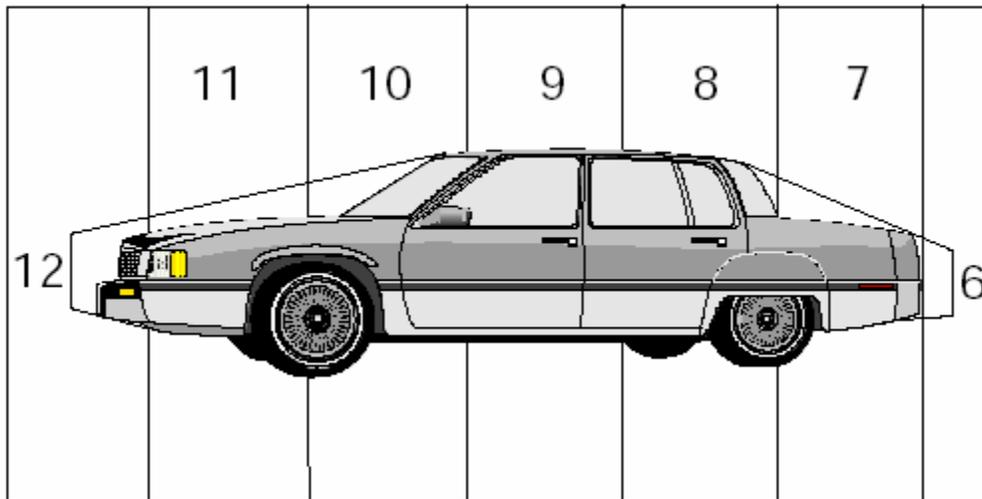
(Continued on Next Page)

Impact (Continued)

IMPACT POINTS



Right Side



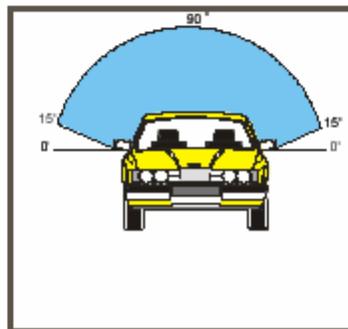
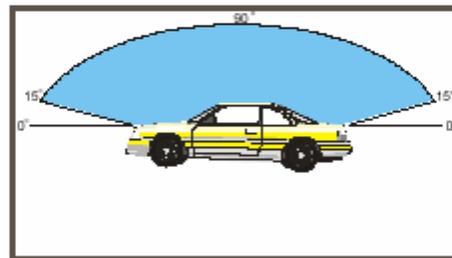
Left Side

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

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 opposing directions.

Use element 02 for all head-on crashes and all crashes in which the front of both vehicles make contact in 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 opposite direction. 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.

(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

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

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 that 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 Again, these must be true for both vehicles involved in the collision (with each other), which is the first harmful event.
- 9 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 should be used for collisions where one vehicle's end swipes (end-swipe) another vehicle instead of their sides swiping. Also, this element should be 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.

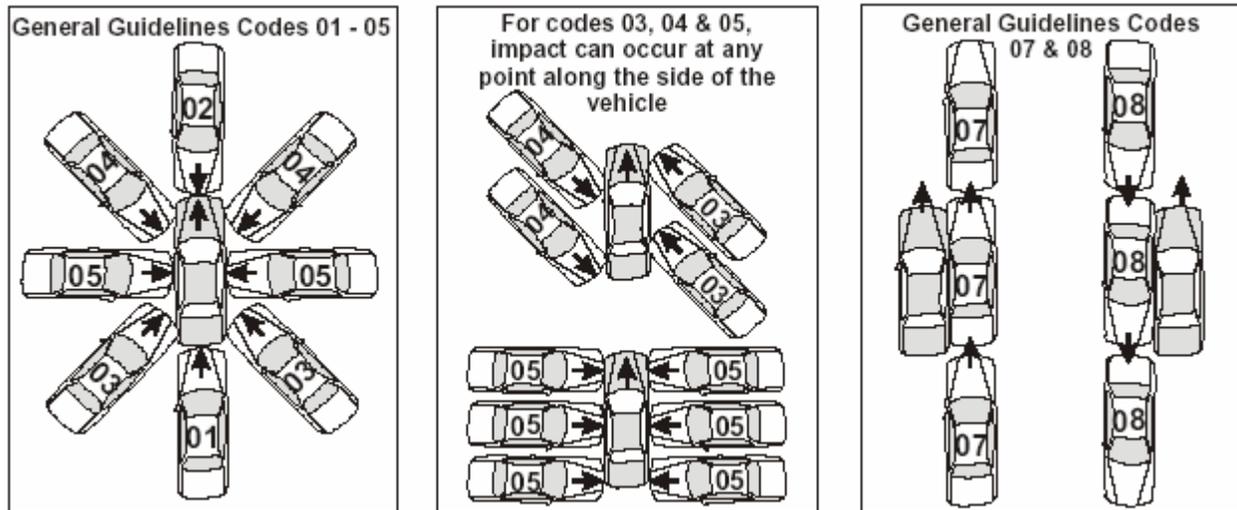
See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

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° 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 = Blanks
 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 (*A 2 Digit Field*)
 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.

MCARR_ID Element = NNNNNNNNNNN or NNAAAAAAAAA

Variable = MCARR_I1 (2- Digit Issuing Authority)

MCARR_I1 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)

MCARR_I2 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:

And Where NNNNNNNNNN or AAAAAAAAAA
 = 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., $93 \leq DR_CFi \leq 98$. 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.

Previously Recorded

1994 and later

Variables = PREV_ACC Previously Recorded Crash (*Crashes*)
 PREV_DWI Previously Recorded DWI Convictions
 PREV_OTH Previously Recorded Other Moving Violations Convict
 PREV_SPD Previously Recorded Speeding Convictions
 PREV_SUS Previously 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 Previously Recorded Accidents (*Crashes*)
 PREV_DWI Previously Recorded DWI Convictions
 PREV_OTH Previously Recorded Other Moving Violations Convict
 PREV_SPD Previously Recorded Speeding Convictions
 PREV_SUS Previously 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 Vehicle
 - 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.) (1982-1994)
- 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 to 1994 only, see element 11)
- 08 - Road Rage/Aggressive Driving (since 2004)
- 09 - Impaired Due to Previous Injury
- 10 - Deaf (1982 - 1994)
- 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 (2000-2003 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 (1982-1999)
- 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 (*see 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 - 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 (1982 - 1994)

(Continued on Next Page)

Related Factors - Driver Level (Continued)

1982 and later

Except as noted

MISCELLANEOUS FACTORS

- 46 - *Not Used (1995-1997)*
- 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- 2001 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 – 2001 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 (since 1991)

- 93 - Cellular Telephone (since 1991)
- 94 - Fax Machine (1991 - 2001)
- 94 - Cellular Telephone in Use in Vehicle (since 2002)
- 95 - Computer (since 1991 - 2001)
- 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*)
See note:
- 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 – 2003 only*)

(Continued on Next Page)

Related Factors - Vehicle Level (Continued)

1982 and later

- 35 - Reconstructed Vehicle (*since 1998*)
- 36 - Electric/Alternative Fuel Vehicle (*since 1999*)
- 37 - Transporting Children to/from Head Start/Day Care (*since 2000*)
- 38 - Vehicle Went Airborne During Crash (*2001-2003 only*)
- 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 (*2005-2006*)
- 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	
<i>Classification</i>	<i>Data Year and Element</i>
	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 apply:

At least one driver involved in the crash had a speeding-related Driver-Related Factor or 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 = 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 or VIOLCHG4=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 and later	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 conflict 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 conflict 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.

- | | |
|---------------------------|---------------------|
| Blanks | 29 - Missouri |
| 00 - Not Applicable | 30 - Montana |
| 01 - Alabama | 31 - Nebraska |
| 02 - Alaska | 32 - Nevada |
| 04 - Arizona | 33 - New Hampshire |
| 05 - Arkansas | 34 - New Jersey |
| 06 - California | 35 - New Mexico |
| 08 - Colorado | 36 - New York |
| 09 - Connecticut | 37 - North Carolina |
| 10 - Delaware | 38 - North Dakota |
| 11 - District of Columbia | 39 - Ohio |
| 12 - Florida | 40 - Oklahoma |
| 13 - Georgia | 41 - Oregon |
| 15 - Hawaii | 42 - Pennsylvania |
| 16 - Idaho | 43 - Puerto Rico |
| 17 - Illinois | 44 - Rhode Island |
| 18 - Indiana | 45 - South Carolina |
| 19 - Iowa | 46 - South Dakota |
| 20 - Kansas | 47 - Tennessee |
| 21 - Kentucky | 48 - Texas |
| 22 - Louisiana | 49 - Utah |
| 23 - Maine | 50 - Vermont |
| 24 - Maryland | 51 - Virginia |
| 25 - Massachusetts | 53 - Washington |
| 26 - Michigan | 54 - West Virginia |
| 27 - Minnesota | 55 - Wisconsin |
| 28 - Mississippi | 56 - Wyoming |

(Continued on Next Page)

State (Continued)

1975 and later

Registration State Only:

- 92 - No Registration
- 93 - Multiple State Registration - In State (*In 1997 level 93 and level 94 were combined into level 93. After 93 the level is Multiple State Registration*)
- 94 - Multiple State Registration - Out-of-State (*1975-96 only, value=94, not valid after 1996*)
- 95 - U.S. Government Tags
- 96 - Multiple Vehicle
- 97 - Foreign Country
- 98 - Other Registration
- 99 - Unknown

License State only:

- 94 – U.S. Government (since 2007)
- 94 – Military (1975-2006)
- 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

(Continued on Next Page)

Towed Trailing Unit (Continued)

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 has always 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

2005 and later

Variable = UNITTYPE

Element = 1 - Motor Vehicle in Transport

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*) – (2001-2006)

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

Variable = V_CONFIG

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

(Continued on Next Page)

Vehicle Configuration (Continued)

(See *BODY_TYP* and *CARGO_BT*)

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.

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Vehicle Forms Submitted (*Number of*) (*Continued*)

This comes from the Accident File also repeated in the Vehicle File

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 (whether in motion or not). **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.

Vehicle Identification Number

1975 and later

Variable = VIN The first [12 (*1994 and later*)] [10 (*1975 to 1993*)] 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	F3 - PEUGEOT
A3 - MITSUBISHI	FA - FORD (IF VIN_1 = 1)
AB - ISUZU	FA - FIAT (IF VIN_1 = Z)
AJ - JAGUAR	FF - FERRARI
AM - MASERATI (IF VIN_1 = Z)	FR - PININFARINA
AM - AMERICAN MOTORS (IF VIN_1 = 1)	G1 - CHEVROLET
AR - ALPHA ROMEO	G2 - PONTIAC
AW - AUDI	G3 - OLDSMOBILE
AX - STERLING	G4 - BUICK
B3 - DODGE	G6 - CADILLAC
BA - BMW	G8 - SATURN
BB - BERTONE	H4 - ACURA
C3 - CHRYSLER	HM - HONDA
CA - ROLLS ROYCE	JC - JEEP
CC - LOTUS	LN - LINCOLN
CE - DELOREAN	M1 - MAZDA
CF - ASTON MARTIN	ME - MERCURY
DB - MERCEDES BENZ	MH - HYUNDAI
E3 - EAGLE	N1 - NISSAN
F1 - EAGLE MEDALLION (IF VIN_1 = V SEE RENAULT)	P3 - PLYMOUTH
F1 - MERKUR (IF VIN_1 = W)	PO - PORSCHE
F1 - RENAULT (IF VIN_1 = V SEE EAGLE MEDALLION)	S3 - SAAB
F1 - SUBARU (IF VIN_1 = J)	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 =

A - 1980	L - 1990	Y - 2000
B - 1981	M - 1991	1 - 2001
C - 1982	N - 1992	2 - 2002
D - 1983	P - 1993	3 - 2003
E - 1984	R - 1994	4 - 2004
F - 1985	S - 1995	5 - 2005
G - 1986	T - 1996	6 - 2006
H - 1987	V - 1997	7 - 2007
J - 1988	W - 1998	8 - 2008
K - 1989	X - 1999	9 - 2009

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
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Vehicle Make (Continued)

1991 and later

80 - Brockway	89 - White/Autocar	Divco
81 - Diamond Reo	White GMC	Hino
Reo	90 - Bluebird	Mid Bus
82 - Freightliner	91 - Eagle Coach	Neoplan
83 - FWD	92 - Gillig	Orion
84 - International Harvester	93 - MCI	Oshkosh
Navistar	94 - Thomas Built	Scania
85 - Kenworth	98 - Other Make	Sterling
86 - Mack	Auto-Union-DKW	UD
87 - Peterbilt	Carpenter	Van Hool
88 - Iveco Magirus	Collins Bus	Western Star
	DINA	99 - Unknown Make

(Continued on Next Page)

Vehicle Make (Continued)

1991 and later

Variable = MAKE

Element = [In alphabetical order]

54 - Acura	71 - Ducati	40 - Lancia
31 - Alfa Romeo	10 - Eagle	62 - Land Rover
03 - AM General	91 - Eagle Coach	59 - Lexus
01 - American Motors	29 - Excalibur	13 - Lincoln
69 - Aston Martin	69 - Ferrari	69 - Lotus
32 - Audi	36 - Fiat	86 - Mack
33 - Austin/Austin Healey	12 - Ford	69 - Maserati
29 - Avanti	82 - Freightliner	69 - Maybach
98 - Auto-Union-DKW	83 - FWD	41 - Mazda
69 - Bentley	69 - Gazelle	93 - MCI
69 - Bertone	92 - Gillig	42 - Mercedes-Benz
90 - Bluebird	23 - GMC	14 - Mercury
34 - BMW	25 - Grumman	56 - Merkur
69 - Bricklin	72 - Harley-Davidson	98 - Mid Bus
80 - Brockway	69 - Hillman	69 - Mini Cooper
70 - BSA	98 - Hino	43 - MG
18 - Buick	37 - Honda	52 - Mitsubishi
19 - Cadillac	29 - Hudson	69 - Morgan
98 - Carpenter	55 - Hyundai	69 - Morris
29 - Checker	08 - Imperial	74 - Moto Guzzi
20 - Chevrolet	58 - Infiniti	84 - Navistar
06 - Chrysler	84 - International Harvester	98 - Neoplan
69 - Citroen	38 - Isuzu	35 - Nissan
98 - Collins Bus	88 - Iveco Magirus	75 - Norton
64 - Daewoo	39 - Jaguar	21 - Oldsmobile
60 - Daihatsu	69 - Jensen	18 - Opel
35 - Datsun	02 - Jeep	98 - Orion
69 - DeLorean	02 - Kaiser-Jeep	98 - Oshkosh
29 - DeSoto	73 - Kawasaki	69 - Other Imports
69 - Desta	85 - Kenworth	29 - Other Domestic
81 - Diamond Reo	63 - KIA	98 - Other Make
98 - DINA	69 - Lada	29 - Packard
98 - Divco	69 - Lamborghini	29 - Panoz
07 - Dodge		87 - Peterbilt

(Continued on Next Page)

Vehicle Make (*Continued*)

1991 and later

44 - Peugeot	69 - Singer	69 - TVR
09 - Plymouth	69 - Spyker	98 - UD
22 - Pontiac	61 - Sterling	99 - Unknown Make
45 - Porsche	98 - Sterling	98 - Van Hool
69 - Reliant (British)	29 - Studebaker	30 - Volkswagen
46 - Renault	29 - Stutz	51 - Volvo
69 - Rolls-Royce	48 - Subaru	98 - Western Star
81 - Reo	69 - Sunbeam	89 - White/Autocar
47 - Saab	53 - Suzuki	89 - White GMC
29 - Saleen	94 - Thomas Built	02 - Willys Jeep
24 - Saturn	49 - Toyota	76 - Yamaha
98 - Scania	50 - Triumph	57 - Yugo
69 - Simca		

(Continued on Next Page)

Vehicle Make (Continued)

1975 to 1990

Variable = MAKE

Element = [In numerical order]

01 - American Motors	35 - Datsun	58 - Infiniti (Not before 1988)
02 - Jeep	36 - Fiat	59 - Other Imports
03 - AM General	37 - Honda	60 - BSA
06 - Chrysler	38 - Isuzu	61 - Ducati
07 - Dodge	39 - Jaguar	62 - Harley-Davidson
08 - Imperial	40 - Lancia	63 - Kawasaki
09 - Plymouth	41 - Mazda	64 - Moto Guzzi
10 - Eagle (Not before 1988)	42 - Mercedes-Benz	65 - Norton
12 - Ford	43 - MG	67 - Yamaha
13 - Lincoln	44 - Peugeot	69 - Other Motor Cycle
14 - Mercury	45 - Porsche	70 - Moped
18 - Buick	46 - Renault	80 - Brockway
19 - Cadillac	47 - Saab	81 - Diamond Reo
20 - Chevrolet	48 - Subaru	82 - Freightliner
21 - Oldsmobile	49 - Toyota	83 - FWD
22 - Pontiac	50 - Triumph	84 - International Harvester
23 - GMC	51 - Volvo	85 - Kenworth
29 - Other Domestic	52 - Mitsubishi (Not before 1982)	86 - Mack
30 - Volkswagen	53 - Suzuki (Not before 1987)	87 - Peterbilt
31 - Alfa Romeo	57 - Lexus (Not before 1988)	88 - White
32 - Audi		95 - Other Truck/Bus
33 - Austin-Healey		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	37 - Honda	21 - Oldsmobile
03 - AM General	08 - Imperial	29 - Other Domestic
01 - American Motors	58 - Infiniti (Not before 1990)	59 - Other Imports
32 - Audi	84 - International Harvester	98 - Other Make
33 - Austin-Healey	38 - Isuzu	69 - Other Motor Cycle
34 - BMW	39 - Jaguar	95 - Other Truck/Bus
80 - Brockway	02 - Jeep	87 - Peterbilt
60 - BSA	63 - Kawasaki	44 - Peugeot
18 - Buick	85 - Kenworth	09 - Plymouth
19 - Cadillac	40 - Lancia	22 - Pontiac
20 - Chevrolet	57 - Lexus (Not before 1990)	45 - Porsche
06 - Chrysler	13 - Lincoln	46 - Renault
35 - Datsun	86 - Mack	47 - Saab
81 - Diamond Reo	41 - Mazda	48 - Subaru
07 - Dodge	42 - Mercedes-Benz	53 - Suzuki (Not before 1987)
61 - Ducati	14 - Mercury	49 - Toyota
10 - Eagle (Not before 1988)	43 - MG	50 - Triumph
36 - Fiat	52 - Mitsubishi (Not before 1982)	99 - Unknown Make
12 - Ford	70 - Moped	30 - Volkswagen
82 - Freightliner	64 - Moto Guzzi	51 - Volvo
83 - FWD	65 - Norton	88 - White
23 - GMC		67 - Yamaha
62 - Harley-Davidson		

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)	06 Chrysler/DaimlerChrysler (Cont.)	(CHRY)
SUV/Light Trucks		Automobiles (Cont.)	
03481 AMGN Hummer (Pickup) (for SUV see 03421 for 1993-2003; see 03431 for 2004-on)		06031 CHRY TC (Maserati Sport)	
03498 AMGN Other		06035 CHRY Conquest	
03499 AMGN Unknown		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	
Medium/Heavy Trucks		SUV/Light Trucks	
03884 AMGN Medium/Heavy Truck (Military off-road)		06441 CHRY Town & Country	
03898 AMGN Other		06442 CHRY Voyager (2000-on) (1984- 2000 see 09 Plymouth)	
03899 AMGN Unknown		06499 CHRY 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)	07 Dodge	(DODG)
Automobiles		Automobiles	
06009 CHRY Cordoba		07001 DODG Dart	
06010 CHRY New Yorker (thru 1978)/ Newport/5 th Avenue/ Imperial (1979-1983) (excludes all FWD)		07002 DODG Coronet/Magnum/Charger (thru 1978)	
06014 CHRY New Yorker/E-Class/ Imperial (1990-1993)/ 5 th Avenue		07003 DODG Polara/Monaco/Royal Monaco	
06015 CHRY Laser			
06016 CHRY LeBaron			
06017 CHRY LeBaron GTS/GTC			

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1991 and later

07 Dodge (Cont.)	(DODG)	07 Dodge (Cont.)	(DODG)
Automobiles (Cont.)		SUV/Light Trucks (Cont.)	
07004	DODG Viper	07421	DODG Ramchager
07005	DODG Challenger	07422	DODG Durango (2004-on; see 07402 for 1998-2003)
07006	DODG Aspen	07441	DODG Vista Van
07007	DODG Diplomat	07442	DODG Caravan
07008	DODG Omni/Charger (1983-on)	07461	DODG B-Series Van/Ram Van/ Ram Wagon
07009	DODG Mirada	07462	DODG Sprinter
07010	DODG St. Regis	07470	DODG Van derivative
07011	DODG Aries (K)	07471	DODG D50, Colt Pickup, Ram 50/Ram 100
07012	DODG 400	07472	DODG Dakota
07013	DODG Rampage (car-based pickup)	07481	DODG D-W Series Pickup
07014	DODG 600	07482	DODG Ram Pickup
07015	DODG Daytona	07498	DODG Other
07016	DODG Lancer	07499	DODG Unknown
07017	DODG Shadow		
07018	DODG Dynasty		
07019	DODG Spirit		
07020	DODG Neon		
07021	DODG Magnum		
07024	DODG Charger		
07025	DODG Caliber		
07033	DODG Challenger		
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		Motorhome	
07401	DODG RaiderSport	07850	DODG Motorhome
07402	DODG Durango (1998-2003 only; see 07422 for 2004-on)		
		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)

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Vehicle Make/Vehicle Model (Continued)

1991 and later

08 Imperial	(CHRY)	09 Plymouth (Cont.)	(PLYM)
Automobiles		SUV/Light Trucks	
08010 CHRY Imperial		09421 PLYM Trailduster	
08398 CHRY Other		09441 PLYM Vista Van	
08399 CHRY Unknown		09442 PLYM Voyager (minivan) (2001-on, see 06 Chrysler)	
09 Plymouth	(PLYM)	09461 PLYM Van full-size (B-Series)	
Automobiles		09471 PLYM Arrow pickup (foreign)	
09001 PLYM Valiant/Scamp/ Duster (thru 1976)		09498 PLYM Other	
09002 PLYM Satellite/Belvedere		09499 PLYM Unknown	
09003 PLYM Fury (Fury Gran thru 1978)		Vehicles	
09004 PLYM Gran Fury (1980-on)		09998 PLYM Other	
09005 PLYM Barracuda		09999 PLYM Unknown (PLYMOUTH)	
09006 PLYM Volare		<hr/>	
09007 PLYM Caravelle		10 Eagle*	
09008 PLYM Horizon/Turismo		(EGIL)	
09011 PLYM Reliant(K)		*Note: Eagle model listed under American Motors.	
09013 PLYM Scamp (car-based pickup)		Automobiles	
09017 PLYM Sundance		10034 EGIL Summit (excludes wagon)	
09019 PLYM Acclaim		10037 EGIL Talon	
09020 PLYM Neon (since 2002, see 07 Dodge)		10040 EGIL Premier	
09031 PLYM Cricket		10041 EGIL Vision	
09032 PLYM Arrow		10044 EGIL Medallion	
09033 PLYM Sapporo		10045 EGIL Summit Wagon	
09034 PLYM Champ/Colt import (includes 2WD Vista)		10398 EGIL Other	
09035 PLYM Conquest		10399 EGIL Unknown	
09037 PLYM Laser		<hr/>	
09038 PLYM Breeze		12 Ford	
09039 PLYM Prowler (2002-on, see 06 Chrysler)		(FORD)	
09398 PLYM Other		Automobiles	
09399 PLYM Unknown		12001 FORD Falcon	
		12002 FORD Fairlane	
		12003 FORD Mustang/Mustang II	
		12004 FORD Thunderbird (all sizes)	
		12005 FORD LTD II	

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Vehicle Make/Vehicle Model (Continued)

1991 and later

12 Ford (Cont.)	(FORD)	12 Ford (Cont.)	(FORD)
Automobiles (Cont.)		SUV/Light Trucks (Cont.)	
12006 FORD LTD/Custom/Galaxy (all sizes)		12442 FORD Windstar	
12007 FORD Ranchero		12443 FORD Freestar	
12008 FORD Maverick		12461 FORD E-Series Van/Econoline	
12009 FORD Pinto		12470 FORD Van derivative	
12010 FORD Torino/Gran Torino/Elite		12471 FORD Ranger	
12011 FORD Granada		12472 FORD Courier	
12012 FORD Fairmont		12473 FORD Explorer Sport Trac	
12013 FORD Escort/EXP/ZX2		12481 FORD F-Series Pickup	
12015 FORD Tempo		12498 FORD Other	
12016 FORD Crown Victoria		12499 FORD Unknown	
12017 FORD Taurus			
12018 FORD Probe		Motorhome	
12021 FORD Five Hundred		12850 FORD Motorhome	
12022 FORD Freestyle			
12023 FORD Fusion		Medium/Heavy Trucks	
12031 FORD English Ford		12880 FORD Pickup (pickup-style only – over 10,000 lbs)	
12032 FORD Fiesta		12881 FORD CBE	
12033 FORD Festiva		12882 FORD COE low-entry	
12034 FORD Laser		12883 FORD COE high-entry	
12035 FORD Contour		12884 FORD Unknown engine location	
12036 FORD Aspire		12890 FORD COE entry position unknown	
12037 FORD Focus		12898 FORD Other	
12038 FORD GT		12899 FORD Unknown	
12398 FORD Other			
12399 FORD Unknown		Buses	
		12981 FORD Conventional (engine out front)	
SUV/Light Trucks		12988 FORD Other	
12401 FORD Bronco (thru 1977)/ Bronco II/Explorer/ Explorer Sport			
12402 FORD Escape		Vehicles	
12421 FORD Bronco fullsize (1978-on)		12998 FORD Other	
12422 FORD Expedition		12999 FORD Unknown (FORD)	
12423 FORD Excursion			
12441 FORD Aerostar			

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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

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)

(Continued on Next Page)

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)	20 Chevrolet (Cont.)	(CHEV)
Automobiles (Cont.)		SUV/Light Trucks (Cont.)	
20012 CHEV Monza		20441 CHEV Astro Van	
20013 CHEV Chevette		20442 CHEV Lumina APV	
20015 CHEV Citation		20443 CHEV Venture	
20016 CHEV Cavalier		20444 CHEV Uplander	
20017 CHEV Celebrity		20461 CHEV G-Series Van	
20019 CHEV Beretta/Corsica		20466 CHEV P-Series Van	
20020 CHEV Lumina		20470 CHEV Van derivative	
20022 CHEV Cobalt		20471 CHEV S-10/T-10 pickup	
20023 CHEV HHR		20472 CHEV LUV	
20031 CHEV Spectrum		29473 CHEV Colorado (since 2004)	
20032 CHEV Nova/Geo Prizm/Prism		20481 CHEV C,K,R,V-Series	
20033 CHEV Sprint/Geo Sprint		pickup/Silverado	
20034 CHEV Geo Metro/Metro		20482 CHEV Avalanche	
20035 CHEV Geo Storm		20498 CHEV Other	
20036 CHEV Monte Carlo (1995-on)		20499 CHEV Unknown	
20037 CHEV Malibu/Malibu Maxx			
20038 CHEV SSR			
20039 CHEV Aveo		Motorhome	
20398 CHEV Other		20850 CHEV Motorhome	
20399 CHEV Unknown			
		Medium/Heavy Trucks	
SUV/Light Trucks		20881 CHEV CBE	
20401 CHEV S-10 Blazer/TrailBlazer		20882 CHEV COE low-entry	
(2002 only; for 2003-on, see 20403)		20883 CHEV COE high-entry	
20402 CHEV Geo Tracker/Tracker		20884 CHEV Unknown engine location	
20403 CHEV TrailBlazer (2003-on; for		20890 CHEV COE entry position unknown	
2002, see 20401)		20898 CHEV Other	
20404 CHEV Equinox		20899 CHEV Unknown	
20421 CHEV Fullsize Blazer/Tahoe			
20422 CHEV Suburban (from 2004-on; see		Buses	
20431 for 1950-2003)		20981 CHEV Conventional (engine out	
20431 CHEV Suburban (from 1950-2003;		front)	
see 20422 for 2004-on)		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 PONT Torrent
22441 PONT Trans Sport/Montana/SV6
22499 PONT Unknown

Vehicles

22999 PONT Unknown (**PONTIAC**)

23 GMC (GMC)

Automobiles

23007 GMC Caballero

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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) 37 Honda (Acura: See "54") (Cont.) (HOND)

Automobiles

37031 HOND Civic/CRX, del Sol
 37032 HOND Accord
 37033 HOND Prelude

All-Terrain Vehicles (Cont.)
 37734 HOND 350cc or greater
 37739 HOND Unknown

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

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

37401 HOND Passport
 37402 HOND CR-V
 37403 HOND Element
 37421 HOND Pilot
 37441 HOND Odyssey
 37471 HOND Ridgeline
 37499 HOND 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

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

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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

(Continued on Next Page)

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**)

(Continued on Next Page)

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 Mquette/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

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.

(Continued on Next Page)

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

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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

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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) 83 FWD (FWD)

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**)

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

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**)

(Continued on Next Page)

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

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) 92 Gillig (Cont.) (-----)

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

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.

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.)	(-----)	99 Unknown Make (Cont.)	(-----)
Motorcycles (Cont.)		Motorhome	
99704	-----	350-449cc	99850
99705	-----	450-749cc	-----
99706	-----	750cc or greater	Motor home
99709	-----	Unknown	
All-Terrain Vehicles		Buses	
99731	-----	0-50cc	99981
99732	-----	51-124cc	-----
99733	-----	125-349cc	Conventional (engine out front)
99734	-----	350cc or greater	99982
99739	-----	Unknown	-----
Medium/Heavy Trucks		Front engine flat front	
99881	-----	Medium/Heavy CBE	99983
99882	-----	COE low-entry	-----
99883	-----	COE high-entry	Rear engine, flat front
99884	-----	Unknown engine location	99988
99890	-----	COE entry position unknown	-----
99898	-----	Other	Other
99899	-----	Unknown	99989

			Unknown
			Vehicles
			99998

			Other
			99999

			Unknown (as to automobile, motored cycle, light truck or truck)

(Continued on Next Page)

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)

02 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)

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

(Continued on Next Page)

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

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**)

(Continued on Next Page)

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

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 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/535
- 3437 BMW 733i
- 3461 BMW 0-50cc
- 3462 BMW 51-124cc
- 3463 BMW 125-349cc

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Vehicle Make/Vehicle Model (Continued)

1987 to 1990

34 BMW (Cont.)	(BMW)	35 Nissan/Datsun (Cont.)	(NISS-DATS)
3464 BMW 350-449cc		3599 NISS Unknown (automobile)	
3465 BMW 450-749cc		3500 NISS Unknown (NISSAN)	
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)	36 Fiat	(FIAT)
3531 NISS F-10		3631 FIAT 124 Coupe/Sedan	
3532 NISS 200 SX/240 SX		3632 FIAT 124 Spider	
3533 NISS B210/210/1200		3633 FIAT Brava/131	
3534 NISS 240/260/280/300 Z, ZX		3634 FIAT 850 Coupe/Spider	
3535 NISS 310		3635 FIAT 128	
3536 NISS 510		3636 FIAT X-1/9	
3537 NISS 610		3637 FIAT Strada	
3538 NISS 710		3697 FIAT Other Vehicle	
3539 NISS 810/Maxima		3698 FIAT Other (automobile)	
3540 NISS Roadster-SPL/SRL 311/SRL 341)		3699 FIAT Unknown (automobile)	
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)			
		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)	

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Vehicle Make/Vehicle Model (Continued)

1987 to 1990

38 Isuzu	(ISU)	41 Mazda (Cont.)	(MAZD)
3831 ISU I-Mark		4134 MAZD RX7	
3832 ISU Impulse		4135 MAZD GLC/323	
3833 ISU Stylus		4136 MAZD Cosmo	
3839 ISU Amigo		4137 MAZD 626	
3870 ISU Trooper II		4138 MAZD 808	
3877 ISU Pup pickup/Rodeo		4139 MAZD Mizer	
3878 ISU Other (SUV/light truck)		4140 MAZD R-100	
3879 ISU Unknown (SUV/light truck)		4141 MAZD 618/616	
3897 ISU Other Vehicle		4142 MAZD 1800	
3898 ISU Other (automobile)		4143 MAZD 929	
3899 ISU Unknown (automobile)		4144 MAZD MX-6	
3800 ISU Unknown (ISUZU)		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)	
39 Jaguar	(JAGU)	42 Mercedes-Benz	(MERZ)
3931 JAGU XJ-S Coupe		4231 MERZ 200/220/230/240/250/260/ 280/300 (sedan and 5-passenger Coupe 'C' only)	
3932 JAGU XJ6/XJ12 Sedan/Coupe		4232 MERZ 230SL/280SL (2-passenger)	
3933 JAGU XK-E		4233 MERZ 350 SL/450 SL, 380 SL/560 SL, 300 SL/500 SL	
3997 JAGU Other Vehicle		4234 MERZ 350 SLC/450 SLC/380 SLC	
3998 JAGU Other (automobile)		4235 MERZ 280 SEL/300 SEL	
3999 JAGU Unknown (automobile)		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	
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			

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Vehicle Make/Vehicle Model (Continued)

1987 to 1990

50 Triumph (Cont.)	(TRIU)	52 Mitsubishi	(MITS)
5097 TRIU Other Vehicle		5232 MITS Tredia	
5098 TRIU Other (automobile)		5233 MITS Cordia	
5099 TRIU Unknown (automobile)		5234 MITS Galant/Sigma	
5000 TRIU Unknown (TRIUMPH)		5235 MITS Mirage	
<hr/>		5336 MITS Precis	
51 Volvo	(VOLV)	5237 MITS Eclipse	
5131 VOLV 122		5270 MITS Montero	
5132 VOLV 142/144/145		5272 MITS Minivan	
5133 VOLV 164		5277 MITS pickup Mighty Max/SPX	
5134 VOLV 240/242/244/245		5278 MITS Other (SUV/light truck)	
5135 VOLV 262/264/265		5298 MITS Other (automobile)	
5136 VOLV 1800		5299 MITS Unknown (automobile)	
5137 VOLV P-544		5200 MITS Unknown (MITSUBISHI)	
5138 VOLV 760/780 GLE		<hr/>	
5139 VOLV 740 GLE		53 Suzuki	(SUZI)
5181 VOLV CBE (medium/heavy truck)		5331 SUZI SA 310/GLX	
5182 VOLV COE low-entry: (medium/heavy truck)		5334 SUZI Swift	
5183 VOLV COE high-entry: (medium/heavy truck)		5339 SUZI Sidekick	
5184 VOLV Unknown engine location (medium/heavy truck)		5361 SUZI 0-0cc	
5185 VOLV Medium bus		5362 SUZI 51-124cc	
5188 VOLV Other (truck)		5363 SUZI 125-349cc	
5189 VOLV Unknown (truck)		5364 SUZI 350-449cc	
5190 VOLV COE: entry position unknown (medium/heavy truck)		5365 SUZI 450-749cc	
5197 VOLV Other Vehicle		5366 SUZI 750cc & over	
5198 VOLV Other (automobile)		5369 SUZI Unknown (cc)	
5199 VOLV Unknown (automobile)		5370 SUZI SJ-410/Samurai	
5100 VOLV Unknown (VOLVO)		5378 SUZI Other (SUV/light truck)	
<hr/>		5388 SUZI Other (truck)	
52 Mitsubishi	(MITS)	5397 SUZI Other Vehicle	
5231 MITS Starion		5300 SUZI Unknown (SUZUKI)	
<hr/>		57 Lexus	(LEXS)
		5731 LEXS-250	
		5732 LEXS LS-400	

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Vehicle Make/Vehicle Model (Continued)

1987 to 1990

58 Infiniti	(INFI)	60 BSA (Cont.)	(BSA)
5831 INFI M30		6065 BSA 450-749cc	
5832 INFI Q45		6066 BSA 750cc and over	
		6069 BSA Unknown (cc)	
		6097 BSA Other Vehicle	
59 Other Import	(-----)	61 Ducati	(DUCA)
5931 ----- Aston Martin		6161 DUCA 0-50cc	
5932 ----- Bricklin		6162 DUCA 51-124cc	
5933 ----- Citroen		6163 DUCA 125-349cc	
5934 ----- DeLorean		6164 DUCA 350-449cc	
5935 ----- Ferrari		6165 DUCA 450-749cc	
5936 ----- Hillman		6166 DUCA 750cc and over	
5937 ----- Jensen		6169 DUCA Unknown (cc)	
5938 ----- Lamborghini		6197 DUCA Other Vehicle	
5939 ----- Lotus			
5940 ----- Maserati			
5941 ----- Morris			
5942 ----- Rolls-Royce/Bentley		62 Harley-Davidson	(HD)
5943 ----- Rover		6261 HD 0-50cc	
5944 ----- Simca		6262 HD 51-124cc	
5945 ----- Sunbeam		6263 HD 125-349cc	
5946 ----- TVR		6264 HD 350-449cc	
5947 ----- Daihatsu (Charade)		6265 HD 450-749cc	
5948 ----- Desta (APV-utility)		6266 HD 750cc and over	
5949 ----- Reliant (British)		6269 HD Unknown (cc)	
5950 ----- Yugo		6297 HD Other Vehicle	
5951 ----- Hyundai			
5952 ----- Sterling			
5998 ----- Other (automobile) (e.g., Morgan, Singer)		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	
60 BSA	(BSA)		
6061 BSA 0-50cc			
6062 BSA 51-124cc			
6063 BSA 125-349cc			
6064 BSA 350-449cc			

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1987 to 1990

63 Kawasaki (Cont.)	(KAWK)	69 Other Motorcycle	(-----)
6369 KAWK Unknown (cc)		6961 ----- 0-50cc	
6397 KAWK Other Vehicle		6962 ----- 51-124cc	
		6963 ----- 125-349cc	
		6964 ----- 350-449cc	
		6965 ----- 450-749cc	
		6966 ----- 750cc and over	
		6969 ----- Unknown (cc)	
		6997 ----- Other Vehicle	
64 Moto Guzzi	(MOGU)	70 Moped – Use if Make Not listed	(-----)
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)	80 Brockway	(BROC)
6761 YAMA 0-50cc		8080 BROC Motorhome	
6762 YAMA 51-124cc		8081 BROC CBE (medium/heavy truck)	
6763 YAMA 125-349cc		8082 BROC COE low-entry (medium/heavy truck)	
6764 YAMA 350-449cc		8083 BROC COE high-entry: (medium/heavy truck)	
6765 YAMA 450-749cc		8084 BROC Unknown engine location (medium/heavy truck)	
6766 YAMA 750cc and over		8085 BROC Bus (Conventional (engine out front))	
6769 YAMA Unknown (cc)		8086 BROC Bus (flat front, front engine)	
6797 YAMA Other Vehicle		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)	83 FWD (FWD)
8180 DIAR Motorhome	8380 FWD Motorhome
8181 DIAR CBE (medium/heavy truck)	8381 FWD CBE (medium/heavy truck)
8182 DIAR COE low-entry: (medium/heavy truck)	8382 FWD COE low-entry (medium/heavy truck)
8183 DIAR COE high-entry (medium/heavy truck)	8383 FWD COE high-entry (medium/heavy truck)
8184 DIAR Unknown engine location (medium/heavy truck)	8384 FWD Unknown engine location (medium/heavy truck)
8185 DIAR Bus	8385 FWD Bus
8186 DIAR Bus (flat front, front engine)	8386 FWD Bus (flat front, front engine)
8187 DIAR Bus (flat front, rear engine)	8387 FWD Bus (flat front, rear engine)
8188 DIAR Other (truck)	8388 FWD Other (truck)
8189 DIAR Unknown (truck)	8389 FWD Unknown (truck)
8190 DIAR COE entry position unknown (medium/heavy truck)	8390 FWD COE entry position unknown
8197 DIAR Other Vehicle	8397 FWD Other Vehicle
82 Freightliner or White Freightliner (FRHT)	84 International Harvester (INTL)
8280 FRHT Motorhome	8471 INTL Scout
8281 FRHT CBE (medium/heavy truck)	8473 INTL Pickup/panel
8282 FRHT COE low-entry (medium/heavy truck)	8475 INTL Multistop
8283 FRHT COE high-entry (medium/heavy truck)	8476 INTL Travellall
8284 FRHT Unknown engine location (medium/heavy truck)	8478 INTL Other (SUV/light truck)
8285 FRHT Bus	8479 INTL Unknown (SUV/light truck)
8286 FRHT Bus (flat front, front engine)	8480 INTL Motorhome
8287 FRHT Bus (flat front, rear engine)	8481 INTL CBE (medium/heavy truck)
8288 FRHT Other (truck)	8482 INTL COE low-entry (medium/heavy truck)
8289 FRHT Unknown (truck)	8483 INTL COE high-entry (medium/heavy truck)
8290 FRHT COE entry position unknown (medium/heavy truck)	8484 INTL Unknown engine location (medium/heavy truck)
8297 FRHT Other Vehicle	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)	86 Mack (Cont.) (MACK)
8489 INTL Unknown truck	8685 MACK Bus
8490 INTL COE entry position unknown (medium/heavy truck)	8686 MACK Bus (flat front, front engine)
8497 INTL Other Vehicle	8687 MACK Bus (flat front, rear engine)
8400 INTL Unknown (INTERNATIONAL HARVESTER)	8688 MACK Other (truck)
	8689 MACK Unknown (truck)
	8690 MACK COE entry position unknown (medium/heavy truck)
	8697 MACK Other Vehicle
85 Kenworth (KW)	87 Peterbilt (PTRB)
8580 KW Motorhome	8780 PTRB Motorhome
8581 KW CBE (medium/heavy truck)	8781 PTRB CBE (medium/heavy truck)
8582 KW COE low-entry (medium/heavy truck)	8782 PTRB COE low-entry (medium/heavy truck)
8583 KW COE high-entry (medium/heavy truck)	8783 PTRB COE high-entry (medium/heavy truck)
8584 KW Unknown engine location (medium/heavy truck)	8784 PTRB Unknown engine location (medium/heavy truck)
8585 KW Bus	8785 PTRB Bus
8586 KW Bus (flat front, front engine)	8786 PTRB Bus (flat front, front engine)
8587 KW Bus (flat front, rear engine)	8787 PTRB Bus (flat front, rear engine)
8588 KW Other (truck)	8788 PTRB Other (truck)
8589 KW Unknown (truck)	8789 PTRB Unknown (truck)
8590 KW COE entry position unknown	8790 PTRB COE entry position unknown
8597 KW Other Vehicle	8797 PTRB Other Vehicle
86 Mack (MACK)	88 White (WHIT)
8680 Mack MACK Motorhome	8880 WHIT Motorhome
8681 MACK CBE (medium/heavy truck)	8881 WHIT CBE (medium/heavy truck)
8682 MACK COE low-entry (medium/heavy truck)	8882 WHIT COE low-entry (medium/heavy truck)
8683 MACK COE high-entry (medium/heavy truck)	8883 WHIT COE high-entry (medium/heavy truck)
8684 MACK Unknown engine location (medium/heavy truck)	

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Vehicle Make/Vehicle Model (Continued)

1987 to 1990

88 White (Cont.) (WHIT)	98 Other Make (-----)
8884 WHIT Unknown engine location (medium/heavy truck)	9800 ----- Other Unknown
8885 WHIT Bus	9897 ----- Other Vehicle
8886 WHIT Bus (flat front, front engine)	9899 ----- Other Unknown auto
8887 WHIT Bus (flat front, rear engine)	
8888 WHIT Other (truck)	99 Unknown Make (-----)
8889 WHIT Unknown (truck)	9900 ----- Unknown (automobile/motored cycle/ light truck/ truck)
8890 WHIT COE entry position unknown (medium/heavy truck)	9969 ----- Unknown (motored cycle)
8897 WHIT Other Vehicle	9979 ----- Unknown (SUV/light truck)
	9989 ----- Unknown (truck)
95 Other (truck or bus) (-----)	9997 ----- Unknown (e.g., snowmobile/ go-cart)
9501 ----- Autocar	9999 ----- Unknown (automobile)
9502 ----- Auto-Union-DKW	
9503 ----- Divco	
9504 ----- Western Star	
9578 ----- Other (SUV/light truck)	
9588 ----- Other (truck)	

(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

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

09 Plymouth (Cont.)	(PLYM)	12 Ford (Cont.)	(FORD)
0931 PLYM Cricket		1232 FORD Fiesta	
0932 PLYM Arrow		1233 FORD Laser	
0933 PLYM Sapporo (import)		1270 FORD Bronco II	
0934 PLYM Champ/Colt (import)		1271 FORD Bronco	
0935 PLYM Conquest		1272 FORD Aerostar	
0971 PLYM Trailduster		1273 FORD F-Series pickup	
0972 PLYM Voyager		1274 FORD Van	
0974 PLYM Van (Voyager)		1275 FORD Van Derivative	
0977 PLYM Arrow pickup		1277 FORD Ranger	
0978 PLYM Other (SUV/light truck)		1278 FORD Other (SUV/light truck)	
0979 PLYM Unknown (SUV/light truck)		1279 FORD Unknown (SUV/light truck)	
0997 PLYM Other Vehicle		1281 FORD CBE (medium/heavy truck)	
0998 PLYM Other (automobile)		1282 FORD COE low-entry (medium/heavy truck)	
0999 PLYM Unknown (automobile)		1283 FORD COE high-entry (medium/heavy truck)	
0900 PLYM Unknown (PLYMOUTH)		1284 FORD Unknown engine location (medium/heavy truck)	
12 Ford	(FORD)	1285 FORD Medium Bus	
1201 FORD Falcon		1288 FORD Other (truck)	
1202 FORD Fairlane		1289 FORD Unknown (truck)	
1203 FORD Mustang/Mustang II		1290 FORD COE, entry position unknown	
1204 FORD Thunderbird		1297 FORD Other Vehicle	
1205 FORD LTD II		1298 FORD Other (automobile)	
1206 FORD LTD/Galaxy/Torino		1299 FORD Unknown (automobile)	
1207 FORD Ranchero		1200 FORD Unknown (FORD)	
1208 FORD Maverick			
1209 FORD Pinto			
1210 FORD Torino/Gran Torino		13 Lincoln	(LINC)
1211 FORD Granada		1301 LINC Lincoln Continental	
1212 FORD Fairmont		1302 LINC Mark	
1213 FORD Escort		1311 LINC Versailles	
1214 FORD EXP		1397 LINC Other Vehicle	
1215 FORD Tempo		1398 LINC Other (automobile)	
1216 FORD Crown Victoria		1399 LINC Unknown (LINCOLN)	
1217 FORD Taurus			
1231 FORD English Ford			

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

33 Austin/Austin Healey (AUST)	35 Nissan/Datsun (Cont.) (NISS)
3331 AUST Marina	3535 NISS 310
3332 AUST America	3536 NISS 510
3333 AUST Healey Sprite	3537 NISS 610
3334 AUST Healey 3000	3538 NISS 710
3335 AUST Mini	3539 NISS 810 Maxima
3397 AUST Other Vehicle	3540 NISS Roadster (SPL 311/SRL 341)
3398 AUST Other (automobile)	3541 NISS PL 411/RL 411
3399 AUST Unknown (automobile)	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)
34 BMW (BMW)	36 Fiat (FIAT)
3431 BMW 1600, 2002	3631 FIAT 124 (Coupe/Sedan)
3432 BMW Coupe	3632 FIAT 124 Spider
3433 BMW Bavaria Sedan	3633 FIAT Brava/131
3434 BMW 630, 633	3634 FIAT 850 (Coupe & Spyder)
3435 BMW 318i, 320i, 325E	3635 FIAT 128
3436 BMW 524i, 528i, 530i, 533i	3636 FIAT X-1/9
3437 BMW 733i	3637 FIAT Strada
3461 BMW 0-50cc	3697 FIAT Other Vehicle
3462 BMW 51-124cc	3698 FIAT Other (automobile)
3463 BMW 125-349cc	3699 FIAT Unknown (automobile)
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)	37 Honda (HOND)
3531 NISS F-10	3731 HOND Civic
3532 NISS 200 SX	
3533 NISS B210/210/1200	
3534 NISS 240/260/280/300	

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

46 Renault	(RENA)	49 Toyota	(TOYT)
4631 RENA LeCar		4931 TOYT Corona	
4632 RENA 10/Dauphine/Caravelle/R-8		4932 TOYT Corolla	
4633 RENA 12		4933 TOYT Celica	
4634 RENA 15		4934 TOYT Celica Supra	
4635 RENA 16		4935 TOYT Cressida	
4636 RENA 17		4936 TOYT Crown	
4637 RENA R18i		4937 TOYT Carina	
4638 RENA Fuego		4938 TOYT Tercel	
4639 RENA Alliance		4939 TOYT Starlet	
4640 RENA Encore		4940 TOYT Camry	
4641 RENA Alpine		4941 TOYT MR2	
4697 RENA Other Vehicle		4970 TOYT 4-Runner	
4698 RENA Other (automobile)		4971 TOYT Landcruiser	
4699 RENA Unknown (automobile)		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)	
47 Saab	(SAA)	50 Triumph	(TRIU)
4731 SAA 99/99E/900/9000		5001 TRIU Spitfire	
4732 SAA Sonnet		5002 TRIU GT6	
4733 SAA 95/96/97		5003 TRIU TR4	
4797 SAA Other Vehicle		5004 TRIU TR6	
4798 SAA Other (automobile)		5005 TRIU TR7/TR8	
4799 SAA Unknown (automobile)		5036 TRIU Herald	
		5037 TRIU Stag	
		5061 TRIU 0-50cc	
		5062 TRIU 51-124cc	
		5063 TRIU 125-349cc	
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)			

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

50 Triumph (Cont.)	(TRIU)	52 Mitsubishi	(MITS)
5064 TRIU 350-449cc		5231 MITS Starion	
5065 TRIU 450-749cc		5232 MITS Tredia	
5066 TRIU 750cc or more		5233 MITS Cordia	
5069 TRIU Unknown (cc)		5234 MITS Galant	
5097 TRIU Other Vehicle		5235 MITS Mirage	
5098 TRIU Other (automobile)		5270 MITS Montero	
5099 TRIU Unknown (automobile)		5272 MITS Mini-Van	
5000 TRIU Unknown (TRIUMPH)		5277 MITS Pickup	
		5298 MITS Other (automobile)	
		5299 MITS Unknown (automobile)	
		5200 MITS Unknown (MITSUBISHI)	
51 Volvo	(VOLV)	53 Suzuki	(SUZI)
5131 VOLV 122		5331 SUZI SA 310	
5132 VOLV 142/144/145		5361 SUZI 0-50cc	
5133 VOLV 164		5362 SUZI 51-124cc	
5134 VOLV 242/244/245		5363 SUZI 125-349cc	
5135 VOLV 262/264/265		5364 SUZI 350-449cc	
5136 VOLV 1800		5365 SUZI 450-749cc	
5137 VOLV P-544		5366 SUZI 750cc or over	
5138 VOLV 760/780 GLE		5369 SUZI Unknown (cc)	
5139 VOLV 740 GLE		5370 SUZI SJ-410	
5181 VOLV CBE (medium/heavy truck)		5397 SUZI Other Vehicle	
5182 VOLV COE low-entry (medium/heavy truck)		5300 SUZI Unknown (SUZUKI)	
5183 VOLV COE high-entry (medium/heavy truck)			
5184 VOLV Unknown engine location (medium/heavy truck)		59 Other Import	(-----)
5185 VOLV Medium Bus		5931 ----- Aston Martin	
5188 VOLV Other (truck)		5932 ----- Bricklin	
5189 VOLV Unknown (truck)		5933 ----- Citroen	
5190 VOLV COE, entry position unknown (medium/heavy truck)		5934 ----- Delorean	
5197 VOLV Other Vehicle		5935 ----- Ferrari	
5198 VOLV Other (automobile)		5936 ----- Hillman	
5199 VOLV Unknown (automobile)		5937 ----- Jensen	
5100 VOLV Unknown (VOLVO)		5938 ----- Lamborghini	

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Vehicle Make/Vehicle Model (Continued)

1982 to 1986

65 NORTON	(NORT)	80 Brockway	(BROC)
6561 NORT 0-50cc		8080 BROC Motorhome	
6562 NORT 51-124cc		8081 BROC CBE (medium/heavy truck)	
6563 NORT 125-349cc		8082 BROC COE low-entry	
6564 NORT 350-449cc		(medium/heavy truck)	
6565 NORT 450-749cc		8083 BROC COE high-entry	
6566 NORT 750cc and over		(medium/heavy truck)	
6569 NORT Unknown (cc)		8084 BROC Unknown engine location	
6597 NORT Other Vehicle		(medium/heavy truck)	
<hr/>		8085 BROC Bus	
67 Yamaha	(YAMA)	8086 BROC Bus (flat front, front engine)	
6761 YAMA 0-50cc		8087 BROC Bus (flat front, rear engine)	
6762 YAMA 51-124cc		8088 BROC Other (truck)	
6763 YAMA 125-349cc		8089 BROC Unknown (truck)	
6764 YAMA 350-449cc		8090 BROC COE, entry position unknown	
6765 YAMA 450-749cc		(medium/heavy truck)	
6766 YAMA 750cc and over		8097 BROC Other Vehicle	
6769 YAMA Unknown (cc)		<hr/>	
6797 YAMA Other Vehicle		81 Diamond Reo or Reo	(DIAR)
<hr/>		8180 DIAR Motorhome	
69 Other Motored Cycle	(-----)	8181 DIAR CBE (medium/heavy truck)	
6961 ----- 0-50cc		8182 DIAR COE low-entry	
6962 ----- 51-124cc		(medium/heavy truck)	
6963 ----- 125-349cc		8183 DIAR COE high-entry	
6964 ----- 350-449cc		(medium/heavy truck)	
6965 ----- 450-749cc		8184 DIAR Unknown engine location	
6966 ----- 750cc and over		(medium/heavy truck)	
6969 ----- Other (cc)		8185 DIAR Bus	
6997 ----- Other Vehicle		8186 DIAR Bus (flat front, front engine)	
<hr/>		8187 DIAR Bus (flat front, rear engine)	
70 Moped	(-----)	8188 DIAR Other (truck)	
7061 ----- 0-50cc		8189 DIAR Unknown (truck)	
7062 ----- 51-124cc		8390 DIAR COE, entry position unknown	
7069 ----- Unknown (cc)		(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)	84 International Harvester (INTL)-(NAVI)
8280 FRHT Motorhome	8471 INTL Scout
8281 FRHT CBE (medium/heavy truck)	8473 INTL Pickup/Panel
8282 FRHT COE low-entry (medium/heavy truck)	8475 INTL Multistop
8283 FRHT COE high-entry (medium/heavy truck)	8476 INTL Travellall
8284 FRHT Unknown engine location (medium/heavy truck)	8478 INTL Other (SUV/light truck)
8285 FRHT Bus	8479 INTL Unknown (SUV/light truck)
8286 FRHT Bus (flat front, front engine)	8480 INTL Motorhome
8287 FRHT Bus (flat front, rear engine)	8481 INTL CBE (medium/heavy truck)
8288 FRHT Other (truck)	8482 INTL COE low-entry (medium/heavy truck)
8289 FRHT Unknown (truck)	8483 INTL COE high-entry (medium/heavy truck)
8290 FRHT COE, entry position unknown (medium/heavy truck)	8484 INTL Unknown engine location (medium/heavy truck)
8297 FRHT Other Vehicle	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)
83 FWD (FWD)	85 Kenworth (KW)
8380 FWD Motorhome	8580 KW Motorhome
8381 FWD CBE (medium/heavy truck)	8581 KW CBE (medium/heavy truck)
8382 FWD COE low-entry (medium/heavy truck)	8582 KW COE low-entry (medium/heavy truck)
8383 FWD COE high-entry (medium/heavy truck)	8583 KW COE high-entry (medium/heavy truck)
8384 FWD Unknown engine location (medium/heavy truck)	8584 KW 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	

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1982 to 1986

95 Other (Truck or Bus)	(-----)	99 Unknown Make	(-----)
9501 Autocar		9900 -----	Unknown (as to automobile, motored cycle light truck, or truck)
9502 Auto-Union-DKW			
9503 Divco			
9504 Western Star		9969 -----	Unknown (motored cycle)
9578 Other (SUV/light truck)		9979 -----	Unknown (SUV/light truck)
9588 Other (truck)		9989 -----	Unknown (truck)
9597 Other Vehicle (bus)		9999 -----	Unknown (automobile)

98 Other Make	(-----)
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9800 -----	Unknown
9897 -----	Other Vehicle
9899 -----	Unknown (automobile)

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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)	03 AM General (AMGN)
101 AMER Rambler/American	301 AMGN Dispatcher
102 AMER Rebel/Matador	375 AMGN Dispatcher (DJ-Series)
103 AMER Ambassador	387 AMGN Bus (rear engine)
104 AMER Pacer	388 AMGN Other (truck)
105 AMER AMX	389 AMGN Unknown (truck)
106 AMER Javelin	398 AMGN Other (automobile)
107 AMER Hornet/Concord	399 AMGN Unknown (automobile)
108 AMER Spirit/Gremlin	300 AMGN Unknown (AM GENERAL)
109 AMER Eagle	
110 AMER SX4/Kammback	
198 AMER Other (automobile)	
199 AMER Unknown (automobile)	
02 Jeep (AMER)	06 Chrysler (CHRY)
201 AMER CJ-2/CJ-3/CJ-4	607 CHRY LeBaron
202 AMER CJ-5/CJ-6/CJ-7/CJ-8	609 CHRY Cordoba
271 AMER Cherokee	610 CHRY Newport/NewYorker
273 AMER Pickup	698 CHRY Other (automobile)
276 AMER Wagoneer	699 CHRY Unknown (automobile)
278 AMER Other (SUV/light truck)	
279 AMER Unknown (SUV/light truck)	
298 AMER Other (automobile)	
299 AMER Unknown (automobile)	
200 AMER Unknown (JEEP)	
	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)	09 Plymouth	(PLYM)
707 DODG Diplomat		901 PLYM Valiant/Duster/Scamp	
708 DODG Omni		902 PLYM Satellite/Belvedere	
709 DODG Mirada		903 PLYM Fury	
710 DODG St. Regis		904 PLYM Gran Fury	
711 DODG Aries		905 PLYM Barracuda	
732 DODG Arrow		906 PLYM Volare	
733 DODG Challenger-Import		907 PLYM Caravelle	
734 DODG Colt		908 PLYM Horizon	
771 DODG Ramcharger		911 PLYM Reliant	
772 DODG D50/Colt Pickup		931 PLYM Cricket	
773 DODG D, W-Series Pickup		932 PLYM Arrow	
774 DODG Van		933 PLYM Sapporo	
778 DODG Other (SUV/light truck)		934 PLYM Champ	
779 DODG Unknown (SUV/light truck)		971 PLYM Trailduster	
781 DODG CBE (medium/heavy truck)		972 PLYM Arrow pickup	
782 DODG COE low-entry (medium/heavy truck)		974 PLYM Van (Voyager)	
783 DODG COE high-entry (medium/heavy truck)		978 PLYM Other (SUV/light truck)	
784 DODG Unknown engine location (medium/heavy truck)		979 PLYM Unknown (SUV/light truck)	
785 DODG Medium Bus (not van-based)		998 PLYM Other (automobile)	
788 DODG Other (truck)		999 PLYM Unknown (automobile)	
789 DODG Unknown (truck)		900 PLYM Unknown (PLYMOUTH)	
798 DODG Other (automobile)			
799 DODG Other (automobile)			
700 DODG Unknown (DODGE)			
		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	
08 Imperial	(CHRY)		
810 CHRY Imperial			
898 CHRY Other (automobile)			
899 CHRY Unknown (automobile)			

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

19 Cadillac (Cont.)	(CADI)	20 Chevrolet (Cont.)	(CHEV)
1906 CADI Commercial Series		2084 CHEV Unknown engine location (medium/heavy truck)	
1914 CADI Seville		2085 CHEV Bus	
1916 CADI Cimarron		2088 CHEV Other (truck)	
1998 CADI Other (automobile)		2089 CHEV Unknown (truck)	
1999 CADI Unknown (automobile)		2098 CHEV Other (automobile)	
20 Chevrolet	(CHEV)	2099 CHEV Unknown (automobile)	
		2000 CHEV Unknown (CHEVROLET)	
2001 CHEV Malibu/Chevelle		21 Oldsmobile	(OLDS)
2002 CHEV Caprice/Impala		2101 OLDS Cutlass	
2004 CHEV Corvette		2102 OLDS Delta 88	
2006 CHEV Corvair		2103 OLDS Ninety-Eight	
2007 CHEV El Camino		2105 OLDS Toronado	
2008 CHEV Nova		2106 OLDS Commercial Series	
2009 CHEV Camaro		2112 OLDS Starfire	
2010 CHEV Monte Carlo		2115 OLDS Omega	
2011 CHEV Vega		2198 OLDS Other (automobile)	
2012 CHEV Monza		2199 OLDS Unknown (automobile)	
2013 CHEV Chevette		22 Pontiac	(PONT)
2015 CHEV Citation		2201 PONT LeMans/Tempest	
2016 CHEV Cavalier		2202 PONT Bonneville, Catalina	
2071 CHEV Blazer		2208 PONT Ventura	
2072 CHEV LUV pickup		2209 PONT Firebird/Trans Am	
2073 CHEV C, K-Series pickup		2210 PONT Grand Prix	
2074 CHEV G-Series Van		2211 PONT Astra	
2075 CHEV Van Derivatives		2212 PONT Sunbird	
2076 CHEV Sururban		2215 PONT Phoenix	
2078 CHEV Other (SUV/light truck)		2216 PONT J-2000	
2079 CHEV Unknown (SUV/light truck)		2298 PONT Other (automobile)	
2081 CHEV CBE (medium/heavy truck)		2299 PONT Unknown (automobile)	
2082 CHEV COE low-entry (medium/heavy truck)			
2083 CHEV COE high-entry (medium/heavy truck)			

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

33 Austin/Austin Healey (AUST)	35 Datsun (Cont.) (DATS)
3305 AUST Mini	3511 DATS PL 411/RL 411
3398 AUST Other (automobile)	3572 DATS Pickup
3399 AUST Unknown (automobile)	3578 DATS Other (SUV/light truck)
	3579 DATS Unknown (SUV/light truck)
	3598 DATS Other (automobile)
	3599 DATS Unknown (automobile)
	3500 DATS Unknown (DATSUN)
34 BMW (BMW)	36 Fiat (FIAT)
3401 BMW 1600, 2002	3601 FIAT 124 (Coupe/Sedan)
3402 BMW Coupe	3602 FIAT 124 (Spider)
3403 BMW Bavaria Sedan	3603 FIAT Brava/131
3404 BMW 630, 633	3604 FIAT 850 (Coupe/Spyder)
3405 BMW 320i	3605 FIAT 128
3406 BMW 528i, 530i	3606 FIAT X-1/9
3407 BMW 733i	3607 FIAT Strada
3461 BMW 0-50 cc	3698 FIAT Other (automobile)
3462 BMW 51-124 cc	3699 FIAT Unknown (automobile)
3463 BMW 125-349 cc	
3464 BMW 350-449 cc	37 Honda (HOND)
3465 BMW 450-749 cc	3701 HOND Civic
3466 BMW 750 cc or over	3702 HOND Accord
3469 BMW Unknown (cc)	3703 HOND Prelude
3498 BMW Other (automobile)	3704 HOND 600
3499 BMW Unknown (automobile)	3761 HOND 0-50 cc
3400 BMW Unknown (BMW)	3762 HOND 51-124 cc
35 Datsun (DATS)	3763 HOND 125-349 cc
3501 DATS F-10	3764 HOND 350-449 cc
3502 DATS 200 SX	3765 HOND 450-749 cc
3503 DATS B210/210/1200	3766 HOND 750 cc or over
3504 DATS 240/260/280	3769 HOND Unknown (cc)
3505 DATS 310	3798 HOND Other (automobile)
3506 DATS 510	3799 HOND Unknown (automobile)
3507 DATS 610	3700 HOND Unknown (HONDA)
3508 DATS 710	
3509 DATS 810	
3510 DATS Roadster (SPL 311/SRL 311)	

(Continued on Next Page)

Vehicle Make/Vehicle Model (Continued)

1975 to 1981

38 Isuzu	(ISU)	41 Mazda	(MAZD)
3801 ISU Gemini		4111 MAZD 618/616	
3872 ISU Rodeo (pickup)		4112 MAZD 1800	
3878 ISU Other (SUV/light truck)		4172 MAZD Pickup	
3879 ISU Unknown (SUV/light truck)		4178 MAZD Other (SUV/light truck)	
3898 ISU Other (automobile)		4179 MAZD Unknown (SUV/light truck)	
3899 ISU Unknown (automobile)		4198 MAZD Other (automobile)	
3800 ISU Unknown (ISUZU)		4199 MAZD Unknown (automobile)	
		4100 MAZD Unknown (MAZDA)	
39 Jaguar	(JAGU)	42 Mercedes-Benz	(MERZ)
3901 JAGU XJ-S Coupe		4201 MERZ 200/220/230/240/250/280/300 (Sedan and 5-passenger Coupe "C" only)	
3902 JAGU XJ6/XJ12 Sedan/Coupe		4202 MERZ 230 SL/280 SL (2-passenger)	
3903 JAGU XK-E		4203 MERZ 350 SL/450 SL/380 SL	
3998 JAGU Other (automobile)		4204 MERZ 350 SLC/450 SLC/380 SLC	
3999 JAGU Unknown (automobile)		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)	
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			

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Vehicle Make/Vehicle Model (Continued)

1975 to 1981

43 MG	(MG)	46 Renault (Cont.)	(RENA)
4301 MG MG Midget		4604 RENA 15	
4302 MG MGB		4605 RENA 16	
4303 MG MGB-GT		4606 RENA 17	
4304 MG MGA		4607 RENA RI8i	
4305 MG TA/TC/TD/TF		4698 RENA Other (automobile)	
4306 MG MGC		4699 RENA Unknown (automobile)	
4398 MG Other (automobile)			
4399 MG Unknown (automobile)			
44 Peugeot	(PEUG)	47 Saab	(SAA)
		4701 SAA 99/99E/900	
4401 PEUG 304		4702 SAA Sonnet	
4402 PEUG 403		4703 SAA 95/96/97	
4403 PEUG 404		4772 SAA Pickup	
4404 PEUG 505/504		4774 SAA Chinook	
4405 PEUG 604		4778 SAA Other (SUV/light truck)	
4498 PEUG Other (automobile)		4779 SAA Unknown (SUV/light truck)	
4499 PEUG Unknown (automobile)		4798 SAA Other (automobile)	
		4799 SAA Unknown (automobile)	
45 Porsche	(PORS)	48 Subaru	(SUBA)
4501 PORS 911		4801 SUBA FE/GF/DL/STD/GL/G/GLF	
4502 PORS 912/912E		4802 SUBA Star	
4503 PORS 914		4803 SUBA 360	
4504 PORS 924		4872 SUBA Brat	
4505 PORS 928		4878 SUBA Other (SUV/light truck)	
4506 PORS 930/Turbo		4879 SUBA Unknown (SUV/light truck)	
4598 PORS Other (automobile)		4898 SUBA Other (automobile)	
4599 PORS Unknown (automobile)		4899 SUBA Unknown (automobile)	
46 Renault	(RENA)		
4601 RENA LeCar			
4602 RENA 10/Dauphine/Caravelle/R-8			
4603 RENA 12			

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Vehicle Make/Vehicle Model (Continued)

1975 to 1981

49 Toyota (Cont.)	(TOYT)	51 Volvo (Cont.)	(VOLV)
4901 TOYT Corona		5102 VOLV 142/144/145	
4902 TOYT Corolla		5103 VOLV 164	
4903 TOYT Celica		5104 VOLV 242/244/245	
4904 TOYT Celica Supra		5105 VOLV 262/264/265	
4905 TOYT Cressida		5106 VOLV 1800	
4906 TOYT Crown		5107 VOLV P-544	
4907 TOYT Carina		5181 VOLV CBE (medium/heavy truck)	
4908 TOYT Tercel		5182 VOLV COE low-entry (medium/heavy truck)	
4909 TOYT Starlet		5183 VOLV COE high-entry (medium/heavy truck)	
4971 TOYT Land Cruiser		5184 VOLV Unknown engine location (medium/heavy truck)	
4998 TOYT Other (automobile)		5185 VOLV Medium Bus	
4999 TOYT Unknown (automobile)		5188 VOLV Other (truck)	
4900 TOYT Unknown (TOYOTA)		5189 VOLV Unknown (truck)	
<hr/>		5198 VOLV Other (automobile)	
50 Triumph	(TRIU)	5199 VOLV Unknown (automobile)	
5001 TRUI Spitfire		5100 VOLV Unknown (VOLVO)	
5002 TRUI GT6		<hr/>	
5003 TRUI TR4		59 Other Import	(-----)
5004 TRUI TR6		5931 ----- Aston Martin	
5005 TRUI TR7/TR8		5932 ----- Bricklin	
5006 TRUI Herald		5933 ----- Citroen	
5007 TRUI Stag		5934 ----- DeLorean	
5061 TRUI 0-50 cc		5935 ----- Ferrari	
5062 TRUI 51-124 cc		5936 ----- Hillman	
5063 TRUI 125-349 cc		5937 ----- Jensen	
5064 TRUI 350-449 cc		5938 ----- Lamborghini	
5065 TRUI 450-749 cc		5939 ----- Lotus	
5066 TRUI 750 cc or more		5940 ----- Maserati	
5069 TRUI Unknown (cc)		5941 ----- Morris	
5098 TRUI Other (automobile)		5942 ----- Rolls-Royce/Bentley	
5099 TRUI Unknown (automobile)		5943 ----- Rover	
5000 TRUI Unknown (TRIUMPH)		5944 ----- Simca	
<hr/>		5945 ----- Sunbeam	
51 Volvo	(VOLV)		
5101 VOLV 122			

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Vehicle Make/Vehicle Model (Continued)

1975 to 1981

59 Other Import (Cont.)	(-----)	63 Kawasaki	(KAWK)
5946 ----- TVR		6361 KAWK 0-50 cc	
5998 ----- Other (automobile) (e.g., Morgan, Singer)		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)	
60 BSA	(BSA)	64 Moto Guzzi	(MOGU)
6061 BSA 0-50 cc		6461 MOGU 0-50 cc	
6062 BSA 51-124 cc		6462 MOGU 51-124 cc	
6063 BSA 125-349 cc		6463 MOGU 125-349 cc	
6064 BSA 350-449 cc		6464 MOGU 350-449 cc	
6065 BSA 450-749 cc		6465 MOGU 450-749 cc	
6066 BSA 750 cc and over		6466 MOGU 750 cc and over	
6069 BSA Unknown (cc)		6469 MOGU Unknown (cc)	
61 Ducati	(DUCA)	65 Norton	(NORT)
6161 DUCA 0-50 cc		6561 NORT 0-50 cc	
6162 DUCA 51-124 cc		6562 NORT 51-124 cc	
6163 DUCA 125-349 cc		6563 NORT 125-349 cc	
6164 DUCA 350-449 cc		6564 NORT 350-449 cc	
6165 DUCA 450-749 cc		6565 NORT 450-749 cc	
6166 DUCA 750 cc and over		6566 NORT 750 cc and over	
6169 DUCA Unknown (cc)		6569 NORT UNKNOWN (cc)	
62 Harley-Davidson	(HD)	66 Suzuki	(SUZI)
6261 HD 0-50 cc		6661 SUZI 0-50 cc	
6262 HD 51-124 cc		6662 SUZI 51-124 cc	
6263 HD 125-349 cc		6663 SUZI 125-349 cc	
6264 HD 350-449 cc		6664 SUZI 350-449 cc	
6265 HD 450-749 cc			
6266 HD 750 cc and over			
6269 HD Unknown (cc)			

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Vehicle Make/Vehicle Model (Continued)

1975 to 1981

66 Suzuki (Cont.)	(SUZI)	80 Brockway	(BROC)
6665 SUZI 450-749 cc		8083 BROC COE high-entry	
6666 SUZI 750 cc and over		(medium/heavy truck)	
6669 SUZI Unknown (cc)		8084 BROC Unknown engine location	
		(medium/heavy truck)	
67 Yamaha	(YAMA)	8085 BROC Bus	
6761 YAMA 0-50 cc		8086 BROC Bus (flat front, front engine)	
6762 YAMA 51-124 cc		8087 BROC Bus (flat front, rear engine)	
6763 YAMA 125-349 cc		8088 BROC Other (truck)	
6764 YAMA 350-449 cc		8089 BROC Unknown (truck)	
6765 YAMA 450-749 cc			
6766 YAMA 750 cc and over		81 Diamond Reo	(DIAR)
6769 YAMA Unknown (cc)		8180 DIAR Motorhome	
		8181 DIAR CBE (medium/heavy truck)	
69 Other Motored Cycle	(-----)	8182 DIAR COE low-entry	
6961 ----- 0-50 cc		(medium/heavy truck)	
6962 ----- 51-124 cc		8183 DIAR COE high-entry	
6963 ----- 125-349 cc		(medium/heavy truck)	
6964 ----- 350-449 cc		8184 DIAR Unknown engine location	
6965 ----- 450-749 cc		(medium/heavy truck)	
6966 ----- 750 cc and over		8185 DIAR Bus	
6969 ----- unknown (cc)		8186 DIAR Bus (flat front, front engine)	
		8187 DIAR Bus (flat front, rear engine)	
		8188 DIAR Other (truck)	
		8189 DIAR Unknown (truck)	
70 Moped	(-----)	82 Freightliner or White Freightliner	(FRHT)
7061 ----- 0-50 cc			
7062 ----- 51-124 cc			
7069 ----- Unknown (cc)			
80 Brockway	(BROC)	8280 FRHT Motorhome	
8080 BROC Motorhome		8281 FRHT CBE (medium/heavy truck)	
8081 BROC CBE (medium/heavy truck)		8282 FRHT COE low-entry	
8082 BROC COE low-entry		(medium/heavy truck)	
(medium/heavy truck)		8283 FRHT COE high-entry	
		(medium/heavy truck)	

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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)

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Vehicle Make/Vehicle Model (Continued)

1975 to 1981

86 Mack (Cont.)	(MACK)	88 White (Cont.)	(WHIT)
8683 MACK COE high-entry (medium/heavy truck)		8883 WHIT COE high-entry (medium/heavy truck)	
8684 MACK Unknown engine location (medium/heavy truck)		8884 WHIT Unknown engine location (medium/heavy truck)	
8685 MACK Bus			
8686 MACK Bus (flat front, front engine)		8885 WHIT Bus	
8687 MACK Bus (flat front, rear engine)		8886 WHIT Bus (flat front, front engine)	
8688 MACK Other (truck)		8887 WHIT Bus (flat front, rear engine)	
8689 MACK Unknown (truck)		8888 WHIT Other (truck)	
		8889 WHIT Unknown (truck)	
87 Peterbilt	(PTRB)	95 Other (Truck or Bus)	(-----)
8780 PTRB Motorhome		9501 ----- Autocar	
8781 PTRB CBE (medium/heavy truck)		9502 ----- Auto-Union-DKW	
8782 PTRB COE low-entry (medium/ heavy truck)		9503 ----- Divco	
8783 PTRB COE high-entry (medium/heavy truck)		9504 ----- Western Star	
8784 PTRB Unknown engine location (medium/heavy truck)		9578 ----- Other (SUV/light truck)	
8785 PTRB Bus		9588 ----- Other (truck)	
8786 PTRB Bus (flat front, front engine)			
8787 PTRB Bus (flat front, rear engine)		98 Other Make	(-----)
8788 PTRB Other (truck)		9800 ----- Unknown	
8789 PTRB Unknown (truck)		9899 ----- Unknown (automobile)	
88 White	(WHIT)	99 Unknown Make	(-----)
8880 WHIT Motorhome		9900 ----- Unknown (as to automobile, motored cycle, light truck, or truck)	
8881 WHIT CBE (medium/heavy truck)		9979 ----- Unknown (SUV/light truck)	
8882 WHIT COE low-entry (medium/ heavy 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 loses 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	BU - Bus
2F - Passenger Vehicle Formal Hardtop 2-Door	CB - Truck Chassis and Cab
2H - (81-03) Passenger Vehicle 2-Door	CB - Passenger Vehicle Cab & Chassis (Luv)
2L - Passenger Vehicle Liftback 3-Door	CC - Truck Conventional Cab
2P - Passenger Vehicle Pillard Hardtop 2-Door	CG - Truck Cargo Van
2T - Passenger Vehicle Hardtop 2-Door	CH - Truck Crew Chassis
2W - Truck 2-Door Wagon/Sport Utility	CL - Truck Club Chassis
2W - Passenger Vehicle Wagon 2-Door	CM - Truck Concrete or Transit Mixer
3D - Passenger Vehicle Runabout 3-Door	CP - Truck Crew Pickup
4D - Passenger Vehicle Sedan 4-Door	CP - Passenger Vehicle Coupe
4H - (81-03) Passenger Vehicle Hatchback 4-Door	CR - Truck Crane
4L - Passenger Vehicle Liftback 5-Door	CS - Truck Super Cab/Chassis Pickup
4P - Passenger Vehicle Pillard Hardtop 4-Door	CU - Truck Custom Pickup
4T - Passenger Vehicle Hardtop 4-Door	CV - Truck Convertible (Jeep Commando, Suzuki Samurai, Dodge Dakota)
4W - Truck 4-Door Wagon/Sport Utility	CV - Passenger Vehicle Convertible
4W - Passenger Vehicle Wagon 4-Door	CY - Truck Cargo Cutaway
5D - Passenger Vehicle Sedan 5-Door	DP - Truck Dump
8V - Truck 8-Passenger Sport Van	DS - Truck Tractor Truck (diesel)
AC - Truck Auto Carrier	EC - Truck Extended Cargo Van
AM - Passenger Vehicle Ambulance	EN - Motorcycle Enduro
AR - Truck Armored Truck	ES - Truck Extended Sport Van
AT - Motorcycle All-Terrain	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	PM - Truck Pickup with Camper Mounted on Bed
FT - Truck Fire Truck	PN - Truck Panel
GG - Truck Garbage or Refuse	PS - Truck Super Cab Pickup
GL - Truck Gliders	RC - Motorcycle Racer
GN - Truck Grain	PN - Passenger Vehicle Panel, Truck commonly registered as passengers
HB - Passenger Vehicle Hatchback number doors unknown	RD - Truck Roadster (Jeep, Jeep Commando)
HO - Truck Hopper	RD - Passenger Vehicle Roaster
HR - Passenger Vehicle Hearse	RS - Motorcycle Road/Street
HT - Passenger Vehicle Hardtop number doors unknown	RT - Motorcycle Road/Trail
IC - Truck Incomplete Chassis	S1 - Truck One-Seat
IE - Truck Incomplete Ext Van	S2 - Truck Two-Seat
LB - Passenger Vehicle Liftback	SB - Passenger Vehicle Sport Hatchback
LG - Truck Logger	SC - Passenger Vehicle Sport Coupe
LL - Truck Suburban & Carry-All	SD - Passenger Vehicle Sedan, number doors unknown
LM - Passenger Vehicle Limousine	SN - Truck Step Van
MH - Truck Motorized Home	SP - Truck Sport Pickup
MK - Motorcycle Mini-Bike	ST - Truck Stake or Rack
MN - Motorcycle Mini Moto Class	SV - Truck Sports Van
MP - Motorcycle Moped	SV - Passenger Vehicle Sport Van
MP - Truck Multipurpose	SW - Passenger Vehicle Station Wagon
MR - Motorcycle Mini Road/Trail	SW - Truck Station Wagon (Jeep Wagoneer etc.)
MS - Motorcycle Motor Scooter	T - Motorcycle Dirt
MV - Truck Maxi-Van	TB - Truck Tilt Cab
MX - Motorcycle Moto Cross	TL - Truck Tilt Tandem
MY - Truck Motorized Cutaway	TL - Motorcycle Trail/Dirt
MY - Motorcycle Mini-Cycle	TM - Truck Tandem
NB - Passenger Vehicle Notchback	TN - Truck Tank
PC - Truck Club Cab Pickup	TR - Motorcycle Trails
PD - Truck Parcel Delivery	TR - Truck Tractor (gasoline)
PK - Truck Pickup	
PK - Passenger Vehicle Pickup, Truck commonly registered passengers	

(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 - 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

(Continued on Next Page)

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	$1,950 \leq$ Car Weight < 2,450
Class 3	$2,450 \leq$ Car Weight < 2,950
Class 4	$2,950 \leq$ Car Weight < 3,450
Class 5	$3,450 \leq$ Car Weight < 3,950
Class 6	$3,950 \leq$ 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.

Wheelbase (Auto)

This is repeated in the Person File.

1975 and later

Variables = WHLBS_LG The longest and shortest wheelbase respectively for the

WHLBS_SH 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**

FARS PERSON FILE VARIABLES																																			
Variable	Year																																		
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		
AGE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
AIR_BAG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B		
ALC_DET	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	C	C	C	C		
ACL_RES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	B	B	B	B	B	B	B	B	B	C	C	C	C		
AUT_REST	A	A	B	B	B	C	C	C	C	C	C	C	C	C	C	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ATST_TYP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	B	B	B	C	C	C	C
BODY_TYP	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
CERT_NO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
COUNTY	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DAY	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DEATH_DA	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DEATH_HR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DEATH_MN	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DEATH_MO	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DEATH_TM	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DEATH_YR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B
DOA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	
DRINKING	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DRUGRES1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DRUGRES2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DRUGRES3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DRUGS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DRUGTEST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DRUGTST1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DRUGTST2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DRUGTST3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
DRUG_DET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
DRUG_RES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EJECTION	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
EJ_PATH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

FARS PERSON FILE VARIABLES																																			
Variable	Year																																		
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		
EMER_USE	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
EXTRICAT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
FIRE_EXP	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
HARM_EV	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	C	D	D	D	E	F	F	F	F	F	F	G	H	H	H	H		
HISPANIC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	C	C	C	C	C	C	C	
HOSPITAL	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	C	C	C	C	C	C	C	D
HOURL	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
IMPACT1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
IMPACT2	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
IMPACTS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
INJ_SEV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
LAG_HRS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
LAG_MINS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
LOCATION	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	
MAKE	A	A	A	A	A	A	A	B	B	B	B	B	C	C	C	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
MAK_MOD	A	A	A	A	A	A	A	B	B	B	B	B	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
MAN_COLL	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C
MAN_REST	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MCYCL_DS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MINUTE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MOD_YEAR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B
MONTH	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
N_MOT_NO	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PER_NO	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PER_TYP	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	D
P_CF1	A	B	B	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	E	F	G	G	G	G	G	G	H	
P_CF2	A	B	B	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	E	F	G	G	G	G	G	G	G	H	
P_CF3	A	B	B	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	E	F	G	G	G	G	G	G	G	H	
RACE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	C	C	G	G	G	G	G	G	
REST_USE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B

FARS PERSON FILE VARIABLES																																				
Variable	Year																																			
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007			
ROAD_FNC	-	-	-	-	-	-	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B			
ROLLOVER	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
SCH_BUS	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
SEAT_POS	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		
SER_TR	S	E	E	-	V	I	N	-	M	A	N	U	A	L	-	F	O	R	-	L	E	V	E	L	-	-	-	-	-	-	-	-	-	-		
SEX	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
SPEC_USE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
STATE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
ST_CASE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
TEST_RES	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOW_VEH	-	-	A	A	A	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
TOXCLGY	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
VEH_NO	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
VE_FORMS	-	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		
VINA_MOD	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
VIN_BT	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
VIN_WGT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
WGTCDD_TR	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
WHLBS_LG	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
WHLBS_SH	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
WORK_INJ	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	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

Note: 1975 to 1979 data on the type of blood alcohol test were collected, but this data has since been removed from the analysis files.

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      */
%DO Y=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)  */
    ELSE CPC&I=0;
    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 - 1993 only*)
 - 08 - Sedan/Hardtop, number of doors unknown (*since 1994*)
 - 09 - Unknown auto type (*1991 - 1993 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 4 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 to 2002 only*)
 - 25 - Van-Based Transit Bus (*1993 to 2002 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
 - 39 - Unknown (*pickup style*) Light Conventional Truck 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.

1991 and later

Except as noted

By numerical order

- 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)
- 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, forklift, city street sweeper, dune/swamp buggy, golf cart)
- 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.***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
- 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

(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

- 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 Med 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 - Three-Wheel Vehicle Unknown Body Type
- 99 - Unknown Body Type

(Continued on Next Page)

Body Type (Continued)

This comes from the Vehicle File.

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.
(1975-1979)
 - 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 - Firetruck
 - 43 - On/Off Road Vehicle – Jeep CJ-S, Bronco, Blazer, Scout, etc.
(1980-1981)
 - 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_TYP EQ 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 Elements
 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 element will be divided into two elements.

If you need a copy of the current city/county elements 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

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)

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 GSA State Element

Last 6 digits 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

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 (*Alcohol Not Involved*)
 - 1 - Yes (*Alcohol 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
 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

(Continued on Next Page)

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	1-2
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 Files and is repeated here

2004 and later

Variables = 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° 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.

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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 struck 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.

15 - Non-motorist 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.

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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 that 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 Files and is repeated here

2004 and later**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.

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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later**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 these 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**

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Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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, 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*).

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

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.

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 (since 2005)

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.

61 - Equipment Failure (blown tire, brake failure, etc.)

62 - Separation of Units

This element is used when a trailing unit separates from its power unit or another trailing unit(s). This applies to truck tractors with trailers, a single-unit truck with a trailer, and other vehicles pulling trailers (e.g., car pulling a boat or motorhome).

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

2004 and later

63 - Ran Off Road – Right

64 - Ran Off Road – Left

These elements 63 and 64 are used if a driver loses control of vehicle and runs off road. Identification of running off road can be determined from diagram. These elements can be used anytime in the event sequence before or after any harmful events.

65 - Cross Median/Centerline

This element is used when a vehicle completely crosses the median and enters the shoulder or travel lanes on the opposite side of a divided highway. It also includes crossing over the enter line of a two-way, undivided highway.

66 - Downhill Runaway

67 - Vehicle Went Airborne

Officer must indicate by narrative or diagram that the vehicle left the ground (excludes simple rollover) because vehicle drove off cliff, propelled into air after striking another vehicle or traversing a berm. Officer states, "launched, vaulted, or went airborne." Driving off bridge and landing on road or vehicle below.

99 - Unknown

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

- Element =
- 01 - **Overturn/Rollover**
This element is used if a vehicle rotates 90° 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 unstabilized 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).

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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.

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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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.

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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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 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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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:

- 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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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 (1993-2003)

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.). 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 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

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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 is. For example, if a series of harmful events occurred, and it's unclear which was first.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1982 to 2003

Variables = HARM_E

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 event 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. 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.

(Continued on Next Page)

Harmful Event (Continued)

HARM_EV is from the Accident Files and is repeated here

1975 to 1981

Variables = 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 to 1978 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 to 1981 only)
 - 33 - Bridge or Overpass [*Passing Over*] (1979 to 1981 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 (1999-2000)
 8 - Died En Route (1999-2000)
 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

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)

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 (*1980-1993 only*)
 16 - Override (*1982-1993 only*)
 99 - Unknown

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.

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

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 contact 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.

(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**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**08 - Sideswipe - Opposite Direction**

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

- 10 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.
- 11 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.
- 12 There is low retardation of the force along the surface of the vehicle.
- 13 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.

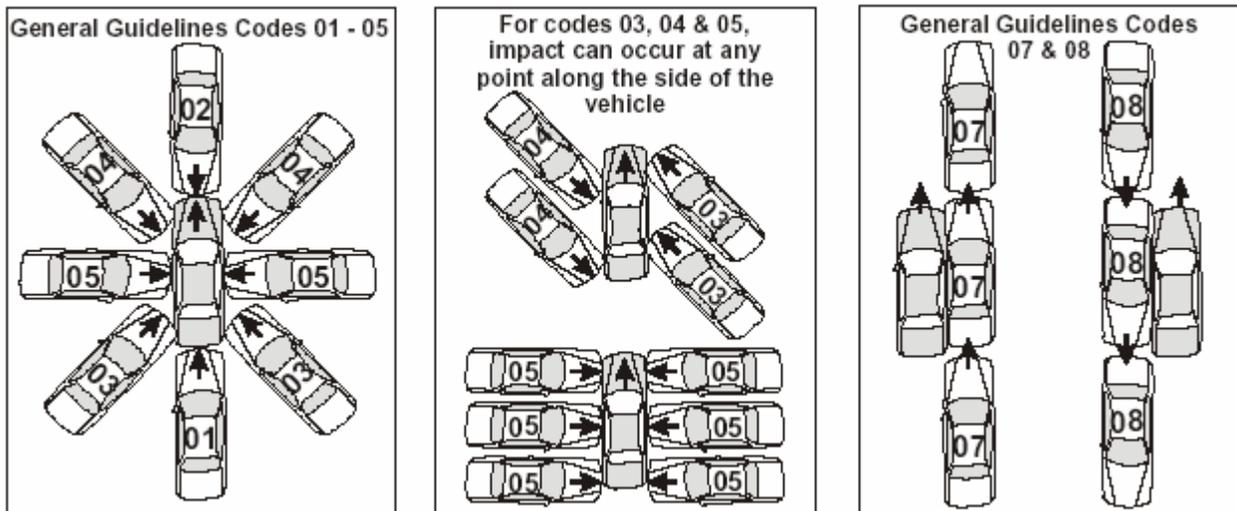
See the note at the end of this section on the change in the interpretation of Manner of Collision from 2001 to 2002

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° 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

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*) – (1994-2006)
 - 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

(Continued on Next Page)

Person Type 1975 to 1981 (Continued)

1975 to 1981

Variable = PER_TYP

- Element =
- 1 - Driver
 - 2 - Passenger
 - 3 - Nonmotorist: Pedestrian
 - 4 - Nonmotorist: Pedalcyclist
 - 5 - Nonmotorist: Occupant of Non-Traffic-Unit Vehicle
 - 8 - Nonmotorist: Other or Unknown
 - 9 - Occupant: Unknown Type

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 (*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*)
 - 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 (*individual 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, 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.
- (Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

- 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 (1982-1994)
- 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 (1982-1994)
- 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 (1982-1994)
- 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.

(Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

- 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 (1982-1999)
- 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.
- 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.

(Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

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.

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).

(Continued on Next Page)

Related Factors Person Level (Continued)

1982 and later

except as noted

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

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 to 2001 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.

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

(Continued on Next Page)

Related Factors Person Level (*Continued*)

1982 and later

except as noted

VISION OBSCURED BY

65 - Motor Vehicle (*including load*)

Vision obscured by:

Car stopped on roadway.

Tractor-trailer moving on road.

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

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.

(Continued on Next Page)

Related Factors Person Level (*Continued*)

1982 and later

except as noted

AVOIDING, SWERVING, OR SLIDING DUE TO

82 - Pedestrian, Pedalcyclist, or Other Nonmotorist

83 - Ice, Snow, Slush, Water, [*sand, 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").

OTHER NONMOTORIST FACTORS

84 - Jay walk (*1982 to 1994 only*)

85 - Jog (*1982 to 1994 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.

99 - Unknown

(Continued on Next Page)

Related Factors Person level (Continued)

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.

Related Factors (Person level)

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
- 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

(Continued on Next Page)

Related Factors Person Level (Continued)

1975 to 1981

NON-MOTOR-VEHICLE-OPERATOR-RELATED FACTORS:

- 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
(1994-2004 only)
 - 01 - Shoulder Belt
 - 02 - Lap Belt
 - 03 - Lap and Shoulder Belt
 - 04 - Child Safety Seat
 - 05 - Motorcycle Helmet
 - 06 - Bicycle Helmet
 - 08 - Restraint Used - Type Unknown
 - 13 - Safety Belt Used Improperly
 - 14 - Child Safety Seat Used Improperly
 - 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 (1998-2006)

02 - From Side (door, seat, canopy) - (since 2007)

02 - Deployed Air Bag From Side (1998-2006)

07 - From Other Direction (knee, airbelt, etc.) – (since 2007)

07 - Deployed Air Bag Other Direction (1998-2006)

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

(Continued on Next Page)

Protection System Use (Continued)

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

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 - 1985*)
 - 4 - Non-Deployed Air Bag (*no data 1983 - 1987*)
 - 5 - Passive Belt [*i.e., Passive Belt in Use*] (*1977-1979 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.

(Continued on Next Page)

Protection System Use (Continued)

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, 13-14
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 =
- 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 Principal Arterial
 - 14 - Urban Minor Arterial
 - 15 - Urban Collector
 - 16 - Urban Local Road or Street
 - 19 - Urban Unknown

 - 99 - Unknown

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

(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	1987 and 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)	1987 and 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

An interesting visual of rural and urban roadways can be found at:
<http://ntl.bts.gov/lib/23000/23100/23121/09RoadFunction.pdf>

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.

(Continued on Next Page)

School-Bus-Related (*Continued*)

This comes from the Accident File

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.*)

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 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*).

(Continued on Next Page)

School-Bus-Related (Continued)

This comes from the Accident File

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 to 2004*)
 - 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

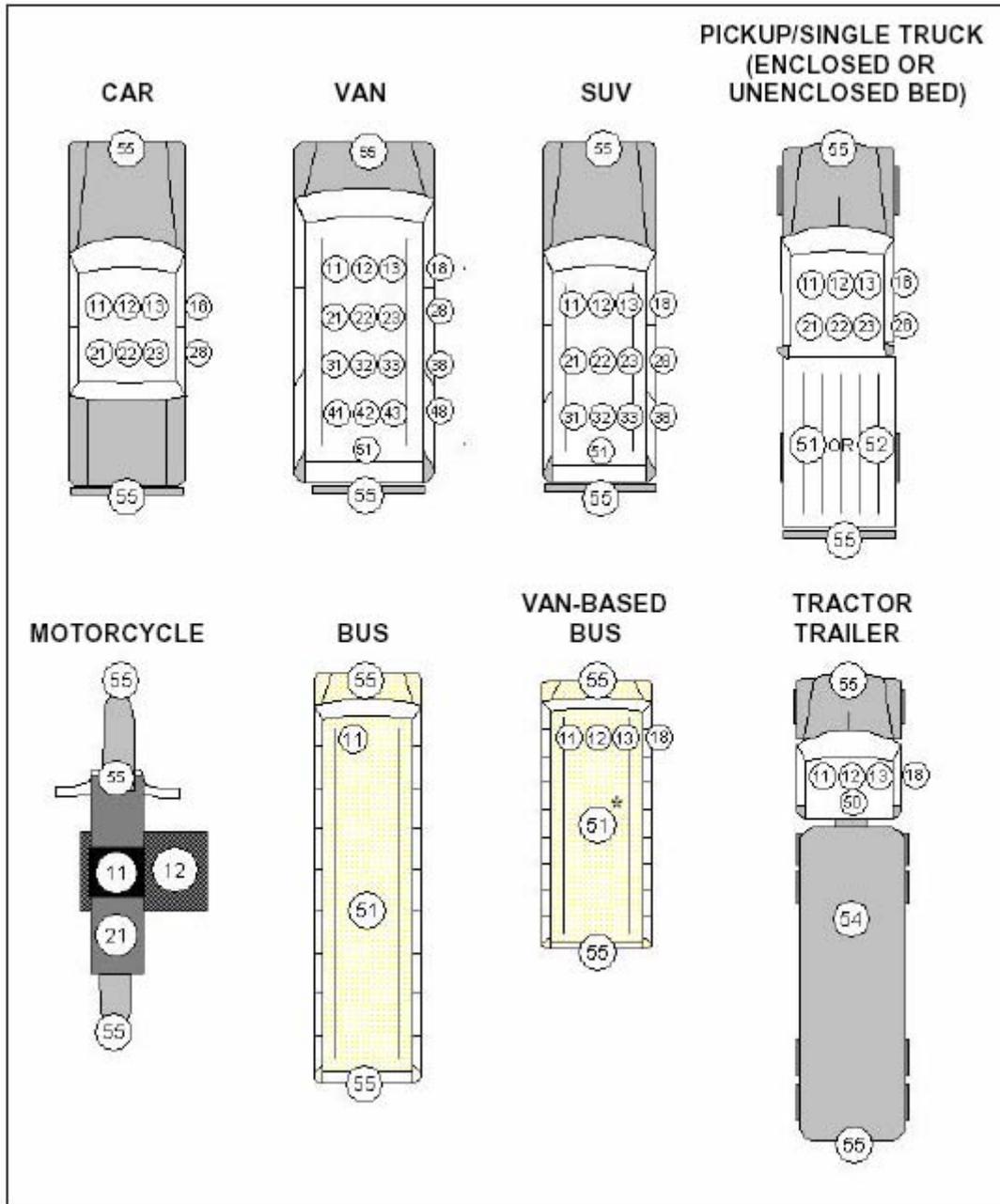
Note: Starting in 2003 Person Level Forms are submitted for uninjured occupants of van-based buses.

(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

1975 and later

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

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 and PER_NO, Person Number, in the 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

1982 and later

Variable = TOW_VEH

- Element =
- 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
 - 5 - Vehicle Towing Another Motor Vehicle (since 2004)
 - 9 - Unknown

1980 to 1981

Variable = TOW_VEH

- Element =
- 0 - No
 - 1 - Yes

1979

Variable = TOW_VEH

- Element =
- 0 - No
 - 1 - Travel-Trailer/Camper
 - 2 - Other Car Trailer
 - 8 - Other
 - 9 - Unknown

(Continued on Next Page)

Towed Trailing Unit (Continued)

This comes from the Vehicle File

1977 to 1978

Variable = TOW_VEH

- Element =
- 0 - No
 - 1 - Travel-Trailer/Camper
 - 2 - Other Car Trailer
 - 3 - Fifth-Wheel Trailer
 - 4 - Truck Trailer
 - 8 - Other
 - 9 - Unknown

1975 to 1976

Variable = TOW_VEH

- Element =
- 0 - No
 - 1 - Travel-Trailer/Camper
 - 2 - Other Car Trailer
 - 3 - Fifth-Wheel Trailer
 - 4 - Truck Trailer
 - 5 - Other
 - 8 - Not Reportable
 - 9 - Unknown

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 persons in the 1994 Annual Report file all the persons 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 in 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 in 1982 and later.

(Continued on Next Page)

Vehicle Forms Submitted (*Number of*) (*Continued*)

This comes from the Accident File and is repeated in the Vehicle File

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.

Vehicle Make

This comes from the Vehicle File

1991 and later

Variable = MAKE

Element = [In numerical order]

01 - American Motors	30 - Volkswagen	62 - Land Rover
02 - Jeep	31 - Alfa Romeo	63 - KIA
Kaiser-Jeep	32 - Audi	64 - Daewoo
Willys Jeep	33 - Austin/Austin Healey	69 -Other Imports
03 - AM General	34 - BMW	Aston Martin
06 - Chrysler	35 - Datsun	Bentley
07 - Dodge	Nissan	Bertone
08 - Imperial	36 - Fiat	Bricklin
09 - Plymouth	37 - Honda	Citroen
10 - Eagle	38 - Isuzu	DeLorean
12 - Ford	39 - Jaguar	Desta
13 - Lincoln	40 - Lancia	Ferrari
14 - Mercury	41 - Mazda	Gazelle
18 - Buick	42 - Mercedes-Benz	Hillman
18 - Opel	43 - MG	Jensen
19 - Cadillac	44 - Peugeot	Lada
20 - Chevrolet	45 - Porsche	Lamborghini
21 - Oldsmobile	46 - Renault	Lotus
22 - Pontiac	47 - Saab	Maserati
23 - GMC	48 - Subaru	Maybach
24 - Saturn	49 - Toyota	Mini Copper
25 - Grumman	50 - Triumph	Morgan
29 - Other Domestic	51 - Volvo	Morris
Avanti	52 - Mitsubishi	Reliant (British)
Checker	53 - Suzuki	Rolls-Royce
DeSoto	54 - Acura	Simca
Excalibur	55 - Hyundai	Singer
Hudson	56 - Merkur	Sunbeam
Packard	57 - Yugo	TVR
Panoz	58 - Infiniti	70 - BSA
Saleen	59 - Lexus	71 - Ducati
Studebaker	60 - Daihatsu	72 - Harley-Davidson
Stutz	61 - Sterling	73 - Kawasaki

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Vehicle Make (Continued)

This comes from the Vehicle File

1991 and later

74 - Moto Guzzi	87 - Peterbilt	DINA
75 - Norton	88 - Iveco Magirus	Divco
76 - Yamaha	89 - White/Autocar	Hino
80 - Brockway	White GMC	Mid Bus
81 - Diamond Reo	90 - Bluebird	Neoplan
Reo	91 - Eagle Coach	Orion
82 - Freightliner	92 - Gillig	Oshkosh
83 - FWD	93 - MCI	Scania
84 - International Harvester	94 - Thomas Built	Sterling
Navistar	98 - Other Make	UD
85 - Kenworth	Auto-Union-DKW	Van Hool
86 - Mack	Carpenter	Western Star
	Collins Bus	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	07 - Dodge	69 - Lamborghini
31 - Alfa Romeo	71 - Ducati	40 - Lancia
03 - AM General	10 - Eagle	62 - Land Rover
01 - American Motors	91 - Eagle Coach	59 - Lexus
69 - Aston Martin	29 - Excalibur	13 - Lincoln
32 - Audi	69 - Ferrari	69 - Lotus
33 - Austin/Austin Healey	36 - Fiat	86 - Mack
29 - Avanti	12 - Ford	69 - Maserati
98 - Auto-Union-DKW	82 - Freightliner	69 - Maybach
69 - Bentley	83 - FWD	41 - Mazda
69 - Bertone	69 - Gazelle	93 - MCI
90 - Bluebird	92 - Gillig	42 - Mercedes-Benz
34 - BMW	23 - GMC	14 - Mercury
69 - Bricklin	25 - Grumman	56 - Merkur
80 - Brockway	72 - Harley-Davidson	98 - Mid Bus
70 - BSA	69 - Hillman	69 - Mini Cooper
18 - Buick	98 - Hino	43 - MG
19 - Cadillac	37 - Honda	52 - Mitsubishi
98 - Carpenter	29 - Hudson	69 - Morgan
29 - Checker	55 - Hyundai	69 - Morris
20 - Chevrolet	08 - Imperial	74 - Moto Guzzi
06 - Chrysler	58 - Infiniti	84 - Navistar
69 - Citroen	84 - International Harvester	98 - Neoplan
98 - Collins Bus	38 - Isuzu	35 - Nissan
64 - Daewoo	88 - Iveco Magirus	75 - Norton
60 - Daihatsu	39 - Jaguar	21 - Oldsmobile
35 - Datsun	69 - Jensen	18 - Opel
69 - DeLorean	02 - Jeep	98 - Orion
29 - DeSoto	02 - Kaiser-Jeep	98 - Oshkosh
69 - Desta	73 - Kawasaki	69 - Other Imports
81 - Diamond Reo	85 - Kenworth	29 - Other Domestic
98 - DINA	63 - KIA	98 - Other Make
98 - Divco	69 - Lada	29 - Packard

(Continued on Next Page)

Vehicle Make (Continued)

This comes from the Vehicle File

1991 and later

29 - Panoz	98 - Scania	69 - TVR
87 - Peterbilt	69 - Simca	98 - UD
44 - Peugeot	69 - Singer	99 - Unknown Make
09 - Plymouth	61 - Sterling	98 - Van Hool
22 - Pontiac	98 - Sterling	30 - Volkswagen
45 - Porsche	29 - Studebaker	51 - Volvo
69 - Reliant (British)	29 - Stutz	98 - Western Star
46 - Renault	48 - Subaru	89 - White/Autocar
69 - Rolls-Royce	69 - Sunbeam	89 - White GMC
81 - Reo	53 - Suzuki	02 - Willys Jeep
47 - Saab	94 - Thomas Built	76 - Yamaha
29 - Saleen	49 - Toyota	57 - Yugo
24 - Saturn	50 - Triumph	

(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	35 - Datsun	58 - Infiniti (not before 1988)
02 - J eep	36 - Fiat	59 - Other Imports
03 - AM General	37 - Honda	60 - BSA
06 - Chrysler	38 - Isuzu	61 - Ducati
07 - Dodge	39 - Jaguar	62 - Harley-Davidson
08 - Imperial	40 - Lancia	63 - Kawasaki
09 - Plymouth	41 - Mazda	64 - Moto Guzzi
10 - Eagle (not before 1988)	42 - Mercedes-Benz	65 - Norton
12 - Ford	43 - MG	67 - Yamaha
13 - Lincoln	44 - Peugeot	69 - Other Motor Cycle
14 - Mercury	45 - Porsche	70 - Moped
18 - Buick	46 - Renault	80 - Brockway
19 - Cadillac	47 - Saab	81 - Diamond Reo
20 - Chevrolet	48 - Subaru	82 - Freightliner
21 - Oldsmobile	49 - Toyota	83 - FWD
22 - Pontiac	50 - Triumph	84 - International Harvester
23 - GMC	51 - Volvo	85 - Kenworth
29 - Other Domestic	52 - Mitsubishi (not before	86 - Mack
30 - Volkswagen	1982)	87 - Peterbilt
31 - Alfa Romeo	53 - Suzuki (not before	88 - White
32 - Audi	1987)	95 - Other Truck/Bus
33 - Austin/Healey	57 - Lexus (not before	98 - Other Make
	1988)	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	37 - Honda	21 - Oldsmobile
03 - AM General	08 - Imperial	29 - Other Domestic
01 - American Motors	58 - Infiniti (Not before 1990)	59 - Other Imports
32 - Audi	84 - International Harvester	98 - Other Make
33 - Austin/Healey	38 - Isuzu	69 - Other Motor Cycle
34 - BMW	39 - Jaguar	95 - Other Truck/Bus
80 - Brockway	02 - Jeep	87 - Peterbilt
60 - BSA	63 - Kawasaki	44 - Peugeot
18 - Buick	85 - Kenworth	09 - Plymouth
19 - Cadillac	40 - Lancia	22 - Pontiac
20 - Chevrolet	57 - Lexus (not before 1990)	45 - Porsche
06 - Chrysler	13 - Lincoln	46 - Renault
35 - Datsun	86 - Mack	47 - Saab
81 - Diamond Reo	41 - Mazda	48 - Subaru
07 - Dodge	42 - Mercedes-Benz	53 - Suzuki (not before 1987)
61 - Ducati	14 - Mercury	49 - Toyota
10 - Eagle (not before 1988)	43 - MG	50 - Triumph
36 - Fiat	52 - Mitsubishi (not before 1982)	99 - Unknown Make
12 - Ford	70 - Moped	30 - Volkswagen
82 - Freightliner	64 - Moto Guzzi	51 - Volvo
83 - FWD	65 - Norton	88 - White
23 - GMC		67 - Yamaha
62 - Harley-Davidson		

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 for persons not in a motor vehicle
1 - 99

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 [these data are 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 loses 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 = 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	BU - Bus
2F - Passenger Vehicle Formal Hardtop 2-Door	CB - Truck Chassis and Cab
2H - (81-03) Passenger Vehicle 2-Door	CB - Passenger Vehicle Cab & Chassis (Luv)
2L - Passenger Vehicle Liftback 3-Door	CC - Truck Conventional Cab
2P - Passenger Vehicle Pillard Hardtop 2-Door	CG - Truck Cargo Van
2T - Passenger Vehicle Hardtop 2-Door	CH - Truck Crew Chassis
2W - Truck 2-Door Wagon/Sport Utility	CL - Truck Club Chassis
2W - Passenger Vehicle Wagon 2-Door	CM - Truck Concrete or Transit Mixer
3D - Passenger Vehicle Runabout 3-Door	CP - Truck Crew Pickup
4D - Passenger Vehicle Sedan 4-Door	CP - Passenger Vehicle Coupe
4H - (81-03) Passenger Vehicle Hatchback 4-Door	CR - Truck Crane
4L - Passenger Vehicle Liftback 5-Door	CS - Truck Super Cab/Chassis Pickup
4P - Passenger Vehicle Pillard Hardtop 4-Door	CU - Truck Custom Pickup
4T - Passenger Vehicle Hardtop 4-Door	CV - Truck Convertible (Jeep Commando, Suzuki Samurai, Dodge Dakota)
4W - Truck 4-Door Wagon/Sport Utility	CV - Passenger Vehicle Convertible
4W - Passenger Vehicle Wagon 4-Door	CY - Truck Cargo Cutaway
5D - Passenger Vehicle Sedan 5-Door	DP - Truck Dump
8V - Truck 8-Passenger Sport Van	DS - Truck Tractor Truck (diesel)
AC - Truck Auto Carrier	EC - Truck Extended Cargo Van
AM - Passenger Vehicle Ambulance	EN - Motorcycle Enduro
AR - Truck Armored Truck	ES - Truck Extended Sport Van
AT - Motorcycle All-Terrain	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	PM - Truck Pickup with Camper Mounted on Bed
FT - Truck Fire Truck	PN - Truck Panel
GG - Truck Garbage or Refuse	PS - Truck Super Cab Pickup
GL - Truck Gliders	RC - Motorcycle Racer
GN - Truck Grain	PN - Passenger Vehicle Panel, Truck commonly registered as passengers
HB - Passenger Vehicle Hatchback number doors unknown	RD - Truck Roadster (Jeep, Jeep Commando)
HO - Truck Hopper	RD - Passenger Vehicle Roaster
HR - Passenger Vehicle Hearse	RS - Motorcycle Road/Street
HT - Passenger Vehicle Hardtop number doors unknown	RT - Motorcycle Road/Trail
IC - Truck Incomplete Chassis	S1 - Truck One-Seat
IE - Truck Incomplete Ext Van	S2 - Truck Two-Seat
LB - Passenger Vehicle Liftback	SB - Passenger Vehicle Sport Hatchback
LG - Truck Logger	SC - Passenger Vehicle Sport Coupe
LL - Truck Suburban & Carry-All	SD - Passenger Vehicle Sedan, number doors unknown
LM - Passenger Vehicle Limousine	SN - Truck Step Van
MH - Truck Motorized Home	SP - Truck Sport Pickup
MK - Motorcycle Mini-Bike	ST - Truck Stake or Rack
MN - Motorcycle Mini Moto Class	SV - Truck Sports Van
MP - Motorcycle Moped	SV - Passenger Vehicle Sport Van
MP - Truck Multipurpose	SW - Passenger Vehicle Station Wagon
MR - Motorcycle Mini Road/Trail	SW - Truck Station Wagon (Jeep Wagoneer etc.)
MS - Motorcycle Motor Scooter	T - Motorcycle Dirt
MV - Truck Maxi-Van	TB - Truck Tilt Cab
MX - Motorcycle Moto Cross	TL - Truck Tilt Tandem
MY - Truck Motorized Cutaway	TL - Motorcycle Trail/Dirt
MY - Motorcycle Mini-Cycle	TM - Truck Tandem
NB - Passenger Vehicle Notchback	TN - Truck Tank
PC - Truck Club Cab Pickup	TR - Motorcycle Trails
PD - Truck Parcel Delivery	TR - Truck Tractor (gasoline)
PK - Truck Pickup	
PK - Passenger Vehicle Pickup, Truck commonly registered passengers	

(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 is 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. This material comes from analysis of the Vehicle Identification Number (VIN).

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 is 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 code, 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	$1,950 \leq$ Car Weight < 2,450
Class 3	$2,450 \leq$ Car Weight < 2,950
Class 4	$2,950 \leq$ Car Weight < 3,450
Class 5	$3,450 \leq$ Car Weight < 3,950
Class 6	$3,950 \leq$ Car Weight

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 The longest and shortest wheelbase respectively for the
 WHLBS_SH 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
Fatal Accident 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

```
libname library 'I:\farssas\formats\format91';
```

FORMAT87.SAS

```
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.

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