



# General Estimates System Coding And Editing Manual

2001



# **2001 VARIABLE CHANGES**

P06, EJECTION, responses **Not applicable** and **Ejected-Unknown Degree** are added to the Oracle and SAS data sets.

P07, AGE, response **97 Years Old and Older** is changed to the person's actual age in both the Oracle and SAS data sets. The value for the response **Unknown** is changed from 99 to 999 in the SAS data set.

E05/V24 POINT OF IMPACT (OTHER VEHICLE) response **Not A Motor Vehicle In Transport**: The SAS value is changed from dot (.) To 98.

V18, Damage Severity: If the PAR indicates that the vehicle is towed due to damage; then V18, Damage Severity must not equal Functional.

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#### ACKNOWLEDGMENT

The production of this edition of the General Estimates System Coding and Editing Manual would not have been possible without contributions from many individuals within the U.S. Department of Transportation and the National Automotive Sampling System Zone Centers.

#### **A22 POLICE JURISDICTION**

Screen Heading:	PAR
Screen Name:	Jurisdiction (none-E)
Long Name:	None
SAS Name:	Accident.pj
Oracle Name:	NASS.PARdata.Jurisdiction
Element Values:	
Range: 1-126	

#### Remarks:

This is the police jurisdiction from which the PAR is selected; it is written at the top of the PAR and is prefaced by the character "PJ." The police jurisdiction may also be shown as the second of three numbers separated by -'s. The first number in the set of three is the primary sampling unit; the second is the police jurisdiction; and the third is the PAR number. The jurisdiction number written on the PAR must match the number shown in the "GES Input Form" PAR/Jurisdiction field.

#### A01 DATE

Screen Heading:	PAR
Screen Name:	Crash Date (none-E)
Long Name:	None
SAS Name:	Accident.Month, Accident.Weekday, Accident.Year
Oracle Name:	GES.Crashdata.CrashDate
Element Values:	

Date Field (MM/DD/YYYY)

#### Remarks:

If the PAR indicates (usually a hit-and-run) that the crash occurred between some PM and AM time (e.g., 8:00 PM and 6:00 AM) on either a preceding or following day, code the crash as occurring on the following day. If a range of days is indicated (e.g., between Sunday and Friday), code the last date of the range (e.g., Friday). When the day is not available on the PAR use the day listed on the Stratification Record if it is available.

If the month cannot be determined from the PAR, enter the month of the Ending Contact Date from the Inventory Record.

If the crash date on the PAR does not match the crash date shown on the data entry screen and it is determined that the crash date on the PAR is correct, the crash date is corrected.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AA034A	there is a row in the ges.crashdata table	there must be a row in the nass.pardata table with a matching parid.
<u>Warnings</u>		
	IF	THEN
AA034	DATE-MM (A01) equals 05-09	ATMOSPHERIC CONDITION (A20) should not equal 3 or 4.

#### A02 TIME

Screen Heading:	PAR
Screen Name:	Crash Time (none-E)
Long Name:	None
SAS Name:	Accident.Hour, Accident.Minute
Oracle Name:	GES.Crashdata.CrashTime
Element Values:	
Time Field (HH:MM)	

#### **Remarks:**

Enter time as shown on the PAR. If the hour (HH) or AM versus PM cannot be determined, then enter (Unknown).

If the PAR indicates the crash occurred during some time interval of greater than one hour (e.g., 8:00 PM to 6:00 AM, or 8:00 am to 5:00 PM), enter (Unknown). However, if the interval is one hour or less, code the midpoint of the interval (e.g., 8:00 PM to 9:00 PM), enter "2030."

If the PAR indicates an hour and unknown minutes, code the midpoint (e.g., 12:99 = 12:30, 16:99 = 16:30).

When the time is available but AM versus PM is not shown on the PAR, base the time on light conditions (e.g. time is 10:00, light condition is dark. Code as 2200).

AM - Starts at 12:00 Midnight PM - Starts at 12:00 Noon 12 AM (or 12:00 midnight) is the equivalent of 2400 in military time 12:01 AM is the equivalent of 0001 in military time

If the time on the PAR does not match the crash time shown on the data entry screen and it is determined that the crash time on the PAR is correct, the crash time is corrected.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AA003	LIGHT CONDITION (A19) equals 5	TIME (A02) must not equal 2200- 2400 or 0001-1400.
AA003A	TIME (A02) - Hour equals 00-24	Time (A02) - Minute must not equal 99.

AA062	LIGHT CONDITION (A19) equals 2	TIME (A02) must not equal 1000- 1500.
AA066	LIGHT CONDITION (A19) equals 1	TIME (A02) must not equal 2200- 2400 or 0001-0300.
AA066A	TIME (a02) must not equal 00:00 or r	null.
AA079	LIGHT CONDITION (A19) equals 4	TIME (A02) must not equal 1000- 2400 or 0001-0300.

## <u>Warnings</u>

	IF	THEN
AA006	TIME (A02) equals 1000-1500	LIGHT CONDITION (A19) should equal 1 or 9.
AA057	TIME (A02) equals 2200-2400 or 0001-0300	LIGHT CONDITION (A19) should equal 2, 3 or 9.
AA068	LIGHT CONDITION (A19) equals 3	TIME (A02) should not equal 1000- 1500.
AA074	LIGHT CONDITION (A19) equals 1	TIME (A02) should equal 0500-2100 or 9999.
AA078	LIGHT CONDITION (A19) equals 2	TIME (A02) should equal 1600-2400, 0100-0900 or 9999.
AA080	LIGHT CONDITION (A19) equals 4	TIME (A02) should equal 0400-0900 or 9999.
AA082	LIGHT CONDITION (A19) equals 5	TIME (A02) should equal 1600-2100 or 9999.

### A23 STRATUM

Screen Heading:	PAR
Screen Name:	Category (none-N)
Long Name:	None
SAS Name:	Accident.Stratum
Oracle Name:	NASS.PARdata.CategoryID
Element Values:	

Screen	Oracle	SAS	
n/a	1	1	Category 1
n/a	2	2	Category 2
n/a	3	3	Category 3
n/a	4	4	Category 4

#### Remarks:

Only NASS crashes are included in the GES. See the current <u>NASS GES Researcher's Manual</u>, section 3.0 for the definition of a NASS crash.

**Category 1** applies if the NASS crash involves at least one passenger vehicle (i.e., a passenger car, sport utility vehicle, van, or pickup truck) which is towed due to damage from the crash scene. Crashes involving medium or heavy trucks are excluded from this category.

**Category 2** applies if the NASS crash does not qualify for Category 1, but involves at least one medium or heavy truck and either a vehicle which is towed due to damage or at least one involved person which has a police reported injury of "K", "A", "B", or "C."

**Category 3** applies if the NASS crash does not qualify for Categories 1 or 2, none of the vehicles involved in the crash are medium or heavy trucks, and at least one person involved in the crash has a police reported injury of "K", "A", or "B."

**Category 4** applies if the crash does not qualify for Categories 1, 2, or 3 and no one in the crash receives a "K", "A", or "B" injury.

Stabilization:

At times, one police report will contain more than one crash. This will happen when events constituting a crash have stabilized (*ANSI D16.1-1996*, *Section 2.4.4*) and units involved in the first sequence are subsequently involved in another crash sequence which is recorded on the same police report. If more than one crash is recorded on a police report, based on the ANSI definition of stabilized, then use the following protocol to determine which of the crashes to code.

First, identify all NASS crashes. Exclude from consideration those which are not NASS crashes.

Second, select the situation (A, B, or C below) which is applicable to the PAR under consideration and follow the protocol provided.

#### Situation A

If exactly one crash qualifies for Category 1, choose this crash to code.

#### Situation B

If more than one crash qualifies for Category 1, follow the 4 steps below to select the crash to code. Ignore all crashes not applicable to Category 1.

(1) If injury is involved and the relative degree of injury between crashes can be determined, choose the crash with the highest injury severity.

(2) If injury is involved and the relative degree of injury between crashes is approximately equal, choose the first of the highest equal injury crashes.

(3) If injury is involved and the relative degree of injury between crashes cannot be determined, choose the first crash.

(4) If there are no injuries, then choose the first crash.

#### Situation C

If no crash qualifies for Category 1 and there is more than one crash applicable to Categories 2, 3, or 4; follow the criteria in Situation B above to select the crash to code.

#### **Consistency Checks:**

#### <u>Warnings</u>

	IF	THEN
AP098	STRATUM (A23) equals 3	at least one INJURY SEVERITY (P09) should not equal 2, 3 or 5.
AP144	STRATUM (A23) equals 4	INJURY SEVERITY (P09) should not equal 2, 3, 4 or 5.
AV100	STRATUM (A23) equals 3 or 4 and BODY TYPE (V05) equals 01-49	MANNER OF LEAVING SCENE (V19) should not equal 2.
AV121	STRATUM (A23) equals 1 or 3	BODY TYPE (V05) should not equal 60-79.
AV230	STRATUM (A23) equals 4 and at least one BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 1, 2, 3 or 4.

## Post Entry

	IF	THEN
AV099	STRATUM (A23) equals 1	MANNER OF LEAVING SCENE (V19) should equal 2 for at least one vehicle where BODY TYPE (V05) equals 1-49.
AV145	STRATUM (A23) equals 1	at least one BODY TYPE (V05) should equal 01-49.
AV146	STRATUM (A23) equals 2	at least one BODY TYPE (V05) should equal 60-79.
AV231	STRATUM (A23) equals 4 and no BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 2, 3 or 4.
PV188	(any) INJURY SEVERITY (P09) equals 1, 2, 3, 4 or 5 and (any) BODY TYPE (V05) equals 60-79	STRATUM (A23) should equal 2.
PV233	INJURY SEVERITY (P09) equals 1 and at least one BODY TYPE (V05) EQUALS 60-79	STRATUM (A23) should not equal 4.
VP143	no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 2-5 and no BODY TYPE (V05) EQUALS 60-79 -or- no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 1-5 and at least 1 BODY TYPE (V05) EQUALS 60-79	STRATUM (A23) should equal 4.

## **A03 NUMBER OF MOTOR VEHICLES**

Screen Heading:	PAR Configuration Questions
Screen Name:	Number of In-Transport Motor Vehicles (10-R)
Long Name:	How many in-transport motor vehicles are in the crash?
SAS Name:	Accident.Veh_invl
Oracle Name:	GES.Crashdata.Numvehs
Element Values:	
Range: 1 to 30	

#### Remarks:

Each crash must have at least one in-transport motor vehicle involved. The value entered must equal the total number of in-transport motor vehicles involved in the crash. Vehicles not in transport are not included in this variable's count.

In order for a vehicle to be considered in transport, the motor vehicle must be either (1) on the roadway or (2) in motion. This includes driverless vehicles.

When one motor vehicle is towing another, the number of motor vehicles entered depends on the type of linkage between the vehicles. A fixed linkage is defined as one which has the property of keeping the towed unit separated from the power unit by a distance which is essentially constant. Included within this definition are cradle linkages where the towed unit has two or more wheels off the ground. A nonfixed linkage (such as a rope or a chain) requires the towed unit to be manually controlled.

If the PAR indicates (probably in the narrative section) the linkage between the units is fixed, consider the towed unit as cargo throughout the entire crash sequence, regardless of subsequent events/impacts sustained by the towed unit. In other words, a vehicle towed by a fixed linkage: (1) is never considered as an in-transport vehicle, and (2) will be considered as cargo associated with the power unit.

If the linkage between the units is nonfixed, each vehicle is considered to be in-transport, and only the vehicle(s) involved in the crash sequence can be counted. If no information is available regarding type of linkage, assume fixed linkage.

Hit-and-run crashes may cause some confusion on this variable. The count is increased for each in-transport motor vehicle involved in the crash independent of the amount of information collected on the vehicles by the police.

Parked vehicles may or may not be counted depending on whether or not they were in-transport. A vehicle parked off the roadway, its door open over a roadway, is not in transport.

## **Consistency Checks:**

## Errors

	IF	THEN
AA014	HARMFUL EVENT (A06) equals 25	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
AA014A	ACTION (E06) equals 4 or 5	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
AA086	MANNER OF COLLISION (A07) does not equal 0	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
AV197	NUMBER OF MOTOR VEHICLES (A03) equals 02 and one vehicle's VEHICLE ROLE (V22) equals 2	the other vehicle's VEHICLE ROLE (V22) must not equal 2.
AV213	NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13	VEHICLE ROLE (V22) must equal 1 or 3.
PA201	PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01.
VA001	HARMFUL EVENT (A06) equals 25	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
VA093	VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 31-46, 58 or 59.
VA096	VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 01-10.
<u>Warnings</u>		
	IF	THEN
AV184	NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION	CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12, 13 or 14.

ATTEMPTED (V27) equals 00 or 01

# Post Entry

	IF	THEN
AP015	NUMBER OF MOTOR VEHICLES (A03) is greater than 00	at least one PERSON TYPE (P03) should equal 1, 2 or 9.
AV019	NUMBER OF MOTOR VEHICLES (A03) is greater than 01	there should be at least one vehicle with TRAVEL SPEED (V11) > 00 or unknown.
AV097	RELATION TO ROADWAY (A10) equals 3 and NUMBER OF MOTOR VEHICLES (A03) equals 01	ACCIDENT TYPE (V23) should equal 06-10, 98 or 99.
PA200	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal one VEHICLE NUMBER (V01) in the crash unless it is equal to 99.	
VA014	ACCIDENT TYPE (V23) equals 01- 16	NUMBER OF MOTOR VEHICLES (A03) should equal 1.
VA015	ACCIDENT TYPE (V23) equals 20- 91	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
VA120	Only ACCIDENT TYPE (V23) codes ( when the crash involves a single vehic (A03) equals 01.	

## A04 NUMBER OF NON-MOTORISTS

Screen Heading:	PAR Configuration Questions
Screen Name:	Number of Non-Motorists (15-R)
Long Name:	How many non-motorists are involved in the crash?
SAS Name:	Accident.Non_invl
Oracle Name:	GES.Crashdata.NumNonMotorists
Element Values:	
Range: 0-98	
Remarks:	

The value entered must equal the number of non-motorists involved in the crash.

Non-Motorists are generally listed in the vehicle section on the PAR.

Non-Motorists include: occupants of a vehicle not in-transport, pedestrians, bicyclists, other cyclists, as well as other non-motorists.

"Occupant of vehicle not in transport" represents those persons in or on a motor vehicle which is not in transport when struck.

A "non-motorist conveyance" is defined as any human-powered device by which a non-motorist may move, or by which a pedestrian or non-motorist may move another non-motorist, other than by pedaling. A non-motorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. This includes those persons in a non-motorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

A "pedestrian" is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

A "bicyclist" refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion. "Other cyclist" refers to all other pedalcyclists such as persons on tricycles or unicycles. This includes those pedalcyclists who hold onto a motor vehicle in motion.

"Other non-motorist" includes any other person not included under the above definitions of a pedestrian, bicyclist, other cyclist, or occupant of a motor vehicle not in-transport. Persons riding on an animal or in an animal powered conveyance are one example. Any person outside a trafficway or outside a sidewalk or path contiguous with a trafficway is another.

The maximum number of non-motorists that can be coded is 98. If more than 98 non-motorists are involved code only the first 98.

## **Consistency Checks:**

## <u>Errors</u>

	IF	THEN
AA033	HARMFUL EVENT (A06) equals 21, 22 or 27	NUMBER OF NON-MOTORISTS (A04) must not equal 00.
AA070	NUMBER OF NON-MOTORISTS (A04) equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0000.

## <u>Warnings</u>

	IF	THEN	
PA065	HARMFUL EVENT and NUMBER OF N MOTORISTS (A04) NON-MOTORIST'S equals 07	NON-         TYPE (,           equals 01 and         0002, 0           ACTION (P19)         0019, 0	TRIAN/BIKE ACCIDENT A24) should equal 0001, 003, 0004, 0005, 0018, 021, 0026, 0040, 0049, 098, 0099.

Post Entry

	IF	THEN
AP135	RELATION TO JUNCTION (A09) equals 03 or 13 and NUMBER OF NON-MOTORISTS (A04) is greater than 00	NON-MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09.
AP135A	The PERSON NUMBERS (P02) of the non-motorists within a crash must be consecutively numbered. The number of non-motorists coded for a crash must equal NUMBER OF NON-MOTORISTS (A04).	

#### **E01 EVENT NUMBER**

Screen Heading:	Events
Screen Name:	Event Number (N)
Long Name:	None
SAS Name:	Event.Eventnum
Oracle Name:	GES.Events.EventNumber
Element Values:	
Range: 1-98	
Remarks:	

This is a computer assigned number beginning with 1.

A "crash" is the total set of "harmful events" (one or more) resulting from an unstabilized situation. The "crash" is concluded in time when all harmful events which originate from the unstabilized situation are stabilized.

A harmful event is an occurrence of injury or damage involving an in-transport motor vehicle. It can result from an impact or non-collision event. An impact is defined as any vehicle to vehicle or vehicle to object (fixed or nonfixed, stationary or nonstationary) contact which results in damage or injury. Noncollision events such as fire/explosion, occupant fell from vehicle, occupant injury without vehicle impact, etc., involving an in-transport motor vehicle are harmful events if damage or injury result.

The NASS GES is only interested in harmful events that involve **in-transport** motor vehicles. Events that involve **only** not in-transport motor vehicles and/or pedestrians and/or non-motorists are not included in the coded crash sequence. Below are some examples of nonqualifying events.

Not in-transport vehicle (e.g., parked vehicle) impacts pedestrian, pedalcyclist, or other non-motorist

Not in-transport vehicle impacts an object (fixed or nonfixed)

Not in-transport vehicle impacts another not in-transport vehicle

Pedestrian (pedalcyclist, other non-motorist) impacts an object

Pedestrian (pedalcyclist, other non-motorist) impacts another not in-transport vehicle

Pedestrian, pedalcyclist, or other non-motorist inter-impact.

The crash events variables are designed to provide a coded description of all qualifying events which occurred in the crash sequence. Events are encoded in chronological sequence. Two groups of variables are provided for each event. The first (or left) group always describes the intransport motor vehicle with the lower vehicle number in the event. The second group describes either the other in-transport vehicle, the object involved in the event or the noncollision event associated with the in-transport motor vehicle described by the left group.

With this coded chronological sequence of qualified crash events on the GES database, analysts can review the entire series of events involving in-transport motor vehicles. Various areas of concern to the highway safety community will be easily assessed using these variables. For instance, the injury severity in accidents can be assessed relative to the number and type of impacts involved.

Likewise, certain collision configurations may create a greater hazardous condition for the occupants. A possible area of analysis would be the mix of vehicles sizes or the types of objects the different classes of vehicles impact.

Complete these variables based upon a reconstruction of the vehicular dynamics involved in the crash as described in the PAR. All of the injury or damage producing qualifying events or circumstances for the in-transport motor vehicle(s) are coded.

An example of a properly coded crash sequence is shown below.

Vehicle 1 (a compact passenger car) went out of control on a wet roadway and struck a median guardrail with its front. The vehicle was redirected by the guardrail and reentered the roadway, where it struck vehicle 2 (a large pickup truck) in the left side with its front. Vehicle 1 spun to a stop in the roadway, and the driver, due to the spinning, hit his head on the door pillar breaking his neck. Vehicle 2, out-of-control, ran off the roadway, struck a pedestrian with its front and rolled over.

E01 Event Number	E02 Vehicle Number (This Vehicle)	E03 Point of Impact (This Vehicle)	E06 Action	E04 Vehicle Number (Other Vehicle) or Object Contacted	E05 Point of Impact (Other Vehicle)	A07 Manner of Collision
1	1	Front	Collision With Fixed Object	Guardrail	-	Not Collision With Motor Vehicle in transport
2	1	Front	Strike Another Vehicle	2	Left Side	-
3	2	Front	Collision With Object Not Fixed	Pedestrian	-	-
4	2	Non-Collision	Non-Collision	Rollover or Overturn	-	-

Note: For the driver of vehicle 1, breaking his neck is not a separate codeable event. Rather, this injury, and almost all occupant injuries resulting from occupant interior contact, is a result of a

collision event. Also, A07, Manner of Collision, applies only to the first harmful event in the crash.

## **Consistency Checks:**

## <u>Errors</u>

	IF	THEN
AA009	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-24, 26-46, 58 or 59	MANNER OF COLLISION (A07) must not equal 1-6.
AA010	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25	MANNER OF COLLISION (A07) must not equal 0.
AA011	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) for this vehicle equals 23	TRAFFIC CONTROL DEVICE (A16) must not equal 01-51or 98.
AA012	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26	RELATION TO ROADWAY (A10) must not equal 1.
AA039	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO ROADWAY (A10) must equal 1.
AA051	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610, 0620, EVENT NUMBER (E01) equals 1, and HARMFUL EVENT (A06) equals 21	RELATION TO ROADWAY (A10) must not equal 1.
AA088	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 7	RELATION TO ROADWAY (A10) must equal 1.
AV022	HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97.
AV073	MANNER OF COLLISION (A7) equals 2	POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1.
AV074	MANNER OF COLLISION (A7) equals 3	H POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1.

AV075	MANNER OF COLLISION (A7) equals 1	one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04.
AV132	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04, 05, 06, 08 or 09	ACCIDENT TYPE (V23) must equal 00.
AV215	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-10	ACCIDENT TYPE (V23) must not equal 20-91.
PA127	NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO JUNCTION (A09) must not equal 01 or 11.
VA081	ACCIDENT TYPE (V23) equals 13 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 21, 22, 24 or 27.
VA086	ACCIDENT TYPE (V23) equals 01- 16 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 25.
VA093	VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 31-46, 07, 58 or 59.
VA096	VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 01-10.
VA137	ACCIDENT TYPE (V23) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 02, 03, 04, 05, 06, 08 or 09.
VA219	ACCIDENT TYPE (V23) equals 20- 91 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 25.
VV099A	ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14.
VV100A	ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13.

# <u>Warnings</u>

	IF	THEN
AA023	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 99	MANNER OF COLLISION (A07) should not equal 0-6.
AA024	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 31-46, 58 or 59	RELATION TO ROADWAY (A10) should not equal 1.
AA025	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 23	RELATION TO JUNCTION (A09) should equal 5.
AV070	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26	ACCIDENT TYPE (V23) should equal 01-11, 92, 98 or 99.
AV071	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13	ACCIDENT TYPE (V23) should equal 13.
AV072	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1	ACCIDENT TYPE (V23) should equal 12 or 15.
AV137A	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04 or 06	ACCIDENT TYPE (V23) should equal 00.
AV137B	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 08 or 09	ACCIDENT TYPE (V23) should equal 00.
AV223	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01	ACCIDENT TYPE (V23) should equal 1-10, 98 or 99.
VA087	ACCIDENT TYPE (V23) equals 99 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 99.
VA198	POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 01-10.

VA211	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10	RELATION TO ROADWAY (A10) should equal 1.	
Post Entry			
	IF	THEN	
AP001	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1	there must be at least one NON- MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20 or 99.	
AP002	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 2 or 7	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.	
AP003	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.	
AP004	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99	there must be at least one NON- MOTORIST LOCATION (P13) equal to 09, 19 or 99.	
AV011	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) is not equal to 02, 06, 10, 21, 22, 25, 27 or 28	TRAVEL SPEED (V11) should not equal 00.	
AV011A	HARMFUL EVENT (A06) equals 25 and EVENT NUMBER (E01) equals 1	TRAVEL SPEED (V11) should not equal 00 for both vehicles.	
PA049	at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920.	
PA058	at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099.	
VA093	VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 31-46, 58 or 59.	

## E02/V01 VEHICLE NUMBER (THIS VEHICLE)

Screen Heading:	Events
Screen Name:	Vehicle (100-R)
Long Name:	What is the number of the "lower numbered" in-transport motor vehicle involved in this event?
SAS Name:	Event.Vehnum, Vehicle.Vehno
Oracle Name:	GES.Events.VehicleID, GES.Vehicle.VehicleNumber
Element Values:	
Range: 1-30	

#### **Remarks:**

The in-transport motor vehicles within a crash are numbered sequentially beginning with 1; no numbers are skipped. In-transport motor vehicles are assigned the PAR's vehicle number unless a number is skipped. The vehicle number entered is for the in-transport motor vehicle involved in this event with the <u>lower</u> vehicle number.

#### **Consistency Checks:**

#### <u>Errors</u>

	IF	THEN
PP048A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	VEHICLE NUMBER (V01) must equal null.
EV215	All in-transport motor vehicles must be involved in at least one event.	
<u>Warnings</u>		
	IF	THEN
AV215A	The lower vehicle number should be entered first when entering the event	

information.

## E03/V24 POINT OF IMPACT (THIS VEHICLE)

Screen Heading:	Events	
Screen Name:	Point of Impact - This Vehicle (102-R)	
Long Name:	What is the point of impact for this vehicle?	
SAS Name:	Event.Gad, Vehicle.Impact	
Oracle Name:	GES.Events.VehiclePlaneID	
Element Values:		

Screen	Oracle	SAS	
1	26859	0	Non-Collision
2	26860	1	Front
3	26861	2	Right Side
4	26862	3	Left Side
5	26863	4	Back
6	26864	5	Тор
7	26865	6	Undercarriage
8	26866	11	Front Right Corner
9	26867	12	Front Left Corner
10	26868	13	Back Right Corner
11	26869	14	Back Left Corner
12	26870	99	Point of Impact Unknown

~ ^ ~

#### Remarks:

For this event, code the impact point that produced property damage or personal injury. The impact point is for the vehicle coded in variable E02/V01, Vehicle Number (This Vehicle).

Non-collision applies when the event involves rollover, fire, non-collision injury etc.

**Front** is used when it can be determined that the point of impact for this vehicle is the front plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for both is front, A07, Manner of Collision, must be entered as head-on.

**Right Side** applies when the point of impact for this vehicle is known to be the right plane.

Left side applies when the point of impact for this vehicle is known to be the left plane.

**Back** is used when the point of impact for this vehicle is known to be the back plane.

**Front Right Corner** applies when the point of impact for this vehicle is either the front plane or right plane, but the plane can not be determined. In crashes where two vehicles are involved in

the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front right corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

**Front Left Corner** is selected when the point of impact for this vehicle is either the front plane or left plane, but the plane can not be determined. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front left corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

**Back Right Corner** applies when the point of impact for this vehicle is either the back plane or the right plane, but it is unknown if the point of impact is to the back or right plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back right corner; A07, Manner of Collision, must not be entered as rear-end or rear-to-rear.

**Back Left Corner** is used when the point of impact for this vehicle is either the back or left plane, but it is unknown if the point of impact is to the back or left plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back left corner; A07, Manner of Collision, must not be entered as rear-end rear-to-rear.

**Unknown** is selected when the lack of information prohibits the coding of any of the other element values.

### **Consistency Checks:**

	IF	THEN
AV069	HARMFUL EVENT (A06) equals 1- 6, 8 or 9	POINT OF IMPACT (V24) must equal 00.
AV073	MANNER OF COLLISION (A07) equals 2	POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1.
AV074	MANNER OF COLLISION (A07) equals 3	POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1.
AV075	MANNER OF COLLISION (A07) equals 1	one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04.
AV076	MANNER OF COLLISION (A07) equals 1	at least one vehicle must have POINT OF IMPACT (V24) equal to 04.
VV057	POINT OF IMPACT (V24) equals 11, 12, 13 or 14	DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0.

VV064	VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92	POINT OF IMPACT (V24) must not equal 01.
VV065	ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60	POINT OF IMPACT (V24) must equal 01.
VV066	ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39 or 41	POINT OF IMPACT (V24) must equal 04.
VV099A	ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14.
VV100A	ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13.

### <u>Warnings</u>

	IF	THEN
VA198	POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 01-10.
VV058E	POINT OF IMPACT (V24) equals 11	DAMAGE AREAS (V25) should equal one of the following combinations:/values (1, 2), (7) or (0).
VV097	ACCIDENT TYPE (V23) equals 87	POINT OF IMPACT (V24) should equal 02.
VV098	ACCIDENT TYPE (V23) equals 89	POINT OF IMPACT (V24) should equal 03.
VV104	ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2	POINT OF IMPACT (V24) should not equal 03.
VV177	POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00	VEHICLE ROLE (V22) should not equal 2.
VV178	POINT OF IMPACT (V24) equals 11	DAMAGE AREAS (V25) should include values 1 and 2.
VV179	POINT OF IMPACT (V24) equals 12	DAMAGE AREAS (V25) should include values 1 and 3.
VV180	POINT OF IMPACT (V24) equals 13	DAMAGE AREAS (V25) should include values 2 and 4.

VV181	POINT OF IMPACT (V24) equals 14	DAMAGE AREAS (V25) should include values 3 and 4.
VV224	CRITICAL EVENT (V26) equals 53	POINT OF IMPACT (V24) should not equal 01.
VV225	CRITICAL EVENT (V26) equals 51 or 52	POINT OF IMPACT (V24) should not equal 04.

### E06 ACTION

Screen Heading:		Events		
Screen N	ame:	Action	(105-R)	
Long Name:		What is the action for this event?		
SAS Name:		none		
Oracle Name:		GES.Events.VehActionID		
Element Values:				
Screen	Oracle	SAS		
1 2 3 4 5	10228 10229 10230 10231 10232	1 2 3 4 5	Non-Collision Collision With Object Not Fixed Collision With Fixed Object Strike Another In-Transport Motor Vehicle Struck By An In-Transport Motor Vehicle	

### Remarks:

The attributes for this variable are the five major categories of A06, Harmful Event. The A06, Harmful Event, subcategories for each are listed below. The definitions of the subcategories are shown under variable A06, Harmful Event.

Example 1: If the event is a rollover involving an in-transport motor vehicle; E06, Action, is coded **Non-Collision** and A06, Harmful Event, is coded **Rollover/Overturn**.

Example 2: If the event involves an impact between an in-transport motor vehicle and a pedestrian; E06, Action, is coded **Collision With Object Not Fixed** and A06, Harmful Event, is coded **Pedestrian**.

Example 3: If the event involves an impact between two in-transport motor vehicles, where vehicle 1 strikes vehicle 2; E06, Action, is coded **Strike Another In-transport Motor Vehicle** and A06, Harmful Event, is coded **2**.

### **Non-Collision**

Rollover/Overturn Fire/Explosion Immersion Gas Inhalation Jackknife Non-Collision Injury (Injured In or Fell From Vehicle) Pavement Surface Irregularity (ruts, potholes, grates, etc.) Other Non-Collision Non-Collision - No Details Thrown Or Falling Object

### **Collision With Object Not Fixed**

Pedestrian Cycle Or Cyclist (Pedalcycle/Pedalcyclist) Railway train Animal <del>Motor Vehicle In Transport</del> Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) Other Type Non-Motorist Other Object Not Fixed Object Not Fixed - No Details

### **Collision with Fixed Object**

Ground Building Impact Attenuator/Crash Cushion Bridge Structure Guardrail Concrete Traffic Barrier Or Other Longitudinal Barrier Type Sign Post, Utility Pole, Or Other Support Culvert Or Ditch Curb Embankment Fence Wall Fire Hydrant Shrubbery Or Bush Tree Boulder Other Fixed Object Fixed Object - No Details Unknown

### Strike Another In-transport Motor Vehicle

Vehicle Number of the struck in-transport motor vehicle

### Struck By An In-Transport Motor Vehicle

Vehicle Number of the striking in-transport motor vehicle.

# **Consistency Checks:**

<u>Errors</u>

IF

THEN

AA014A

ACTION (E06) equals 4 or 5

NUMBER OF MOTOR VEHICLES (A03) must be greater than 1.

# E04/A06 Non-Collision Category or Object Contacted / Harmful Event

Screen H	leading:	Events		
Screen N	lame:	Vehicle/Other (115-R)		
Long Na	me:	What n event?	on-collision category or object (non-fixed or fixed) applies to this	
SAS Nan	ne:	Event.0	Dbjcont, Accident.Event1	
Oracle N	ame:	GES.E	vents.ObjecthitID	
Element	Values:			
Screen	Oracle	SAS (E	event.Objcont/Accident.Event1)	
Non-Colli	sion			
1 2 3 4 5 6 7 8 9 10 Collision	10231 10232 10233 19433 10234 10235 19434 10236 10237 10238 1 With Object	102/2 103/3 104/4 105/5 106/6 107/7 108/8 109/9 10/10	Rollover/Overturn Fire/Explosion Immersion Gas Inhalation Jackknife Non-Collision Injury (Injured In or Fell From Vehicle) Pavement Surface Irregularity (ruts, potholes, grates, etc.) Other Non-Collision Non-Collision - No Details Thrown Or Falling Object	
1 2 3 4 5 6 7	10239 1 10240 1 10241 1 10242 1 * 10244 1 10245 1	21/21 22/22 23/23 24/24 */25 26/26 27/27	Pedestrian Cycle Or Cyclist (Pedalcycle/Pedalcyclist) Railway train Animal Motor Vehicle In Transport Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) Other Type Non-Motorist	

- 7 10245 127/27 Other Type Non-Motoris 8 10246 128/28 Other Object Not Fixed
- 9 10247 129/29 Object Not Fixed No Details
- 10 10270 127/27 Other Type Non-Motorist Ped./Bike Applicable

Collision with Fixed Object

1	10248 131/31	Ground
2	10249 132/32	Building
3	10250 133/33	Impact Attenuator/Crash Cushion
4	10251 134/34	Bridge Structure

5 6 7	10252 135/35 10253 136/36 10254 137/37	Guardrail Concrete Traffic Barrier Or Other Longitudinal Barrier Type Sign Post, Utility Pole, Or Other Support
8	10255 138/38	Culvert Or Ditch
9	10256 138/39	Curb
10	10257 140/40	Embankment
11	10258 141/41	Fence
12	10259 142/42	Wall
13	10260 143/43	Fire Hydrant
14	10261 144/44	Shrubbery Or Bush
15	10262 145/45	Tree
16	10263 146/46	Boulder
17	10265 158/58	Other Fixed Object
18	10266 159/59	Fixed Object - No Details
19	10267 999/99	Unknown

\* The Oracle value equals GES.Vehicle.VehicleID for the other in-transport motor vehicle involved in the event. The SAS value equals the other vehicle number.

### **Remarks:**

Enter **Rollover/Overturn** when a motor vehicle rotates (rollover) at least one quarter turn in any nonhorizontal direction. Use this code also when an uncontrolled motorcycle first contacts the ground or pavement surface. All motor vehicles may rollover/overturn, with the exception of motorcycles, which can overturn but not rollover.

**Gas Inhalation** includes injury or death from carbon monoxide fumes leaking from a motor vehicle in transport.

Enter **Jackknife** whenever there is sufficient rotation (articulation) between a truck tractor/trailer combination such that they contact each other. Jackknife applies to all articulated vehicle combinations. This category includes jackknife for light vehicles (e.g., light utility vehicle/trailer combination).

Enter **Non-Collision Injury (Injured In or Fell From Vehicle)** when a person falls from or is injured inside the vehicle. This includes persons jumping or stepping from moving vehicles, persons falling from pickup beds, and persons colliding with the interior of a vehicle during a sudden stop. This attribute applies only to the first harmful event for this vehicle. If a vehicle becomes mired and results in injury, select this attribute.

Enter **Other Non-Collision** when a vehicle sets an object in motion that strikes or is struck by a vehicle before the object stabilizes. Examples include dislodged cargo, spewed gravel, etc. It may be used in other situations as well.

**Non-Collision - No Details** when it is known that the event is a non-collision, but the details are unknown.

Enter **Thrown Or Falling Object** when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor

vehicle. However, objects set in motion by an in-transport vehicle are to be coded **Other Non-Collision**. If a tree limb falls from a tree and is contacted by a car, enter **Thrown Or Falling Object**. If a tree limb falls from a tree trimming truck and is struck, enter **Other Non-Collision**. If a child maliciously throws a tree limb off an overpass into traffic below, enter this **Thrown Or Falling Object**.

Enter **Pedestrian** when any person who is involved in a harmful event is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. A non-motorist conveyance is defined as any human-powered device by which a non-motorist may move, or by which a pedestrian or non-motorist may move another non-motorist, other than by pedaling. A non-motorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheelchair, rickshaw, etc. Excluded are pedalcyclists.

Enter **Cycle or Cyclist (Pedalcycle/Pedalcyclist)** when any occupant of a pedalcycle was involved in the harmful event.

Railway Train refers to any railway train, moving or not moving.

**Animal** is used for collisions with animals (domestic or wild) that are not themselves being used as transportation or to draw a wagon, cart or other transport device.

**Motor Vehicle In Transport** is computer generated. If the event involves an impact between 2 in-transport motor vehicles, the data entry system prompts for the vehicle number of the other in-transport motor vehicle and sets A06, Harmful Event (Non-Collision/Object), equal to the vehicle ID (see \* above) of the other in-transport motor vehicle. The event involves an impact between 2 in-transport motor vehicles if variable E02, Action, is coded Strike Another In-transport Motor Vehicle or Struck By An In-Transport Motor Vehicle.

Enter **Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)** when the impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion. A vehicle parked off the roadway, its door open over a roadway, is not in transport.

Enter **Other Type Non-Motorist** when the person impacted is not a pedestrian or a pedalcyclist <u>and</u> the person does not qualify for ped./bike typing. [NOTE: If the harmful event occurs with a motor vehicle not in-transport which contains a non-motorist (e.g., Occupant of vehicle not in-transport), enter **Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)** 

Enter **Other Object Not Fixed** when the impact is between a motor vehicle in-transport and any other object that is moving or not anchored prior to the accident. This response applies when the object contacted is any person who is an occupant of a motor vehicle in-transport. For Example, use this response for an occupant who falls from a vehicle and is subsequently run over before stabilization occurs. In addition, use this response for any motorcyclist who separates from his/her motorcycle during an impact and is subsequently involved in another impact before stabilization occurs.

Enter **Other Type Non-Motorist - Ped./Bike Applicable** when the person impacted is not a pedestrian or a pedalcyclist <u>and</u> the person qualifies for ped./bike typing. Other type non-

motorists who qualify for ped./bike typing are persons who are in or on the following non-motorist conveyances: ice skates, roller skates, roller blades, scooters, skateboards, non-motorized wheelchairs or play vehicles (e.g., wagons and sleds) or persons who are not on a trafficway or sidewalk or path contiguous with a trafficway; but are in a parking lot, driveway, private road, gas station, alley, yard, garage, ball field, etc. [NOTE: If the harmful event occurs with a motor vehicle not in-transport which contains a non-motorist (e.g., Occupant of vehicle not in-transport), enter **Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)** 

Enter **Ground** when the impact is with the ground. This value is not to be entered when the harmful event is "Rollover/Overturn."

**Building** is used when the vehicle impacts a roofed and walled structure built for permanent use. The type of construction material used is not of interest, nor is the use of the building.

Enter **Impact Attenuator/Crash Cushion** when the harmful event is with any device described on the PAR as an impact attenuator or crash cushion.

Enter Bridge Structure when the contact is with any part of a bridge structure. This includes:

support structure overpass structure (not "front face") bridge rail bridge-pier abutment parapet end

For contact to the "front face" of an overpass structure (e.g., the top of the cargo area of a truck strikes the front of a bridge with a low clearance) enter **Other Fixed Object**. Included within the meaning of bridge structure are supports for railway underpasses, including those for mass transit type trains.

If the impact is with an impact attenuator protecting a bridge support, then enter **Impact** Attenuator/Crash Cushion. Contact with the underside of the bridge deck is coded Other Fixed Object.

Variable attributes **Guardrail** and **Concrete Traffic Barrier Or Other Longitudinal Barrier Type** are chosen based upon design and composition. Location is not considered when choosing a value.

Enter **Guardrail** whenever the impact occurs with any longitudinal barrier described on the PAR as a guardrail, regardless of its location.

Enter **Concrete Traffic Barrier Or Other Longitudinal Barrier Type** whenever the impact described on the PAR occurs with a concrete barrier (commonly referred to as a GM or Jersey barrier), regardless of its location. Enter this value for temporary (e.g., construction sites) and permanent installations. Concrete traffic barriers located on a bridge with a closed median are not considered **Bridge Structure**. Concrete traffic barriers located on the outer road edges of a bridge are considered **Bridge Structure**.

Enter **Sign Post, Utility Pole, or Other Support** when the impact occurs to: (1) a support for a highway or traffic sign, (2) anything that supports a sign under which vehicles travel, (3) a street light, (4) a support for utility lines, (5) a traffic signal pole, (6) any non-highway or non-traffic sign (e.g., a private sign), (7) a mail box post, (8) a delineator post, or (9) any other type post, pole, or support. This value should not be used when the impact was with any supporting structure of a bridge (see variable attribute **Bridge Structure**).

Enter **Culvert or Ditch** when the impact occurs with a culvert or ditch. A culvert is a man-made structure that allows passage over a drainage area and is that part of the structure which is intended to channel flow through the structure and maintain the stability/integrity of the road bed. If the structure has a portion above the road surface which is of sufficient height to engage above the wheels of an errant passenger vehicle and redirect it, that part of the structure is considered a **Bridge Structure**. A ditch is a man made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert.

**Curb** is used when the impact is with a concrete or asphalt structure up tp 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.

An **Embankment** is a raised structure to hold back water, to carry a roadway, or the result of excavation or washout (including erosion) which may be faced with earth or rock (sometimes called berm), stone or concrete. An embarkment 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.

Fence includes the fence posts. A Fence can be made of wood, chain link, stone, etc.

A **Wall** is a primarily vertical (+15 degrees from vertical) structure comprise 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 are coded as **Bridge Structure**.

**Fire Hydrant** refers to the roadside device used by fire departments to provide water for fighting fires. Usually made of steel, these devices are also referred to as fireplugs or fire standpipes in some areas.

Enter **Tree** when the impact is with a tree. This includes impacts with overhanging branches. Do not use this code if the tree is not standing. Trees which have fallen and are struck should be coded **Other Object Not Fixed** for small trees or **Other Fixed Object** for large trees.

Enter **Boulder** when an in-transport motor vehicle contacts any large (not defined but at least larger than gravel) stationary rock.

Enter **Other Fixed Object** when the PAR describes the impact to any fixed object which is anchored and not moving and not specifically mentioned above. Collisions which may be classified using this code include (but are not limited to): (1) vehicles which sustain

undercarriage damage by straddling the pavement and shoulder and impacting a prominent pavement lip, (2) free falls or vaults from the road surface to the ground or pavement without being listed on the PAR as rolling over or overturning, or (3) impacts with guy wires supporting utility pole, etc..

If the PAR indicates the impact was in a median, determine if the impact was with a longitudinal barrier (guardrail, concrete, or other). If a barrier was ly contacted, enter **Guardrail** or **Concrete Traffic Barrier or Other Longitudinal Barrier Type** based on the PAR description. If no longitudinal barrier was initially contacted but contact occurred to a nonraised paved surface, gravel, or grass, then enter **Ground**. If the PAR indicates that the harmful event is with a raised, paved area (concrete or asphalt), then enter **Curb**. This is true even if a barrier is anchored in the raised, paved area. If the median is depressed, select the element which best fits the PAR's impact description and enter **Ground**, **Embankment**, **Shrubbery Or Bush**, **Tree**, **Boulder**, **Other Fixed Object**, etc. whichever is most appropriate.

Tunnels are handled according to the following rules. If the PAR describes the impact as external (i.e., the impact is to the hill or mountainside), enter **Embankment**. If the impact is to the tunnel entrance (i.e., not protected by guardrails or bridge rails that lead into a tunnel or impact attenuators), then enter **Other Fixed Object**. Enter **Wall** if the plane of the tunnel is broad or wide enough that the tunnel entrance functions as a wall and contact is made with this wall. External impacts to impact attenuators are entered **Impact Attenuator/Crash Cushion**.

Internal or external impacts to: [a] median barriers should be entered **Guardrail** or **Concrete Traffic Barrier Or Other Longitudinal Barrier Type**; [b] curbs (raised, paved medians) or walks should be entered **Curb**; or [c] the tunnel wall should be entered **Wall**. If contact is made with a bridge that leads into a tunnel, then enter **Bridge Structure**.

**Fixed Object - No Details** is used when it is known the impact is with a fixed object, but the specific type of object is unknown.

Enter **Unknown** when there is not enough information to determine the type of harmful event.

### **Consistency Checks:**

	IF	THEN
AA009	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-24, 26-46, 58 or 59	MANNER OF COLLISION (A07) must not equal 1-6.
AA010	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25	MANNER OF COLLISION (A07) must not equal 0.
AA011	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) for this vehicle equals 23	TRAFFIC CONTROL DEVICE (A16) must not equal 01-51or 98.

AA012	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26	RELATION TO ROADWAY (A10) must not equal 1.
AA014	HARMFUL EVENT (A06) equals 25	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
AA033	HARMFUL EVENT (A06) equals 21, 22 or 27	NUMBER OF NON-MOTORISTS (A04) must not equal 00.
AA037	HARMFUL EVENT (A06) equals 21 or 22	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.
AA039	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO ROADWAY (A10) must equal 1.
AA042	the first HARMFUL EVENT (A06) involving a non-motorist equals 22	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 001-0099.
AA051	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610, 0620, EVENT NUMBER (E01) equals 1, and HARMFUL EVENT (A06) equals 21	RELATION TO ROADWAY (A10) must not equal 1.
AA088	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 7	RELATION TO ROADWAY (A10) must equal 1.
AV022	HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97.
AV057A	all HARMFUL EVENTs (A06) for a vehicle equal 2, 3, 4 or 6	DAMAGE AREAS (V25) must equal 0.
AV069	HARMFUL EVENT (A06) equals 1- 6, 8 or 9	POINT OF IMPACT (V24) must equal 00.
AV105	HARMFUL EVENT (A06) equals 05	JACKKNIFE (V14) for the involved vehicle must equal 1.
AV106	HARMFUL EVENT (A06) equals 05	VEHICLE TRAILING (V13) for the involved vehicle must not equal 1.
AV131	the first HARMFUL EVENT (A06) for the vehicle equals 1-9	VEHICLE ROLE (V22) must equal 0.
AV132	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04, 05, 06, 08 or 09	ACCIDENT TYPE (V23) must equal 00.

AV149	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) not equal to 80-89	ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29 or 99.
AV149A	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) equals 80- 89	ROLLOVER TYPE (V30) must equal 00.
AV215	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-10	ACCIDENT TYPE (V23) must not equal 20-91.
AV232	the HARMFUL EVENT (A06) for the vehicle equals 21-99	VEHICLE ROLE (V22) must not equal 0.
PA127	NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO JUNCTION (A09) must not equal 01 or 11.
VA001	HARMFUL EVENT (A06) equals 25	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
VA081	ACCIDENT TYPE (V23) equals 13 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 21, 22, 24 or 27.
VA086	ACCIDENT TYPE (V23) equals 01- 16 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 25.
VA093	VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 31-46, 07, 58 or 59.
VA137	ACCIDENT TYPE (V23) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 02, 03, 04, 05, 06, 08 or 09.
VA191	HARMFUL EVENT (A06) equals 2 or 4 for all events involving this vehicle	CRITICAL EVENT (V26) must equal 98
VA219	ACCIDENT TYPE (V23) equals 20- 91 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 25.
VA219A	The Oracle value for HARMFUL EVEN	IT (A06) must not equal 10243.
VV091	HARMFUL EVENT (A06) equals 05	VEHICLE TRAILING (V13) must not equal 1 or 6.

VV116	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) does not equal 80-89	ROLLOVER TYPE (V30) must not equal 00.
<u>Warnings</u>		
	IF	THEN
AA023	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 99	MANNER OF COLLISION (A07) should not equal 0-6.
AA024	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 31-46, 58 or 59	RELATION TO ROADWAY (A10) should not equal 1.
AA025	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 23	RELATION TO JUNCTION (A09) should equal 5.
AA030	HARMFUL EVENT (A06) equals 2, 4, 6, 7 or 33	it is unlikely.
AV070	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26	ACCIDENT TYPE (V23) should equal 01-11, 92, 98 or 99.
AV071	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13	ACCIDENT TYPE (V23) should equal 13.
AV072	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1	ACCIDENT TYPE (V23) should equal 12 or 15.
AV214	HARMFUL EVENT (A06) equals 38	ROLLOVER TYPE (V30) should equal 00 or 22.
AV223	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01	ACCIDENT TYPE (V23) should equal 1-10, 98 or 99.
PA065	HARMFUL EVENT (A06) equals 22, NUMBER OF NON- MOTORISTS (A04) equals 01 and NON-MOTORIST'S ACTION (P19) equals 07	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0001, 0002, 0003, 0004, 0005, 0018, 0019, 0021, 0026, 0040, 0049, 0097, 0098 or 0099.
VA003	HARMFUL EVENT (A06) equals 23	INTERSTATE HIGHWAY (A08) should not equal 1.

VA004	HARMFUL EVENT (A06) equals 23	RELATION TO JUNCTION (A09) should equal 05.
VA005	HARMFUL EVENT (A06) equals 23	TRAFFIC CONTROL DEVICE (A16) should not equal 01-51.
VA087	ACCIDENT TYPE (V23) equals 99 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 99.
VA096	VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 01-10.
VA198	POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 01-10.
VA211	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10	RELATION TO ROADWAY (A10) should equal 1.
VV081	HARMFUL EVENT (A06) equals 01	DAMAGE AREAS (V25) should not equal 0.

# Post Entry

	IF	THEN
AP001	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1	there must be at least one NON- MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20 or 99.
AP002	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 2 or 7	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.
AP003	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.
AP004	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99	there must be at least one NON- MOTORIST LOCATION (P13) equal to 09, 19 or 99.
AP005	HARMFUL EVENT (A06) equals 21	at least one person must have PERSON TYPE (P03) equal to 5.

AP006	HARMFUL EVENT (A06) equals 22	at least one person must have PERSON TYPE (P03) equal to 6 or 8.	
AP006A	There is a row in the ges.person table for a non-motorist	there must be a corresponding row in the ges.nonmotorist table. Otherwise, there is no recorded striking vehicle number or non-motorist location for the non-motorist.	
AP008	HARMFUL EVENT (A06) equals 6	at least one PERSON TYPE (P03) equal to 1, 2 or 9 must have INJURY SEVERITY (P09) equal to 1-5.	
AP128	HARMFUL EVENT (A06) equals 27	at least one person must have PERSON TYPE (P03) equal 4 or 8.	
AV009	HARMFUL EVENT (A06) equals 2	at least one vehicle should have FIRE OCCURRENCE (V16) equal 1.	
AV009A	FIRE OCCURRENCE (V16) equals 1	at least one HARMFUL EVENT (A06) must equal 2.	
AV011	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) is not equal to 02, 06, 10, 21, 22, 25, 27 or 28	TRAVEL SPEED (V11) should not equal 00.	
AV011A	HARMFUL EVENT (A06) equals 25 and EVENT NUMBER (E01) equals 1	TRAVEL SPEED (V11) should not be 00 for both vehicles.	
PA049	at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920.	
PA058	at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099.	
PP082A	PERSON TYPE (P03) equals 3	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26.	
PP082A	PERSON TYPE (P03) equals 4	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.	

PP082A	PERSON TYPE (P03) equals 5	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21.
PP082A	PERSON TYPE (P03) equals 6	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22.
PP082A	PERSON TYPE (P03) equals 8	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.
VP010	HARMFUL EVENT (A06) equals 21	at least one PERSON TYPE (P03) must be equal 5.
VP010A	at least one PERSON TYPE (P03) equals 5	at least one HARMFUL EVENT (A06) must equal 21.
VP011	HARMFUL EVENT (A06) equals 22	at least one PERSON TYPE (P03) must be equal to 6.
VP011A	at least one PERSON TYPE (P03) equals 6	at least one HARMFUL EVENT (A06) must equal 22.
VP012	HARMFUL EVENT (A06) equals 27	at least one PERSON TYPE (P03) must equal 4 or 8.
VP012A	at least one PERSON TYPE (P03) equals 4 or 8	at least one HARMFUL EVENT (A06) must equal 27.
VP012B	at least one PERSON TYPE (P03) equals 3	at least one HARMFUL EVENT (A06) must equal 26.
VP013	HARMFUL EVENT (A06) equals 06	at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5.
VV116A	ROLLOVER TYPE (V30) equals 10-99 and BODY TYPE (V05) does not equal 80-89	at least one HARMFUL EVENT (A06) must equal 01.

# E04/V01 VEHICLE NUMBER (OTHER VEHICLE)

Screen Heading:	Events
Screen Name:	Vehicle/Other (118-R)
Long Name:	What is the number of the "higher numbered" in-transport motor vehicle involved in this event?
SAS Name:	Event.Objcont, Vehicle.Vehno
Oracle Name:	GES.Events.ObjecthitID, GES.Vehicle.VehicleNumber
Element Values:	
Range: 1-30	

#### Remarks:

The in-transport motor vehicles within a crash are numbered sequentially beginning with 1; no numbers are skipped. In-transport motor vehicles are assigned the PAR's vehicle number unless a number is skipped. The vehicle number entered is for the in-transport motor vehicle involved in this event with the <u>higher</u> vehicle number.

#### **Consistency Checks:**

#### <u>Errors</u>

	IF	THEN
PP048A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	VEHICLE NUMBER (V01) must equal null.
EV215	All in-transport motor vehicles must be	e involved in at least one event.
<u>Warnings</u>		
	IF	THEN
AV215A	The lower vehicle number should be e	entered first when entering the event

information.

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# E05/V24 POINT OF IMPACT (OTHER VEHICLE)

Screen Heading:		Events		
Screen Name:		Point of Impact - Other Vehicle (120-R)		
Long Name:		What is the point of impact for the other vehicle?		
SAS Name:		Vehicle.Impact, Event.Objgad		
Oracle Name:		GES.E	vents.ObjectPlaneID	
Element V	alues:			
Screen	Oracle	SAS		
n/a 1 2 3 4 5 6	null 26859 26860 26861 26862 26863 26863	98 n/a 1 2 3 4 5	Not a Motor Vehicle in Transport Non-Collision Front Right Side Left Side Back Top	

Undercarriage

Front Right Corner

Back Right Corner

Front Left Corner

Back Left Corner

**Remarks:** For this event, code the impact point that produced property damage or personal injury. The impact point is for the vehicle coded in variable E04/V01, Vehicle Number (Other Vehicle).

Point of Impact Unknown

**Non-collision** is not used. The other vehicle, it is always involved in a collision event.

**Front** is used when it can be determined that the point of impact for this vehicle is the front plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for both is front, A07, Manner of Collision, must be entered as head-on.

**Right Side** applies when the point of impact for this vehicle is known to be the right plane.

Left side applies when the point of impact for this vehicle is known to be the left plane.

Back is used when the point of impact for this vehicle is known to be the back plane.

**Front Right Corner** applies when the point of impact for this vehicle is either the front plane or right plane, but the plane can not be determined. In crashes where two vehicles are involved in

the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front right corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

**Front Left Corner** is selected when the point of impact for this vehicle is either the front plane or left plane, but the plane can not be determined. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded front left corner; A07, Manner of Collision, must not be entered as head-on or rear-end.

**Back Right Corner** applies when the point of impact for this vehicle is either the back plane or the right plane, but it is unknown if the point of impact is to the back or right plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back right corner; A07, Manner of Collision, must not be entered as rear-end or rear-to-rear.

**Back Left Corner** is used when the point of impact for this vehicle is either the back or left plane, but it is unknown if the point of impact is to the back or left plane. In crashes where two vehicles are involved in the first harmful event and the <u>initial</u> point of impact for one vehicle is coded back left corner; A07, Manner of Collision, must not be entered as rear-end or rear-to-rear.

**Unknown** is selected when the lack of information prohibits the coding of any of the other element values.

### **Consistency Checks:**

	IF	THEN
AV069	HARMFUL EVENT (A06) equals 1-6, 8 or 9	POINT OF IMPACT (V24) must equal 00.
AV073	MANNER OF COLLISION (A7) equals 2	POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1.
AV074	MANNER OF COLLISION (A7) equals 3	POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1.
AV075	MANNER OF COLLISION (A7) equals 1	one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04.
AV076	MANNER OF COLLISION (A7) equals 1	at least one vehicle must have POINT OF IMPACT (V24) equal to 04.

VV057	POINT OF IMPACT (V24) equals 11, 12, 13 or 14	DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0.
VV064	VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92	POINT OF IMPACT (V24) must not equal 01.
VV065	ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60	POINT OF IMPACT (V24) must equal 01.
VV066	ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39 or 41	POINT OF IMPACT (V24) must equal 04.
VV099A	ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14.
VV100A	ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13.

# <u>Warnings</u>

	IF	THEN
VA198	POINT OF IMPACT (V24) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 01-10.
VV058E	POINT OF IMPACT (V24) equals 11	DAMAGE AREAS (V25) should equal one of the following combinations:/values (1, 2), (7) or (0).
VV097	ACCIDENT TYPE (V23) equals 87	POINT OF IMPACT (V24) should equal 02.
VV098	ACCIDENT TYPE (V23) equals 89	POINT OF IMPACT (V24) should equal 03.
VV104	ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2	POINT OF IMPACT (V24) should not equal 03.
VV177	POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00	VEHICLE ROLE (V22) should not equal 2.
VV178	POINT OF IMPACT (V24) equals 11	DAMAGE AREAS (V25) should include values 1 and 2.

VV179	POINT OF IMPACT (V24) equals 12	DAMAGE AREAS (V25) should include values 1 and 3.
VV180	POINT OF IMPACT (V24) equals 13	DAMAGE AREAS (V25) should include values 2 and 4.
VV181	POINT OF IMPACT (V24) equals 14	DAMAGE AREAS (V25) should include values 3 and 4.
VV224	CRITICAL EVENT (V26) equals 53	POINT OF IMPACT (V24) should not equal 01.
VV225	CRITICAL EVENT (V26) equals 51or 52	POINT OF IMPACT (V24) should not equal 04.

# A07 MANNER OF COLLISION

Screen Heading: Events				
Screen N	Name:	Manner (60-R)		
Long Name:		What is the manner of collision for this event?		
SAS Nan	ne:	Accide	nt.Man_Col	
Oracle N	ame:	GES.CrashData.CollisionMannerID		
Element	Values:			
Screen	Oracle	SAS		
1 2 3 4 5 6 7	26660 26661 26662 26663 26664 26665 26665	0 1 2 3 4 5 6	Not Collision With Motor Vehicle In Transport Rear-End Head-On Rear-To-Rear Angle Sideswipe, Same Direction Sideswipe, Opposite Direction	
8	26668	9	Unknown	

### Remarks:

Enter the manner of collision associated with the first harmful event.

# Enter Not Collision With Motor Vehicle In Transport when the first harmful event is not coded Motor Vehicle In Transport.

Enter **Rear-End** when a collision occurs between the rear of one vehicle and the front of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must be front to back (e.g., front right/left or back left/right corners are not allowed).

Enter **Head-On** when a collision occurs between the front end of one vehicle and the front end of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must both be front (e.g., front right/left corner is not allowed).

Enter **Rear-To-Rear** when a collision occurs between the rear of one vehicle and the rear of another vehicle. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must both be back (e.g., back right/left corner is not allowed).

Enter **Angle** when the impact configuration is known but cannot be classified with any other element. Included here, also, are endswipes. If this attribute is selected, the points of impact for the vehicles involved in the first harmful event must not be front to front, front to back or back to back.

Enter **Sideswipe, Same Direction** when the PAR reports that a sideswipe occurred while the two vehicles were traveling in the same direction.

Enter **Sideswipe**, **Opposite Direction** when the PAR reports that a sideswipe occurred while the two vehicles were traveling in opposite directions.

### **Consistency Checks:**

	IF	THEN
AA009	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-24, 26-46, 58 or 59	MANNER OF COLLISION (A07) must not equal 1-6.
AA010	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 25	MANNER OF COLLISION (A07) must not equal 0.
AA086	MANNER OF COLLISION (A07) does not equal 0	NUMBER OF MOTOR VEHICLES (A03) must be greater than 01.
AV073	MANNER OF COLLISION (A07) equals 2	POINT OF IMPACT (V24) must equal 01 for the two vehicles involved in event 1.
AV074	MANNER OF COLLISION (A07) equals 3	POINT OF IMPACT (V24) must equal 04 for the two vehicles involved in event 1.
AV075	MANNER OF COLLISION (A07) equals 1	one vehicle involved in event 1 must have POINT OF IMPACT (V24) equal to 01 and the other vehicle must have POINT OF IMPACT (V24) equal to 04.
AV133	MANNER OF COLLISION (A07) equals 3	at least one ACCIDENT TYPE (V23) must equal 92 or 98.
AV213	NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13	VEHICLE ROLE (V22) must equal 1 or 3.
AV225	MANNER OF COLLISION (A07) equals 2	ACCIDENT TYPE (V23) must not equal 64-67.
AV226	MANNER OF COLLISION (A07) equals 4	ACCIDENT TYPE (V23) must not equal 20-43 or 50-53.

#### <u>Warnings</u>

	IF	THEN
AA023	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 99	MANNER OF COLLISION (A07) should not equal 0-6.
AA031	UNLIKELY: MANNER OF COLLISION	N (A07) is equal to 3 or 8
AV014	MANNER OF COLLISION (A07) equals 2	VEHICLE ROLE (V22) should equal 1 or 3.
AV203	MANNER OF COLLISION (A07) equals 5	ACCIDENT TYPE (V23) should not equal 20-33.
AV204	MANNER OF COLLISION (A07) equals 5	ACCIDENT TYPE (V23) should equal 44-49, 98 or 99
AV205	MANNER OF COLLISION (A07) equals 6	ACCIDENT TYPE (V23) should not equal 50-53 ACCIDENT.
AV206	MANNER OF COLLISION (A07) equals 6	ACCIDENT TYPE (V23) should equal 64-67, 98 or 99.
AV243	MANNER OF COLLISION (A07) equals 1	ACCIDENT TYPE (V23) should not equal 44-49.

### Post Entry

IFTHENAV244MANNER OF COLLISION (A07)<br/>equals 2 and TRAFFICWAY FLOW<br/>(All) equals 3for at least one vehicle,<br/>MOVEMENT PRIOR TO CRITICAL<br/>EVENT (V21) should equal 00 or 97.

# A05 LAND USE

Screen Heading:		Crash Data Questions		
Screen N	ame:	Popula	tion Area (30-N)	
Long Nar	ne:	Within	what population area is this crash located?	
SAS Name:		Accide	nt.Land_Use	
Oracle Name:		GES.CrashData.LandUseID		
Element	Values:			
Screen	Oracle	SAS		
1 2 3 4 5	26463 26464 26465 26644 26645	1 2 3 8 9	Within area of population 25,000 - 50,000 Within area of population 50,000 - 100,000 Within area of population 100,000+ Other area Unknown	

### Remarks:

The element value for this variable is computer generated. The attribute selected is based on the PSU and police jurisdiction from which the crash is selected. For example, if the crash is selected from PSU72, jurisdiction 1; the attribute selected by the computer is **Within area of population 100,000+**.

# A25 WORK ZONE

Screen He	eading:	Crash Data Questions		
Screen Name:		Work 2	Zone (35-E)	
Long Name: Did the first harmful event in		Did the	e first harmful event in the crash occur in a work zone?	
SAS Name	):	Accident.wrk_zone		
Oracle Name:		GES.C	CrashData.WorkZone	
Element V	alues			
Screen	Oracle	SAS		
1	0	0	No	
2	1	1	Yes	
Remarks:				

Enter **No** when the first harmful event does not occur in a work or construction area or it is unknown if the first harmful event occurs in a work or construction area.

Enter **Yes** when the PAR indicates that the first harmful event occurs in a work zone or construction area. Work zones can often be identified by the presence of a warning sign. A specific block for work zones may be available on the PAR. The narrative or diagram may also indicate the presence of a work zone.

### **Consistency Checks:**

	IF	THEN
RANGE	WORK ZONE (A25) must equal 0 or	1.
<u>Warnings</u>		
	IF	THEN
AA097	WORK ZONE (A25) equals 1	TRAFFIC CONTROL DEVICE (A16) should equal 01-42, 51 or 98.
AA098	TRAFFIC CONTROL DEVICE (A16) equals 42	WORK ZONE (A25) should equal 1.

# A21 SCHOOL BUS RELATED

Screen Heading:		Crash	Data Questions	
Screen Name:		Schoo	l Bus (50-E)	
Long Name:		Was a school bus involved in the crash?		
SAS Name:		Accident.schl_bus		
Oracle Name:		GES.CrashData.School_Bus		
Element Values:				
Screen	Oracle	SAS		
1 2	0 1	0 1	No Yes	

### Remarks:

This variable applies to crashes in which a school bus is directly or indirectly involved, such as a crash involving children exiting from a school bus. The school bus does not have to be involved in the crash. If it cannot be determined that a school bus is involved, enter **No**.

For the purpose of this variable, a school bus refers to a motor vehicle defined by the police on the PAR as such.

### **Consistency Checks:**

		IF	THEN
	VA002	SPECIAL USE (V08) for any vehicle equals 02	SCHOOL BUS RELATED (A21) must equal 1.
<u>Warnings</u>	<u>.</u>		
		IF	THEN
	AP024	SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120.
	AP027	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5	SCHOOL BUS RELATED (A21) should equal 1.

VA102	BODY TYPE (V05) equals 24 or 50	SCHOOL BUS RELATED (A21) should equal 1.
Post Entry		
	IF	THEN
AV210	SCHOOL BUS RELATED (A21) equals 1	at least one SPECIAL USE (V08) should equal 02.
AV236	SCHOOL BUS RELATED (A21) equals 1	at least one BODY TYPE (V05) should equal 24 or 50.

# A08 INTERSTATE HIGHWAY

Screen H	leading:	Crash Data Questions		
Screen N	lame:	Interstate Highway (140-E)		
Long Na	me:	Is the first harmful event associated with an interstate highway?		
SAS Nan	ne:	Accident.int_hwy		
Oracle Name: GES.CrashData.Interstate		CrashData.Interstate		
Element	Values:			
Screen	Oracle	SAS		
1 2	1 2	0 1	No Yes	
3	3	9	Unknown	
Remarks	:			

Crashes which occur in association with a roadway (or one of its lanes) that is unopen are not NASS crashes unless they occur in the junction of a roadway that is open and upon which an involved vehicle was traveling. If the roadway is being built or under construction (repair or maintenance), then the first harmful event must have been associated with that portion of the roadway designated as open. If the maintenance agency has designated the roadway as open then the condition (paved, gravel, etc.) of the road surface is not considered. If the roadway is being built, enter the roadway according to its eventual classification.

The Interstate Highway System includes those trafficways that are within the national system for interstate transport and defense purposes. Interstates typically have limited access and multiple lanes of travel.

Crashes which occur on ramps leading to or away from an Interstate should be coded Yes.

Enter **No** when the PAR indicates that the crash occurred on any of the following: US Highway, State Highway, County Road, Township Road or Municipal Road.

Enter **Yes** when the PAR indicates the crash occurred on an interstate highway. Some PARs use a specific block to indicate interstate. Interstate can also be identified by the prefix "I" used in the roadway name.

# Consistency Checks:

# <u>Warnings</u>

	IF	THEN
AA018	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	NUMBER OF TRAVEL LANES (A12) should not equal 1.
AA019	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	TRAFFICWAY FLOW (A11) should not equal 3.
AA020	INTERSTATE HIGHWAY (A08) equals 1	RELATION TO JUNCTION (A09) should not equal 01-05, 07, 08, 09, 13 or 17.
AA021	INTERSTATE HIGHWAY (A08) equals 1	TRAFFIC CONTROL DEVICE (A16) should not equal 01, 21, 23 or 61-97.
AA022	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	SPEED LIMIT (A18) should not equal 01-40.
VA003	HARMFUL EVENT (A06) equals 23	INTERSTATE HIGHWAY (A08) should not equal 1.

# Post Entry

	IF	THEN
AA071	NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	INTERSTATE HIGHWAY (A08) should not equal 1.
AA092	RELATION TO JUNCTION (A09) equals 01-03, 05 or 11-13	INTERSTATE HIGHWAY (A08) should not equal 1.

### A09 RELATION TO JUNCTION (NON-INTERCHANGE VERSUS INTERCHANGE)

Screen H	leading:	Crash Data Questions		
Screen N	Name:	Interchange Area (150-R)		
Long Na	me:	Is the first harmful event located in an interchange or non-interchange area?		
SAS Nam	ne:	Accident.rel_jct		
Oracle N	lame:	GES.CrashData.JunctionRelID		
Element	Values:			
Screen	Oracle	SAS		
1 2 3	<b>n/a</b> <b>n/a</b> 26559	<b>n/a</b> n/a 99	Non-Interchange Interchange Unknown If Interchange	

#### Remarks:

The element value selected is based on the location of the first harmful event. If the location of the first harmful event is within the boundaries of an interchange then select **Interchange**. If it occurs outside of the boundaries of an interchange, then select **Non-Interchange**.

**Unknown If Interchange** applies if it cannot be determined if the first harmful event is located in an interchange or non-interchange area.

See remarks under A09, Relation To Junction (Specific Location).

### A09 RELATION TO JUNCTION (SPECIFIC LOCATION)

Screen Heading:	Crash Data Questions	
Screen Name:	Relation To Junction (155-R)	
Long Name:	Select the attribute which describes the location of the first harmful event?	
SAS Name:	Accident.rel_jct	
Oracle Name:	GES.CrashData.JunctionRelID	
Element Values:		

Screen Oracle SAS

Non-Interchange Area

1	26542	0	Non-Junction
2	26543	1	Intersection
3	26544	2	Intersection Related
4	26545	3	Driveway, Alley Access, Etc
5	26546	4	Entrance/Exit Ramp
6	26547	5	Rail Grade Crossing
7	26548	6	On A Bridge
8	19435	7	Crossover Related
9	26549	8	Other, Non-Interchange
10	26550	9	Unknown, Non-Interchange

Interchange Area

1	26551	10	Non-Junction
2	26552	11	Intersection
3	26553	12	Intersection Related
4	26554	13	Driveway, Alley Access, Etc.
5	26555	14	Entrance/Exit Ramp
6	26556	16	On A Bridge
7	19436	17	Crossover Related
8	26557	18	Other Location in Interchange
9	26558	19	Unknown, Interchange Area

Unknown If Interchange or Non-Interchange

- 10 26559 99 Unknown if Interchange

#### Remarks:

The element value selected is based on the location of the first harmful event. If the location of the first harmful event is within the boundaries of an interchange then use the interchange

codes. If it occurs outside of the boundaries of an interchange, then use the non-interchange codes.

If the first harmful event occurs off the roadway, refer to the section at the point of departure to code this variable. In those off-roadway instances where the departure occurs from within a junction, enter either **Non-Junction** or **Intersection Related**. The latter element is used if the junction is also an intersection (see definition below).

### DEFINITIONS

### Alley Access

An Alley Access is generally an unnamed roadway providing access, in general, to the rear of houses or buildings, some of which may be further served by a driveway access.

#### Crossover

A Crossover is a designated opening within a median used primarily for "U-turns". To be considered a crossover, the nearest lateral boundary line of the crossover must be greater than 10 meters from the nearest lateral boundary line of any roadway (highway, street, ramp, driveway or alley) which intersects with either side of the roadways which the median divides.

#### **Driveway Access**

A Driveway Access is a roadway providing access to property adjacent to a trafficway.

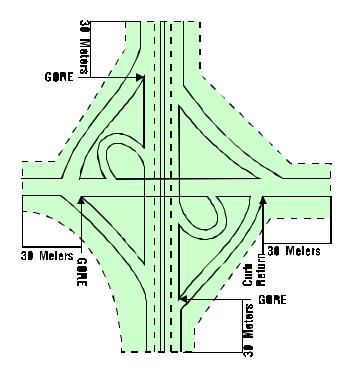
### Entrance or Exit Ramp

An Entrance or Exit Ramp is a transition roadway: (1) which connects two roadways; (2) is used for entering or exiting through- traffic lanes; and (3) begins and ends at a gore or curb return. A ramp can connect two roadways which cross (either at-grade or with a grade separation) or two which do not cross (e.g., frontage roads). A ramp can form an intersection with a roadway as well as diverge from or merge into one. A ramp can form a channeled intersection. A ramp can also split into two ramps.

#### Interchange Area

The Interchange Area is the area around a grade separation which involves at least two trafficways. Included within its boundaries are: (1) all ramps which connect the roadways and (2) each roadway entering or leaving the interchange to a point 30 meters beyond the gore or curb return at the outermost ramp connection for the roadway. One may find included within an interchange area intersections, driveway accesses, and, of course, roadway sections which are non-junctions.

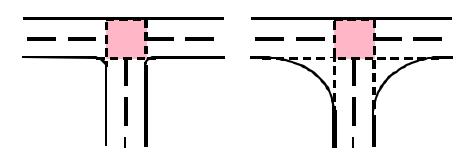
### Figure A-1: Interchange Area



### Intersection

An intersection is a type of junction which: (1) contains a crossing or connection of two or more roadways not classified as a driveway access or alley access, and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters, the two areas and the roadway connecting them are considered to be parts of a single intersection. See the examples of intersections on the following pages.





# Figure A-3: 3-Leg Intersections

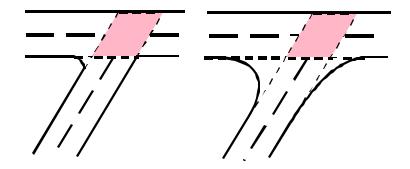


Figure A-4: 'Y' Intersection

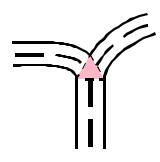
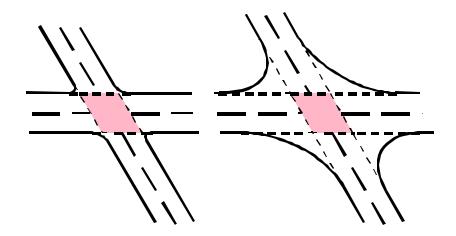


Figure A-5: 4-Leg Intersections





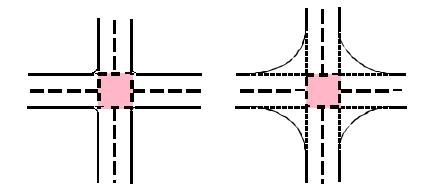
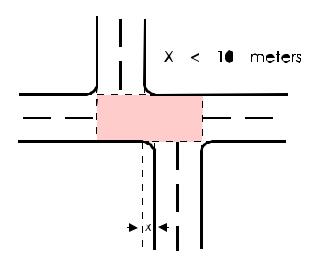
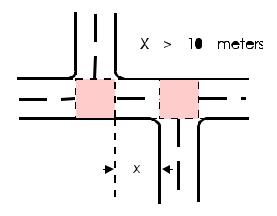


Figure A-7: 4-Leg Intersection



### Figure A-8: Two 3-Leg Intersections



### **Intersection Related**

Intersection Related means that the first harmful event: (1) occurs on an approach to or exit from an intersection, and (2) results from an activity, behavior or control related to the movement of traffic units through the intersection.

### Junction

A Junction, in general, is the area formed by the connection of two roadways. It includes: (1) all at-grade intersections, (2) connections between a driveway access or alley access and a roadway which is not a driveway access or an alley access, (3) connections between two alley accesses or driveway accesses or (4) a connection between a driveway access and an alley access.

## **Traffic Circle**

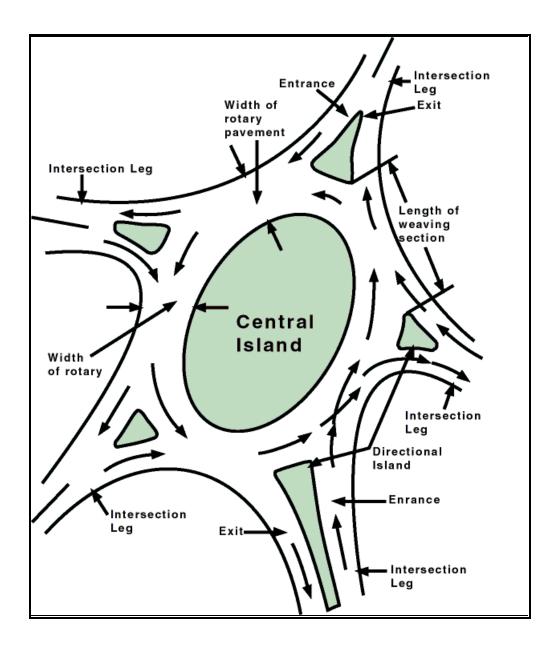
A rotary or traffic circle is a specialized form of at-grade intersection. It is one through which traffic passes by entering and leaving a one-way roadway connecting all intersection approach legs and running continuously around a central island. Rotary intersections are commonly called traffic circles, but proper design can result in central islands of various rounded shapes.

## **Traffic Units**

Traffic Units, as referred to in **Intersection Related**, means any traffic unit (involved or not involved in the accident).

Enter **Intersection** when the first harmful event occurs within the area formed by the prolongation of curb or edge lines of the approach legs of the intersection, enter **Intersection** regardless of whether or not the collision was in any way related to an intersection.

Figure A-9: Traffic Circle



**Intersection** includes any two leg intersection, rotary intersection or traffic circle. To qualify for inclusion as a two-leg intersection, at least one of the two legs must be controlled by a regulatory sign (see A16, Traffic Control Device) or traffic signal; otherwise, treat the area as a sharp curve.

Use **Intersection** if the first harmful event occurs in the rotary roadway, in the central island or on any directional islands which serve the rotary intersection.

Enter **Intersection Related** if the first harmful event occurs outside but near an intersection and involves a vehicle which was engaged or should have been engaged in making an intersection related maneuver such as turning. However, if the loss of control is unrelated to the intersection, enter **Non-Junction**.

If a crash meets the criteria of Intersection Related but also meets the criteria for Driveway, Alley Access, Etc., Entrance or Exit Ramp or Rail Grade Crossing, then Driveway, Alley Access, Etc., Entrance or Exit Ramp or Rail Grade Crossing takes precedence. Remember, for Driveway, Alley Access, Etc. and Entrance or Exit Ramp, and Rail Grade Crossing to apply, a pedestrian, other non-motorist associated with a non-motorist conveyance or road vehicle must have been entering or exiting the appropriate area.

Enter **Driveway**, **Alley Access**, **Etc.** when the first harmful event occurs on a NASS roadway (see below) which approaches or exits from the driveway or alley access junction and at least one involved pedestrian, other non-motorist associated with a non-motorist conveyance, or road vehicle was entering or exiting from the driveway or alley. Included are exits/entrances of parking lots. Do not use this element if the accident was precipitated by the actions of a noncontact road vehicle or person.

**Driveway, Alley Access, Etc.** is also used when the first harmful event occurs outside but near a driveway, alley access and involves a vehicle which was engaged or should have been engaged in making a junction related maneuver such as turning (i.e., driveway, alley access related). If the loss of control is unrelated to the junction, enter **Non-Junction**.

When a controlled driveway/alley access junction overlaps (inside-to-inside of lateral boundary lines is less than or equal to 10 meters) a three leg intersection, enter **Intersection**.

When an uncontrolled driveway/alley access junction is within the prolongation of a three-leg intersection and the crash would meet the criteria of driveway, alley access related, enter **Intersection** if the first harmful event was within the intersection junction or **Intersection Related** if it was not.

For an uncontrolled driveway/alley access junction within ten (10) meters of a three or four leg intersection (inside-to-inside of lateral boundary lines), enter **Driveway, Alley Access, Etc.** only if the criteria above are met and the location of the first harmful event is not within the intersection.

Enter **Entrance/Exit Ramp** if the PAR has a specific element entitled similarly. If no specific PAR element matches, then use this element if according to the PAR diagram/sketch or narrative, the first harmful event occurred while going into, within or coming out of an entrance or exit ramp.

Enter **Rail Grade Crossing** when (1) the first harmful event occurred in the area formed by the at-grade connection of a railroad bed and a roadway or (2) an involved pedestrian, other non-motorist associated with a non-motorist conveyance or road vehicle was on an approach to or exit from the railroad grade crossing. Do not use this code if the crash was precipitated by the actions of a noncontact road vehicle or person.

Enter **On a Bridge** when the first harmful event occurs on a bridge. If the crash meets the criteria for **Intersection Related** and also meets the criteria for **On a Bridge**, then the **On a Bridge** takes precedence.

Use **Crossover Related** when the first harmful event occurred (1) in the junction of a crossover and a roadway, (2) on any leg of the roads which approach or exit from the crossover and which are just outside of the crossover junction itself (and subject to the provision below) or (3) in the crossover itself, and at least one conveyance or road vehicle was entering, in or exiting from the crossover. Do not use this code if the crash was precipitated by the actions of a noncontact road vehicle or person.

Median cuts which are directly across from or within 10 meters of the nearest lateral boundary line of any roadway (highway, street, ramp, driveway or alley) are considered extensions of the roadway. The area between the roadways which the median cut serves is considered part of the junction unless the roadways belong to separate trafficways. In this rare latter case, consider the area as a separate road segment. If the location of the first harmful event is in the median cut, enter the appropriate response: **Intersection** or **Driveway**, **Alley Access**, **Etc.**).

Enter **Other, Non-interchange** if the first harmful event occurs (1) while going into, within or coming out of a channel or (2) on a traffic island (when the PAR indicates the vehicle entered or struck the island from within the channel). A channel refers to any traffic lane that is directed into a path different than the through lanes by a traffic island. An island is defined as a raised or painted paved surface. The channel begins and ends at the extension of the island's lateral boundaries unless the channel is preceded or followed by a merge area or divergence. See figures A-10 to A-13 for examples. A channelized intersection is an at-grade intersection in which traffic is diverted into definite paths by raised or painted traffic islands.

Figure A-10: Channel

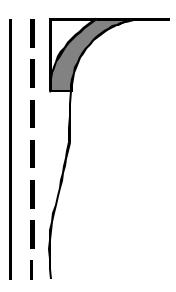
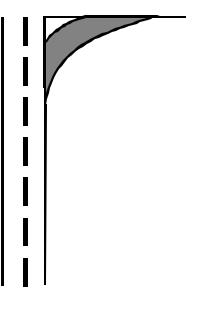


Figure A-11: Channel



## Figure A-12: Channel

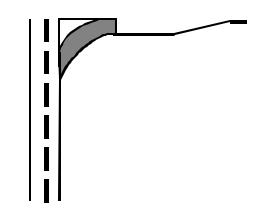
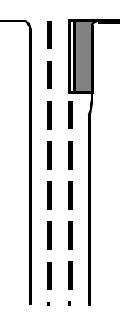


Figure A-13: Channel



# **Consistency Checks:**

# <u>Errors</u>

	IF	THEN
AA015	RELATION TO JUNCTION (A09) equals 00 or 10	TRAFFIC CONTROL DEVICE (A16) must not equal 01.
AA038	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0810, 0821, 0822, 0829, 0830, 0840 or 0890	RELATION TO JUNCTION (A09) must not equal 01 or 11.
AA043	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002 or 0008	RELATION TO JUNCTION (A09) must equal 03 or 13.
AA044	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0010, 0012, 0025, 0048, 0049 or 0055	RELATION TO JUNCTION (A09) must equal 01, 02, 04, 08, 11, 12, 14 or 18.
AA085	TRAFFIC CONTROL DEVICE (A16) equals 01	RELATION TO JUNCTION (A09) must not equal 00 or 10.
AA090	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0009	RELATION TO JUNCTION (A09) must not equal 00.
PA127	NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO JUNCTION (A09) must not equal 01 or 11.
VA139	ACCIDENT TYPE (V23) equals 14	RELATION TO JUNCTION (A09) must not equal 01 or 11.

# <u>Warnings</u>

	IF	THEN
AA018	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	NUMBER OF TRAVEL LANES (A12) should not equal 1.
AA019	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	TRAFFICWAY FLOW (A11) should not equal 3.
AA020	INTERSTATE HIGHWAY (A08) equals 1	RELATION TO JUNCTION (A09) should not equal 01-05, 07, 08, 09, 13 or 17.

AA022	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	SPEED LIMIT (A18) should not equal 01-40.
AA025	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 23	RELATION TO JUNCTION (A09) should equal 05.
AA026	RELATION TO JUNCTION (A09) equals 05	TRAFFIC CONTROL DEVICE (A16) should equal 61 or 62.
AA050	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019, 0021, 0022, 0023 or 0024	RELATION TO JUNCTION (A09) should not equal 00 or 10.
AA071	NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	INTERSTATE HIGHWAY (A08) should not equal 1.
AA085	TRAFFIC CONTROL DEVICE (A16) equals 21 or 22	RELATION TO JUNCTION (A09) should not equal 00 or 10.
AA087	RELATION TO ROADWAY (A10) equals 4 or 8	RELATION TO JUNCTION (A09) should not equal 01 or 11.
AA091	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0009, 0010, 0012, 0025, 0049 or 0055	RELATION TO JUNCTION (A09) should equal 01, 02, 11 or 12.
AA092	RELATION TO JUNCTION (A09) equals 01-03, 05 or 11-13	INTERSTATE HIGHWAY (A08) should not equal 1.
AA096	If TRAFFIC CONTROL DEVICE (A16) equals 61 or 62	RELATION TO JUNCTION (A09) should equal 05.
PA130	NON MOTORIST LOCATION (P13) equals 01, 02, 08 or 09	RELATION TO JUNCTION (A09) should equal 01, 02, 11 or 12.
VA004	HARMFUL EVENT (A06) equals 23	RELATION TO JUNCTION (A09) should equal 05.
VA082	ACCIDENT TYPE (V23) equals 68-91	RELATION TO JUNCTION (A09) should not equal 00.
VA140	ACCIDENT TYPE (V23) equals 14	RELATION TO JUNCTION (A09) should equal 00, 02, 10 or 12.
VA189	CRITICAL EVENT (V26) equals 65- 68 or 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	RELATION TO JUNCTION (A09) should not equal 00 or 10.
VA190	CRITICAL EVENT (V26) equals 70- 73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	RELATION TO JUNCTION (A09) should equal 03 or 13.

VA242	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 or 11	RELATION TO JUNCTION (A09) should not equal 00 or 10.
Post Entry		
	IF	THEN
AP023	RELATION TO JUNCTION (A09) equals 01 or 11 and PERSON TYPE (P03) equals 5 for the first non-motorist equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890
AP039	RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12 and PERSON TYPE (P03) for the first non-motorist equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
AP135	RELATION TO JUNCTION (A09) equals 03 or 13 and NUMBER OF NON MOTORISTS (A04) is greater than 00	NON MOTORIST LOCATION (P13) should equal 01, 02, 08 or 09
AV134	RELATION TO JUNCTION (A09) equals 03 or 13	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) for the vehicles involved in the first harmful event should equal 10, 11, 13 or 97.

# A10 RELATION TO ROADWAY

Screen I	leading:	Crash Data Questions	
Screen I	Name:	Roadw	vay Relation (160-R)
Long Na	me:	Select the attribute which best describes the location of the first harmful event.	
SAS Nar	ne:	Accident.Rel_Rwy	
Oracle N	lame:	GES.CrashData.RoadwayRelID	
Element	Values:		
Screen	Oracle	SAS	
1	10190	1	On Roadway
2	10191	2	On Shoulder
3	10192	3	On Median
4	10193	4	On Roadside
5	10194	5	Outside Trafficway
6	10195	6	Off Roadway - Location Unknown
7	19437	7	In Parking Lane
8	19438	8	Gore
_			_

### Remarks:

9

10

19439

19440

10

99

This element is coded as to the location of the First Harmful Event.

Separator

Unknown

**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 northbound and southbound traffic or for trucks and automobiles. The roadway and any shoulder alongside the roadway together make up the road.

A **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 **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 four (4) or more feet wide denote

medians. Medians of lesser width must have a barrier to be considered a median. Continuous left-turn lanes are considered medians.

**On 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. Use this element if the first harmful event occurs in a raised or painted island (directional or channeling).

**Outside Trafficway** is used when the first harmful event is outside the right-of-way.

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

**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 code should not be used during hours when parking is NOT permitted.

**Gore** is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadway, 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 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 channelizing of vehicle movements
- Islands for pedestrian refuge
- And others.

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. A Separator may be a physical barrier or a depressed, raised, flush or vegetated area between roads.

### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AA008	RELATION TO ROADWAY (A10) equals 3	TRAFFICWAY FLOW (A11) must not equal 1, 3 or 9.
AA012	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26	RELATION TO ROADWAY (A10) must not equal 1.
AA039	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO ROADWAY (A10) must equal 1.
AA051	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610 or 0620, EVENT NUMBER (E01) equals 1, and HARMFUL EVENT (A06) equals 21	RELATION TO ROADWAY (A10) must not equal 1.
AA088	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 7	RELATION TO ROADWAY (A10) must equal 1.

# <u>Warnings</u>

	IF	THEN
AA024	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 31-46, 58 or 59	RELATION TO ROADWAY (A10) should not equal 1.
AA087	RELATION TO ROADWAY (A10) equals 4 or 8	RELATION TO JUNCTION (A09) should not equal 01 or 11.
AV072	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1	ACCIDENT TYPE (V23) should equal 12 or 15.
AV097	RELATION TO ROADWAY (A10) equals 3 and NUMBER OF MOTOR VEHICLES (A03) equals 01	ACCIDENT TYPE (V23) should equal 06-10, 98 or 99.
AV184	NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 01	CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12-14 or 19.

AV186	RELATION TO ROADWAY (A10) equals 4, 5, 6 or 8	PRECRASH LOCATION (V29) of the vehicle(s) involved in the first harmful event should equal 00, 04, 05 or 99.
VA094	ACCIDENT TYPE (V23) equals 01-11or 14	RELATION TO ROADWAY (A10) should not equal 1.
VA138	ACCIDENT TYPE (V23) equals 06- 10 and TRAFFICWAY FLOW (A11) equals 2	RELATION TO ROADWAY (A10) should equal 3.
VA181	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 04	RELATION TO ROADWAY (A10) should not equal 1.
VA182	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 01, 02 or 03	RELATION TO ROADWAY (A10) should equal 1.
VA211	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10	RELATION TO ROADWAY (A10) should equal 1.
VA216	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 05	RELATION TO ROADWAY (A10) should not equal 1.
VA217	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 06	RELATION TO ROADWAY (A10) should equal 1.
VA243	ACCIDENT TYPE (V23) equals 12	RELATION TO ROADWAY (A10) should equal 1.

### Post Entry

	IF	THEN
AP001	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1	there must be at least one NON- MOTORIST LOCATION (P13) equal to 01-09, 11,12, 19, 20 or 99.
AP002	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 2 or 7	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.

AP003	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.
AP004	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99	there must be at least one NON- MOTORIST LOCATION (P13) equal to 09, 19 or 99.
AP040	RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920.

# A19 LIGHT CONDITION

• • • • •			
Screen Heading: Cras	h Data Questions		
Screen Name: Light	Light (260-E)		
Long Name: What	What are the light conditions at the time of the crash?		
SAS Name: Accid	Accident.Lght_Con		
Oracle Name: GES	GES.CrashData.LightID		
Element Values:			
Screen Oracle SAS			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Daylight Dark Dark, But Lighted Dawn Dusk Unknown		

### Remarks:

If the police report contains more than one coded, shaded or checked response for light conditions (e.g., "dark" and "dusk"), then enter **Unknown**.

When dawn and dusk are both marked on the PAR, use the time of day to select either **dawn** or **dusk**.

Default to **Dark** if it cannot be determined if **Dark** or **Dark**, **But Lighted** applies.

### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AA003	LIGHT CONDITION (A19) equals 5	TIME (A02) must not equal 2200-2400 or 0001-1400.
AA003A	TIME (A02) - Hour equals 00-24	Time (A02) - Minute must not equal 99.
AA062	LIGHT CONDITION (A19) equals 2	TIME (A02) must not equal 1000- 1500.
AA066	LIGHT CONDITION (A19) equals 1	TIME (A02) must not equal 2200- 2400 or 0001-0300.

AA079	LIGHT CONDITION (A19) equals 4	TIME (A02) must not equal 1000- 2400 or 0001-0300.
<u>Warnings</u>		
	IF	THEN
AA006	TIME (A02) equals 1000-1500	LIGHT CONDITION (A19) should equal 1 or 9.
AA057	TIME (A02) equals 2200-2400 or 0001- 0300	LIGHT CONDITION (A19) should equal 2, 3 or 9.
AA068	LIGHT CONDITION (A19) equals 3	TIME (A02) should not equal 1000- 1500.
AA074	LIGHT CONDITION (A19) equals 1	TIME (A02) should equal 0500-2100 or 9999.
AA078	LIGHT CONDITION (A19) equals 2	TIME (A02) should equal 1600-2400, 0100-0900 or 9999.
AA080	LIGHT CONDITION (A19) equals 4	TIME (A02) should equal 0400-0900 or 9999.
AA082	LIGHT CONDITION (A19) equals 5	TIME (A02) should equal 1600-2100 or 9999.

# A20 ATMOSPHERIC CONDITION

Screen He	eading:	Crash	Data Questions		
Screen Na	ame:	Atmos	Atmospheric (270-E)		
Long Nan	ne:	What a	What are the atmospheric conditions at the time of the crash?		
SAS Nam	e:	Accide	nt.Weather		
Oracle Name: GES.CrashData.AtmosphereID					
Element \	/alues:				
Screen	Oracle	SAS			
1 2 3 4 5 6 7 8 9	26466 26467 26653 26654 26655 26656 26657 26658 26659	1 2 3 4 5 6 7 8 9	No Adverse Atmospheric Conditions Rain Sleet Snow Fog Rain and Fog Sleet and Fog Other: Smoke, Blowing Sand/Snow/Dust/, Crosswind, Hail, Etc. Unknown		

### Remarks:

Enter **Other: Smog, Smoke, Blowing Sand/Snow/ Dust, Crosswind, Hail, Etc.** when precipitation or particle dispersion has affected the driver's visual ability or the vehicle's controllability.

Enter Rain when the PAR indicates it is raining during the crash. This includes freezing rain.

Enter **Unknown** when the police report does not indicate an atmospheric condition or indicates the atmospheric condition is unknown.

### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AD150	ATMOSPHERIC CONDITION (A20) equals 1	DRIVER'S VISION OBSCURED BY (D04) must not equal 15.

# <u>Warnings</u>

	IF	THEN
AA028	ATMOSPHERIC CONDITION (A20) equals 2-4 or 6-7	ROADWAY SURFACE CONDITION (A15) should not equal 1, 5, 8 or 9.
AA034	DATE-MM (A01) equals 05-09	ATMOSPHERIC CONDITION (A20) should not equal 3 or 4.
AA084	ROADWAY SURFACE CONDITION (A15) equals 1	ATMOSPHERIC CONDITION (A20) should not equal 2, 3, 4, 6 or 7.
DA124	DRIVER'S VISION OBSCURED BY (D04) equals 01	ATMOSPHERIC CONDITION (A20) should not equal 1.
DA159	DRIVER'S VISION OBSCURED BY (D04) equals 15	ATMOSPHERIC CONDITION (A20) should equal 5, 6, 7 or 9.

### **V07 VEHICLE IDENTIFICATION NUMBER**

Screen Heading:	Vehicle Data	
Screen Name:	VIN (365-E)	
Long Name:	What is the vehicle identification number?	
SAS Name:	Vehicle.VIN	
Oracle Name:	GES.Vehicle.VIN	
Element Values:		
Oracle values:		
Enter the entire VIN. Left justify.		
00000000000000000000000000000000000000	0 No VIN Unknown	
SAS values:		
The first 11 characte	ers of the VIN. Left Justify.	
0000000000 99999999999	No VIN Unknown	

### Remarks:

Code the entire VIN; leave "Blank" any column which does not have a VIN character. If part of the VIN is missing or not decipherable, leave the column any such character would ordinarily occupy "Blank."

Use \* (**Unknown**) when the entire VIN is unknown or missing. Use this element if the PAR does not provide the VIN.

Enter "00000000000000000" (No VIN) if the vehicle is a type which has no VIN (e.g., go-cart).

If the vehicle is a motor home or school bus, enter the vehicle chassis VIN; the secondary manufacturer's number must not be encoded. If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script, "f", the "f" is not entered. Proceed to the next character, as in the example below.

VIN: f 3U62S100932 f ENTER: 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

VIN: SM-E.3076421 ENTER: SME3076421

Vehicles manufactured after September 1980 conform to Federal Motor Vehicle Safety Standard 115. This standard requires that each VIN have 17 characters, not contain the letters "I", "O" or "Q", and pass a mathematical test.

If the information from PC VINA or VINASSIST and the PAR are inconsistent, use the following guidelines.

Make and model on the PAR takes precedence over the make and model indicated by the VIN.

Model year - Use model year as indicated by VIN if the Vin Make and Model matches the make and model shown on the PAR .

Body type - Use body type indicated by the VIN if the VIN Make and Model matches the make and model shown on the PAR.

If the information about make and model on the PAR is inconsistent, model takes precedence over the make.

Trailer VINs are not coded. Code **Unknown** if the power unit VIN is not available.

### **Consistency Checks:**

### <u>Errors</u>

	IF	THEN	
VV003A	MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 <sup>th</sup> and 5 <sup>th</sup> characters of the VIN (V07) equal ZN, ZP, ZR or ZY	BODY TYPE (V05) must equal 17.	
VV300A	VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present	the VEHICLE MODEL YEAR (V06) must match the 10 <sup>th</sup> character of the VIN (V07).	
VV300B	VIN (V07) for 1981 and newer vehicles must not contain the characters I, O, or Q.		
VV300C	An unknown VIN (V07) must be coded 999999999999999. There must be no unusual characters [., -, `, (, **, d* or =] which are part of the VIN (V07). Trailer VIN's are not allowed.		
VV300F	VIN (V07) passes the check digit test	BODY TYPE (V05) must be consistent with the VIN (V07) body type.	

# <u>Warnings</u>

	IF	THEN
VV300A	VEHICLE MODEL YEAR (V06) is greater than 1980	the VEHICLE MODEL YEAR (V06) should match the 10 <sup>th</sup> character of the VIN (V07).
VV300D	VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present	VIN (V07) should pass the check digit test.
VV300E	VIN (V07) passes the check digit test	MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known.
VV300R	VEHICLE MODEL YEAR (V06) is greater than 1980	VIN (V07) should contain 17 characters.

# **V03 VEHICLE MAKE**

Screen Heading:	Vehicle Data		
Screen Name:	Make (370-E)		
Long Name:	What is the vehicle make?		
SAS Name:	Vehicle.Make		
Oracle Name:	GES.Vehicle.MakeID		
Element Values:			
Screen		Oracle	SAS
Passenger Vehicle	es/Light Trucks		
ACURA ALFA ROMEO AM GENERAL AMC ASTON MARTIN AUDI AUSTIN / AUSTIN HI AVANTI	EALEY	54 31 3 1 6901 32 33 2902	54 31 3 1 69 32 33 29
BERTONE BMW BRICKLIN BUICK		6918 34 6902 18	69 34 69 18
CADILLAC CHECKER CHEVROLET CHRYSLER CITREON CONSULIER		19 2903 20 6 6903 2909	19 29 20 69 29
DAEWOO DAIHATSU DELOREAN DESOTO DESTA DODGE		20212 60 6904 2904 6916 7	64 60 69 29 69 7
EAGLE EXCALIBER		10 2905	10 29

FERRARI	6905	69
FIAT	36	36
FORD	12	12
GMC	23	23
GRUMMAN	25	25
HILLMAN	6906	69
HONDA	37	37
HUDSON HYUNDAI	2907 55	29 55
IMPERIAL INFINITI	8 58	8 58
ISUZU	38	38
JAGUAR	39	39
JEEP / KAISER-JEEP	2	2
JENSEN	6907	69
KIA	63	63
LADA	6919	69
LAMBORGHINI	6908	69
	40	40
LAND ROVER LEXUS	62 59	62 59
LINCOLN	13	13
LOTUS	6909	69
MASERATI	6910	69
MAZDA	41	41
MERCEDES BENZ	42	42
MERCURY MERKUR	14 56	14 56
MERKOR	56 43	56 43
MITSUBISHI	52	52
MORGAN	6920	69
MORRIS	6911	69
NISSAN / DATSUN	35	35
OLDSMOBILE	21	21
OTHER DOMESTIC MANUFACTURER (light vehicles)	29	29
OTHER FOREIGN MANUFACTURER (light vehicles)	69	69
PACKARD	2908	29
PEUGEOT	44	44
PLYMOUTH	9	9
PONTIAC	22	22

PORSCHE	45	45
RELIANT	6917	69
RENAULT/AMC	46	46
ROLLS ROYCE/BENTLEY	6912	69
SAAB	47	47
SATURN	24	24
SIMCA	6913	69
SINGER	6921	69
STERLING	61	61
STUDEBAKER	2901	29
STUTZ	2906	29
SUBARU	48	48
SUNBEAM	6914	69
SUZUKI	53	53
TOYOTA	49	49
TRIUMPH	50	50
TVR	6915	69
UNKNOWN DOMESTIC MANUFACTURER	2999	99
UNKNOWN FOREIGN MANUFACTURER	6999	99
VOLKSWAGON	30	30
VOLVO	51	51
YUGO	57	57
Motored Cycle/ATC/ATV		
BSA	70	70
DUCATI	71	71
HARLEY-DAVIDSON	72	72
KAWASAKI	73	73
MOTO-GUZZI	74	74
NORTON	75	75
OTHER MAKE MOPED	78	78
OTHER MAKE MOTORED CYCLE	79	79
YAMAHA	76	76
Also See:		
BMW	34	34
HONDA	37	37
PEUGEOT	44	44
TRIUMPH	50	50
SUZUKI	53	53

### **Trucks and Buses**

9807 24428 9899 9809 9804 30189 n/a n/a n/a n/a 3	98 99 98 98 98 98 98 98 98 98 33	
24428 9899 9809 9804 30189 n/a n/a n/a	99 98 98 98 98 98 98 98 98	
24428 9899 9809 9804 30189 n/a n/a n/a	99 98 98 98 98 98 98 98 98	
24428 9899 9809 9804 30189 n/a n/a	99 98 98 98 98 98	
24428 9899 9809 9804 30189 <b>n/a</b>	99 98 98 98 98	
24428 9899 9809 9804 30189	99 98 98 98	
24428 9899 9809 9809 9804	99 98 98	
24428 9899	99	
24428		
	98	
9807		
	98	
87	87	
9805 15691	98 98	
9810	98	
86 9808	86 98	
84	84	
9806	98	
82 83	82 83	
81 9803	81 98	
80	80	
9802 9801	98 98	
	9801 80 81 9803 82 83 9806 84 88 85 86 9808 9808 9810 9810 9805 15691	9801988080818198039882828383980698848485858585980898981098980598980798

DODGE	7	7
FORD	12	12
CHEVROLET	20	20
GMC	23	23
GRUMMAN	25	25
NISSAN / DATSUN	35	35
FIAT	36	36
ISUZU	38	38
MERCEDES BENZ	42	42
VOLVO	51	51
MITSUBISHI	52	52
Unknown UNKNOWN MANUFACTURER	99	99

### Remarks:

Note that for both V03, Vehicle Make, and V04, Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, V03, Vehicle Make, is coded **OTHER MAKE (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, V03, Vehicle Make, is coded **Unknown Manufacturer** and V04, Vehicle Model, is coded **Unknown Bus Type**.

**Unknown Manufacturer** is used for a "hit-and-run" vehicle unless reliable evidence indicates the vehicle's make.

### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
VV003A	MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 <sup>th</sup> and 5 <sup>th</sup> characters of the VIN (V07) equal ZN, ZP, ZR or ZY	BODY TYPE (V05) must equal 17.
RANGE	MAKE (V03) and MODEL (V04) mu combinations specified in the Oracle	

# <u>Warnings</u>

	IF	THEN
PV171	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and BODY TYPE (V05) equals 20	VEHICLE MAKE (V03) should equal 06, 07, 09, 12, 14, 20, 21, 22, 35, 41 or 49.
VV300E	VIN (V07) passes the check digit test	MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known.

### V04 VEHICLE MODEL

Screen Heading:	Vehicle Data
Screen Name:	Model (380-E)
Long Name:	What is the vehicle model?
SAS Name:	Vehicle.Model
Oracle Name:	GES.Vehicle.ModelID

### **Element Values:**

Note that for both V03, Vehicle Make, and V04, Vehicle Model, the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a make or model which is known but is not explicitly listed. "Unknown" refers to the situation where no specific make or model is known.

Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle's body type. For example, if a medium/heavy truck or bus make is known and is not listed, V03, Vehicle Make, is coded **OTHER MAKE (med/heavy truck/bus or "other")** and the appropriate model code is used. If the make is unknown but the body type is known as a "school bus", for instance, V03, Vehicle Make, is coded **Unknown Manufacturer** and V04, Vehicle Model, is coded **Unknown Bus Type**.

If a vehicle make or vehicle model is encountered which is not listed, headquarters is notified.

#### 54 ACURA

MODEL	INCLUDES	YEAR	ORACLE	SAS
INTEGRA LEGEND RL	RS, LS, GS	1986-1998 1986-1995 1996-2000	435 19571 437	31 32 32
ĸ∟ NSX VIGOR	NTX-T	1996-2000 1991-2000 1992-1994	437 440 476	32 33 34
	Coupe	1996-1998 1996-1998	6849 19947	35 35
RSX OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			45074 477 478	38 398 399
SLX MDX		1996-1998	6851 39814	401 421
OTHER LIGHT TRUCK UNKNOWN TYPE LIGHT TRUCK UNKNOWN VEHICLE			6853 6854 479	498 499 999
31 ALFA ROMEO				
MODEL	INCLUDES	YEAR	ORACLE	SAS
SPIDER SPORTS SEDAN	All roadsters, Veloce, 1750/2000 roadsters All 4 door sedans; Giulia, Super, Berlina, Alfetta, Milano, 1750/2000 sedans	1933-1994 1933-1989	785 6776	31 32
SPRINT SPECIAL GTV-6 164 OTHER AUTOMOBILE UNKNOWN AUTOMOBILE	All 2-door coupes; Alfetta GT, 1750/2000 sedans	1933-1980 1981-1986 1990-1995	786 6779 6781 788 789	33 34 35 398 399

#### 3 AM GENERAL

UNKNOWN VEHICLE

MODEL	INCLUDES	YEAR	ORACLE SAS
DISPATCHER HUMMER	Post Office	1965-1994 1993-1998	6195 401 6197 421
DISPATCHER OTHER LIGHT TRUCK	DJ series Post Office Van	1965-1991	6199 466 139 498
UNKNOWN LIGHT TRUCK MEDIUM/HEAVY TRUCK OTHER MEDIUM/HEAVY TRUCK	Military off-road	1965-1994	140 499 6201 884 147 898
UNK TYPE TRUCK (LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY TRUCK			27266 899 148 899
BUS - REAR ENGINE/FLAT FRONT	Transit	1965-1994	152 983
OTHER BUS UNKNOWN BUS TYPE UNKNOWN VEHICLE			153 988 154 989 155 999

790 999

1 AMC

MODEL	INCLUDES	YEAR	ORACLE	SAS
RAMBLER/AMERICAN	Rogue, Scambler, 220, 440	1954-1969	5821	1
REBEL/MATADOR	Barcelona, Classic, Brougham, 550, 660, 770, Marlin: WB=114"	1900-1998	6148	2
REBEL/MATADOR	Barcelona, Classic, Brougham, 550, 660, 770, Marlin: WB=115"	1964-1978	6148	2
REBEL/MATADOR	Matador: WB=115"	1900-1978	6148	2
REBEL/MATADOR	Matador: WB=114"	1958-1974	6148	2
AMBASSADOR	Brougham, DPL, SST, DL, Limited, 880. 990	1900-1998	6153	3
PACER	Limited, DL	1975-1980	131	4
AMX	2-seater only	1968-1970	6156	5
JAVELIN	AMX	1971-1974	6158	6
JAVELIN	SST	1900-1998	6158	6
HORNET/CONCORD	AMX	1975-1978	6161	7
HORNET/CONCORD	Sportabout, limited, DL, SC-360, SST	1900-1998	6161	7
SPIRIT/GREMLIN	Limited, DL. Custom, X	1900-1998	132	8
SPIRIT/GREMLIN	AMX	1979-1998	132	8
SPIRIT/GREMLIN	GT	1983-1998	132	8
EAGLE	Concord based	1980-1987	129	9
EAGLE SX-4	Spirit/Gremilin based	1981-1984	130	10
OTHER AUTOMOBILE			133	398
UNKNOWN AUTOMOBILE			134	399
UNKNOWN VEHICLE			135	999
6901 ASTON MARTIN	NOUTES			646
	INCLUDES	YEAR	ORACLE	SAS
MODEL	INCLUDES	YEAR	ORACLE	5A5
LAGONDA	INCLUDES	1968-2000	9595	31
	INCLUDES			
LAGONDA	INCLUDES		9595	31
LAGONDA OTHER AUTOMOBILE	INCLUDES	1968-2000	9595 239	31 31
LAGONDA OTHER AUTOMOBILE SALOON	INCLUDES	1968-2000	9595 239 9601	31 31 31
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE	INCLUDES	1968-2000 1968-2000	9595 239 9601 240	31 31 31 31
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE	INCLUDES	1968-2000 1968-2000 1968-2000	9595 239 9601 240 9597	31 31 31 31 31
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI		1968-2000 1968-2000 1968-2000 1968-2000	9595 239 9601 240 9597 9599	31 31 31 31 31 31
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE	INCLUDES	1968-2000 1968-2000 1968-2000	9595 239 9601 240 9597	31 31 31 31 31 31
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI		1968-2000 1968-2000 1968-2000 1968-2000	9595 239 9601 240 9597 9599	31 31 31 31 31 31
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL		1968-2000 1968-2000 1968-2000 1968-2000 YEAR	9595 239 9601 240 9597 9599 ORACLE	31 31 31 31 31 31 31 SAS
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90	INCLUDES	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972	9595 239 9601 240 9597 9599 ORACLE 6795	31 31 31 31 31 31 SAS
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6	INCLUDES S, LS, GL	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977	9595 239 9601 240 9597 9599 ORACLE 6795 797	31 31 31 31 31 31 31 SAS 31 32
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX	INCLUDES S, LS, GL Quattro A6	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994	9595 239 9601 240 9597 9599 ORACLE 6795 797 797	31 31 31 31 31 31 SAS 31 32 32
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797	31 31 31 31 31 31 31 SAS 31 32 32 32
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX	INCLUDES S, LS, GL Quattro A6	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797	31 31 31 31 31 31 SAS 31 32 32 32 33
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX 4000 5000 80/90	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979 1980-1988	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797 803	31 31 31 31 31 31 31 SAS 31 32 32 32 32 33 34
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX 4000 5000	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S Quattro, CS, S, Turbo	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979 1980-1988 1978-1988	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797 803 16507	31 31 31 31 31 31 31 SAS 31 32 32 32 33 34 35
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX 4000 5000 80/90	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S Quattro, CS, S, Turbo Quattro-90	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979 1980-1988 1978-1988 1978-1988	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797 803 16507 809	31 31 31 31 31 31 SAS 31 32 32 32 33 34 35 36
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX 4000 5000 80/90 80/90	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S Quattro, CS, S, Turbo Quattro-90 Quattro-80	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979 1980-1988 1978-1988 1978-1988 1988-1995 1988-1992	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797 803 16507 809 809	31 31 31 31 31 31 SAS 31 32 32 33 34 35 36 36 36
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX 4000 5000 80/90 80/90 200 V8 QUATTRO COUPE QUATTRO	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S Quattro, CS, S, Turbo Quattro-90 Quattro-80 Quattro	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979 1980-1988 1978-1988 1978-1988 1988-1995 1988-1992 1989-1992	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797 803 16507 809 809 809	31 31 31 31 31 31 SAS 31 32 32 32 33 34 35 36 36 36 37
LAGONDA OTHER AUTOMOBILE SALOON UNKNOWN AUTOMOBILE VANTAGE VOLANTE 32 AUDI MODEL SUPER 90 100/A6 100/A6 100/A6 FOX 4000 5000 80/90 80/90 200 V8 QUATTRO	INCLUDES S, LS, GL Quattro A6 Quattro, Coupe GT, CS, S Quattro, CS, S, Turbo Quattro-90 Quattro-80	1968-2000 1968-2000 1968-2000 1968-2000 YEAR 1970-1972 1970-1977 1989-1994 1995-1998 1974-1979 1980-1988 1978-1988 1978-1988 1988-1995 1988-1992 1989-1992 1990-1994	9595 239 9601 240 9597 9599 ORACLE 6795 797 797 797 797 6797 803 16507 809 809 809 802 817	31 31 31 31 31 31 SAS 31 32 32 32 33 34 35 36 36 36 37 38

S4/S6	S4	1993-1994 816	6 40
CABRIOLET		1994-1998 6799	9 41
A4		1996-1998 680 <sup>7</sup>	42
A3		1996-1998 6803	3 43
A8		1996-1998 6805	5 44
Π		2000-2000 20200	) 45
S8		39816	6 46
ALLROAD		44656	6 47
OTHER AUTOMOBILE		818	3 398
UNKNOWN AUTOMOBILE		819	399
UNKNOWN VEHICLE		820	) 999

#### 33 AUSTIN / AUSTIN HEALEY

MODEL	INCLUDES	YEAR	ORACLE SAS
MARINA AMERICA HEALEY SPRITE HEALY 3000 MINI OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE	GT Healy 100	1900-1998 1900-1998 1900-1998 1900-1998 1900-1998	680731680932681133681334681535821398822399823999
9801 AUTOCAR			
MODEL	INCLUDES	YEAR	ORACLE SAS

MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY	9745 9750	801 801
POSITION UNKNOWN MEDIUM/HEAVY - COE/HIGH ENTRY	9748	801
MEDIUM/HEAVY - COE/LOW ENTRY	9746	801
MEDIUM/HEAVY - OTHER	9751	801
MEDIUM/HEAVY - UNKOWN ENGINE LOCATION	9749	801
MEDIUM/HEAVY BASED MOTORHOME	9744	801
MEDIUM/HEAVY - COE/LOW ENTRY	9754	802

#### 9802 AUTO-UNION-DKW

MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - OTHER			9753 9757 9755 32532 9758	802 802 802 802 802 802

MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION MEDIUM/HEAVY BASED			9756 802 9752 802
MOTORHOME			
2902 AVANTI			
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			9546 1 9547 1
6918 BERTONE			
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			284 52 285 52
34 BMW			
MODEL	INCLUDES	YEAR	ORACLE SAS
1600, 2002 COUPE BAVARIA SEDAN 3 SERIES 5 SERIES 5 SERIES 6 SERIES 7 SERIES 7 SERIES 23 28 OTHER AUTOMOBILE UNKNOWN AUTOMOBILE X5 OTHER LIGHT TRUCK UNKNOWN AUTOMOBILE X5 OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK MOTORCYCLE (000-050CC) MOTORCYCLE (000-050CC	Tii, 1800i, 200CS 2800CS, 3.0CS 2500, 2800 318i, 318ti, 320i, 325e, 325es, 325i, 328, M3 524i, 258i, 530i, 533i, 535i, TD 525i 630, 633, 635, csi, M6 733i, 435i, L7, 740i, 750iL 850, 840ci M coupe	1900-1976 1969-1976 1969-1974 1977-1998 1975-1998 1993-1998 1977-1998 1997-1998 1990-1997 1996-1998	4507868223168243268263382434826358263582936830376828386830394507640831398832399370744013707649837077499833701834702835703836704837705838706839709840799841999
6902 BRICKLIN MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE			241 32

UNKNOWN AUTOMOBILE

242 32

80	BROCKWAY
00	DIGOURNI

MODEL	INCLUDES	YEAR	ORACLE SAS
MEDIUM/HEAVY TRUCK BASED		1900-1998	9676 850
MOTORHOME MEDIUM/HEAVY - CBE MEDIUM/HEAVE - COE/LOW		1900-1998 1900-1998	9678 881 9680 882
ENTRY MEDIUM/HEAVY - COE HIGH		1900-1998	9682 883
ENTRY MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION		1900-1998	9685 884
MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN		1900-1998	9687 890
MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK		1900-1998	9689 898 32524 899
70 BSA			
MODEL	INCLUDES	YEAR	ORACLE SAS
MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE			306701307702308703309704310705311706312709313798314799
18 BUICK			
MODEL	INCLUDES	YEAR	ORACLE SAS
SPECIAL/SKYLARK (thru 1972)	GS, GS-350, GS-400, GS-455, GS California, Sport	1900-1972	6512 1
LESABRE/CENTURION/WILDCAT	wagon, Custom Wagon, Luxus, Invicta, Custom, Limited	1977-1985	1140 2

	wagon, Custom			
LESABRE/CENTURION/WILDCAT	Wagon, Luxus, Invicta, Custom, Limited	1977-1985	1140	2
LESABRE/CENTURION/WILDCAT	Т-Туре	1986-1998	1140	2
LESABRE/CENTURION/WILDCAT	Wagon, Luxus, Invicta, Custom, Limited	1900-1976	1140	2
ELECTRA/ELECTRA 225/PARK AVENUE (91-ON)	Limited, Park Avenue, Ultra	1900-1976	1145	3
ELECTRA/ELECTRA 225/PARK AVENUE (91-ON)	Limited, Park Avenue, Ultra	1977-1984	1145	3
ELECTRA/ELECTRA 225/PARK AVENUE (91-ON)	LImited, Park Avenue, Ultra	1985-1998	1145	3
ROADMASTER	Estate Wagon, Limited	1991-1996	1163	4
RIVIERA	S-Type, T-Type	1994-1998	1161	5
RIVIERA	S-Type, T-Type	1986-1993	1161	5
RIVIERA	S-Type, T-Type	1966-1976	1161	5
RIVIERA	S-Type, T-Type	1977-1985	1161	5
RIVIERA	S-Type, T-Type	1963-1965	1161	5
CENTURY	Luxus, Custom	1900-1977	1135	7

CENTURY	Custom, FWD	1982-1998	1135	7
CENTURY	Custom	1978-1981	1135	7
CENTURY	Luxus, Regal	1972-1977	1135	7
APOLLO/SKYLARK (73-76)	Skylark	1973-1976	27310	8
REGAL	Turbo, Luxux, Gran National, GNX, T-Type	1978-1988	1153	10
SKYHAWK	S-Type, Roadhawk, T-Type, GT	1975-1981	1166	12
SKYHAWK		1982-1998	1166	12
SKYLARK (76-85)	S/R, S, Limited, Sport, T-Type	1980-1985	1168	15
SKYLARK (76-85)	S/R, S, Limited, Sprot, T-Type	1976-1979	1168	15
SOMERSET(85-87)/SKYLARK(86- ON)	Skylark	1986-1999	1169	18
SOMERSET(85-87)/SKYLARK(86- ON)	Somerset, GS Regal, Custom, Limited, T-Type	1985-1987	1169	18
REGAL (FWD)	Limited	1988-1998	1154	20
REATTA		1988-1991	1152	21
OPEL KADETT		1900-1975	6514	31
OPEL MANTA	1900, Luxus, Rallye, Sports Coupe	1900-1975	6516	32
OPEL GT		1900-1975	6518	33
OPEL ISUZU	Deluxe, Sport	1976-1979	6521	34
OTHER AUTOMOBILE			1175	398
UNKNOWN AUTOMOBILE			1176	399
RENDEZVOUS			40757	401
OTHER LIGHT TRUCK			40760	498
UNKNOWN LIGHT TRUCK			40761	499
UNKNOWN VEHICLE			1177	999

19 CADILLAC

MODEL	INCLUDES	YEAR	ORACLE	SAS
DEVILLE/FLEETWOOD	Coupe de Ville, Sedan de Ville, Fleetwood Brougham, Fleetwood 60 Special, d'Elegance	1900-1976	1195	3
DEVILLE/FLEETWOOD	Concourse	1994-1998	1195	3
DEVILLE/FLEETWOOD	FWD d'Elegance	1985-1998	1195	3
DEVILLE/FLEETWOOD	RWDCoupe de Ville, Sedan de Ville, Fleetwood Brougham, Fleetwood 60 Special, d'Elegance	1977-1996	1195	3
LIMOUSINE	Fleetwood 75, Formal, DeVille-Based	1900-1998	1183	4
ELDORADO	Biarritz, El-doro, Touring Coupe	1986-1998	1187	5
ELDORADO	Biarritz, El-doro, Touring Coupe	1900-1978	1187	5
ELDORADO	Biarritz, El-doro, Touring Coupe	1979-1985	1187	5
COMMERCIAL SERIES	Ambulance/Hearse	1900-1998	6537	6
ALLANTE		1987-1998	1178	9
SEVILLE	STS	1986-1998	1197	14
SEVILLE	Elegante	1976-1985	1197	14
CIMARRON	D'oro	1982-1988	1180	16
CATERA	RWD	1997-1998	6539	17
CTS			45079	18
OTHER AUTOMOBILE			972	398
UNKNOWN AUTOMOBILE			973	399
ESCALADE			20207	421
OTHER LIGHT TRUCK			45154	498
UNKNOWN LIGHT TRUCK			45155	498
UNKNOWN VEHICLE			974	999

2903 CHECKER

MODEL	INCLUDES	YEAR	ORACLE	SAS
AEROBUS		1900-1982	9566	2
MARATHON		1900-1982	9548	2
OTHER AUTOMOBILE		1900-1982	9569	2
SUPERBA		1900-1982	9562	2
TAXI		1900-1982	9564	2
UNKNOWN AUTOMOBILE		1900-1982	9570	2
20 CHEVROLET				
MODEL	INCLUDES	YEAR	ORACLE	SAS
CHEVELLE/MALIBU (83-)	Classic, Concours, S-3, Laguna, Nomad, 300, Greenbriar, Estate, Deluxe, SS 396/454	1978-1983	1024	1
CHEVELLE/MALIBU (83-)	Classic, Concours, S-3, Laguna, Nomad, 300, Greenbriar, Estate, Deluxe, SS 396/454	1964-1977	1024	1
IMPALA/CAPRICE	St. Wgn. Biscayne, Belair, Super sport, Classic Classic Brougham, Townsman	1900-1976	1017	2
IMPALA/CAPRICE	Brookwood, Kingswood	1977-1998	1017	2
IMPALA/CAPRICE	Biscayne, Belair, Super sport, Classic Classic Brougham, Townsman	1900-1976	1017	2
CORVETTE	Stingray	1963-1998	1001	4
CORVETTE	Stingray	1953-1962	1001	4
CORVAIR	Monza, Corsa, 500, Yenko	1960-1969	6574	6
EL CAMINO	Royal Knight, SS	1959-1960	6545	7
EL CAMINO	Royal Knight, SS	1964-1977	6545	7
EL CAMINO	Royal Knight, SS	1978-1998	6545	7
NOVA (-79)	Chevy II, LN, LE, Concours SS-350/396, Rally	1962-1979	6576	8
CAMARO	SS, RS, LT, Berlinetta, IROC-Z, Z28	1967-1998	979	9
MONTE CARLO ('70-'88) (RWD ONLY)	LS, SS, Aerocoupe, Landau	1978-1988	1025	10
MONTE CARLO ('70-'88) (RWD ONLY)	LS, SS, Aerocoupe, Landau	1970-1977	1025	10
VEGA	GT, Cosworth	1971-1977	6578	11
MONZA	Spyder, 2+2, Towne Coupe	1975-1980	1030	12
CHEVETTE	S, Scooter, CS-4 door	1976-1987	996	13
CHEVETTE	S, Scooter, CS2 door	1976-1987	996	13
CITATION	X-11, Citation II	1980-1985	997	15
CAVALIER	CS, RS, Z24, LS	1982-1998	989	16
CELEBRITY	CS, Eurosport, VR	1982-1998	994	17
BERETTA/CORSICA	GT	1988-1998	998	19
	Z-34, Euro	1990-1998	1019	20
SPECTRUM NOVA/GEO PRIZM	CL, NUMMI-built vehicle	1985-1998	1032	31
SPRINT/GEO SPRINT		1985-1998 1985-1998	1007 1010	32 33
GEO METRO	LSi, Xfi	1989-1998	1010	33 34
GEO STORM	Gsi	1985-1998	1012	35
MONTE CARLO (1995+) (FWD	Z34	1995-1998	6580	36
ONLY)				
MALIBU (1997+)		1997-1998	6582	37
			1036	398
	S 10 p/u basad	1002 1004	1037	399 401
S-10 BLAZER, BLAZER	S-10 p/u baseed	1983-1994 1995-1998	6584 6584	401 401
S-10 BLAZER, BLAZER GEO TRACKER	Blazer Lsi	1995-1998 1989-1998	6584 1014	401 402
	Lu;	1003-1990	1014	402

# Vehicles

FULLSIZE BLAZER (K, Tahoe)	K-series, fullsized p/u based	1969-1994	6587	421
FULLSIZE BLAZER (K, Tahoe)	Tahoe	1995-1998	6587	421
SUBURBAN		1900-1998	6590	431
ASTRO VAN	Minivan	1985-1998	6592	441
LUMINA APV/VENTURE	Venture,	1990-1998	6594	442
G-SERIES VAN	Beauville, Chevy Van, Sport Van, G10-G30, Express	1900-1998	6599	461
P-SERIES VAN		1900-1998	6601	466
VAN DERIVATIVE	Hi-cube, Parcel Van	1900-1998	6603	470
S-10/T-10	4 X 4	1982-1998	6605	471
LUV	Imported pickup	1900-1998	6607	472
C, K, R, V-SERIES PICKUP	C10-C30, K10-K30, R10-R30, V10-V30, Silverado, C-K 1500, 2500, 3500	1900-1998	6609	481
AVALANCHE			44657	482
OTHER LIGHT TRUCK			1038	498
UNKNOWN LIGHT TRUCK			1039	499
MEDIUM/HEAVY CBE	C50/60/65; M60/65; H70/80/90; J70/80/90; Bison 90; all other CBE	1900-1998	6611	881
MEDIUM/HEAVY COE LOW ENTRY	T60/65 - all other COE low entry	1900-1998	6613	882
MEDIUM/HEAVY COE HIGH ENTRY	Titan 90, all other COE hight entry	1900-1998	6615	883
MEDIUM/HEAVY; UNKNOWN ENGINE LOCATION			6617	884
MEDIUM/HEAVY; UNKNOWN ENGINE LOCAITON	MKIII, 1500	1900-1979	6619	890
OTHER MEDIUM/HEAVY TRUCK			1040	898
UNK TYPE TRUCK (LIGHT/MED/HEAVY)			27267	899
ÙNKNOWN MEDIUŃ/HEAVY			1041	899
TRUCK BUS	S-60 series	1900-1998	1042	981
OTHER BUS		1000 1000	1043	988
UNKNOWN BUS TYPE			6620	989
OTHER VEHICLE			1044	998
UNKNOWN VEHICLE			1044	999
			10-10	000

## 6 CHRYSLER

MODEL	INCLUDES	YEAR	ORACLE SAS
CORDOBA NEW YORKER FIFTH AVENUE	Crown, 300, LS	1975-1983	159 9 175 10
('89) NEWPORT			173 10
RAMPAGE 2.2 (CAR BASED PICKUP)	GT, Sport	1982-1984	6274 13
NEW YORKER ('83-'90)			173 14
NEW YORKER SALON			177 14
NEW YORKER/E CLASS/IMPERIAL/5TH AVENUE	Imperial	1990-1993	163 14
NEW YORKER/E CLASS/IMPERIAL/5TH AVENUE	FWD vehicles, Turbo	1983-1993	163 14
RWD ONLY-NEW YORKER/NEWPORT/5TH	300	1900-1971	160 14
RWD ONLY-NEW YORKER/NEWPORT/5TH	Custom, Royal, Brougham, Town and Country	1900-1978	160 14
RWD ONLY-NEW YORKER/NEWPORT/5TH	Custom, Royal, Brougham, Town and Country	1979-1981	160 14

	Custom Devel Drevelson Tevre and Country	1000 1000	400 44	
RWD ONLY-NEW YORKER/NEWPORT/5TH	Custom, Royal, Brougham, Town and Country	1982-1989	160 14	ł
LASER	Turbo, XE, XT	1984-1986	164 15	5
LEBARON	FWD except GTS or GTC Sport Coupe	1982-1998	165 16	5
LEBARON	Medallion, Salon	1977-1981	165 16	3
LEBARON GTS/GTC	GTC-Sport Coupe	1987-1998	166 17	7
LEBARON GTS/GTC	GTS-Turbo	1985-1998	166 17	7
INTREPID (CANADIAN)			44198 18	3
TC (MASERATI SPORT)	Turbo Convertible	1988-1991	181 31	
CONQUEST	TSI, Turbo	1987-1989	158 35	5
CONCORDE		1993-1998	157 41	
LHS	New Yorker	1994-1998	171 42	2
SEBRING		1995-1998	180 43	3
CIRRUS		1995-1998	156 44	ł
300M		1999-2000	20209 51	
PT CRUISER			36181 52	2
OTHER AUTOMOBILE			185 398	3
UNKNOWN AUTOMOBILE			186 399	)
TOWN AND COUNTRY	Minivan	1990-1998	183 441	
VOYAGER			38486 442	2
OTHER LIGHT TRUCK			187 498	3
UNKNOWN LIGHT TRUCK			188 499	)
UNKNOWN VEHICLE			189 999	)
6903 CITROEN				
MODEL	INCLUDES	YEAR	ORACLE SAS	3
OTHER AUTOMOBILE			243 33	3
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			243 33 244 33	
UNKNOWN AUTOMOBILE 2909 CONSULIER		VEAD	244 33	3
UNKNOWN AUTOMOBILE	INCLUDES	YEAR		3
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL	INCLUDES		244 33 ORACLE SAS	3
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE	INCLUDES	1900-1998	244 33 ORACLE SAS 9589 398	8
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL	INCLUDES		244 33 ORACLE SAS	8
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE	INCLUDES	1900-1998	244 33 ORACLE SAS 9589 398	8
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE	INCLUDES	1900-1998	244 33 ORACLE SAS 9589 398	8
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE	INCLUDES	1900-1998	244 33 ORACLE SAS 9589 398	3 3 3
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL		1900-1998 1900-1998	244     33       ORACLE     SAS       9589     398       9591     398       ORACLE     SAS	3 3 3
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS		1900-1998 1900-1998	244 33 ORACLE SAS 9589 398 9591 398 ORACLE SAS 20213 31	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA		1900-1998 1900-1998 YEAR 1999-2000	244     33       ORACLE     SAS       9589     398       9591     398       ORACLE     SAS       0RACLE     SAS       20213     31       20215     32	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA		1900-1998 1900-1998 YEAR	244       33         ORACLE       SAS         9589       398         9591       398         ORACLE       SAS         ORACLE       SAS         20213       31         20215       32         20217       33	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA		1900-1998 1900-1998 YEAR 1999-2000	244         33           ORACLE         SAS           9589         398           9591         398           0RACLE         SAS           0RACLE         SAS           20213         31           20215         32           20217         33           31388         398	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998 1900-1998 YEAR 1999-2000	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         0RACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE		1900-1998 1900-1998 YEAR 1999-2000	244         33           ORACLE         SAS           9589         398           9591         398           0RACLE         SAS           0RACLE         SAS           20213         31           20215         32           20217         33           31388         398	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE		1900-1998 1900-1998 YEAR 1999-2000	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         0RACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998 1900-1998 YEAR 1999-2000	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         0RACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE		1900-1998 1900-1998 YEAR 1999-2000	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         0RACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 60 DAIHATSU MODEL	INCLUDES	1900-1998 1900-1998 YEAR 1999-2000 1999-2000 YEAR	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         0RACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399         31390       999         ORACLE       SAS	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 60 DAIHATSU MODEL CHARADE	INCLUDES	1900-1998 1900-1998 YEAR 1999-2000 1999-2000	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         ORACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399         31390       999         ORACLE       SAS         ORACLE       SAS	
UNKNOWN AUTOMOBILE 2909 CONSULIER MODEL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 20212 DAEWOO MODEL LANOS NUBIRA LEGANZA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 60 DAIHATSU MODEL	INCLUDES	1900-1998 1900-1998 YEAR 1999-2000 1999-2000 YEAR	244       33         ORACLE       SAS         9589       398         9591       398         0RACLE       SAS         0RACLE       SAS         20213       31         20215       32         20217       33         31388       398         31389       399         31390       999         ORACLE       SAS	

UNKNOWN AUTOMOBILE ROCKY OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE		1990-1992	461 459 462 463 464	399 401 498 499 999
6904 DELOREAN	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			245 246	34 34
2904 DESOTO				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998 1900-1998	9568 9572	398 398
6916 DESTA				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			280 281	48 48
81 DIAMOND REO/REO				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY TRUCK BASED MOTORHOME		1900-1998	9655	850
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/LOW ENTRY		1900-1998 1900-1998	9657 9666	881 882
MEDIUM/HEAVY - COE/HIGH ENTRY		1900-1998	9668	883
MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION		1900-1998	9670	884
MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9672	890
MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK		1900-1998	9673 32525	898 899
9803 DIVCO				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY			9760 9764	803 803
POSITION UNKNOWN MEDIUM/HEAVY - COE/HIGH ENTRY			9762	803
ENTRY MEDIUM/HEAVY - COE/LOW ENTRY			9761	803

MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN	9765 9763	803 803
ENGINE LOCATION		
MEDIUM/HEAVY BASED	9759	803
MOTORHOME		

7 DODGE

MODEL	INCLUDES	YEAR	ORACLE	SAS
DART	Custom, Swinger, Sport, GT, Demon, Special, Special Edition, 170, 270, 340, 360: WB=111"	1962-1976	6259	1
DART	Custom, Swinger, Sport, GT, Demon, Special, Special Edition, 170, 270, 340, 360: WB=108"	1962-1976	6259	1
CORONET/CHARGER/MAGNUM	Brougham, Custom, Superbee, Crestwood, Deluxe, XE, R/t, SE 440, 500, Police	1900-1979	226	2
CORONET/CHARGER/MAGNUM	Charger	1900-1978	226	2
POLARA/MONACO/ROYAL MONACO	Custom, Special, Crestwood, Brougham, Police Taxi	1900-1976	6264	3
POLARA/MONACO/ROYAL MONACO	Custom, Special, Crestwood, Brougham, Police Taxi	1977-1978	6264	3
VIPER	RT/10, GTS	1992-1998	6268	4
CHALLENGER	R/T, T/A, Rallye	1970-1974	6270	5
ASPEN	Custom, Special Edition, Police, R/T, Sport: WB=109"	1976-1980	195	6
ASPEN	Custom, Special Edition, Police, R/T, Sport: WB=113"	1976-1980	195	6
DIPLOMAT	Medallion, Salon, S	1977-1989	215	7
OMNI/CHARGER	Charger 2.2	1983-1990	124	8
OMNI/CHARGER	O24, DeTomaso, Miser, GLH, GLHS, Shelby, America, Expo	1978-1990	124	8
MIRADA		1980-1983	227	9
ST REGIS	Police, Taxi	1979-1981	9	10
ARIES (K)	Custom, SE, LE	1981-1989	192	11
400	LS	1983-1983	6272	12
RAMPAGE 2.2, GT, SPORT			25735	13
600	ES, Turbo	1983-1988	191	14
DAYTONA	Turbo Z, Shelby Z, Pacifica, C/S Competition, IROC R/T	1984-1994	208	15
LANCER	Pacifica, Turbo, ES, Shelby	1985-1989	223	16
SHADOW	ES, Turbo	1987-1998	6276	17
DYNASTY		1988-1998	216	18
SPIRIT	ES, Shelby, R/T	1989-1994	5	19
NEON	Expresso	1994-1998	230	20
CHALLENGER (ALL IMPORTED)	all imported	1978-1983	200	33
COLT (EXCLUDES VISTA)	RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT	1977-1980	203	34
COLT (EXCLUDES VISTA)	RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT	1974-1976	203	34
COLT (EXCLUDES VISTA)	RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT	1980-1994	203	34
COLT (EXCLUDES VISTA)	RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe Carousel, GT: WB<93"	1977-1980	203	34
CONQUEST	Turbo	1984-1986	206	35
STEALTH		1991-1998	10	39
MONACO		1990-1992	228	40
INTREPID		1993-1998	221	41
AVENGER		1995-1998	196	42
STRATUS		1995-1998	11	43
OTHER AUTOMOBILE			14	398
UNKNOWN AUTOMOBILE			15	399

RAIDER         Sport         1986-1998         127         401           DURANCO         Use 8 stiffness for end impacts, size value for side impacts.         1996-2000         1884/7         422           VISTA         4 X 4         1984-1998         1977         422           CARAVAN         Min-Ram, SE, ES: WB=112"         1984-1998         1977         442           SERIES VANS         Sportsman, Royal, Maxiwagon, Ram, B150-B350, Tradeeman         1990-1998         6228         426           DSO COLT PU, RAM SORAM 100         Ram SORam 100         1983-1998         126         471           DSO COLT PU, RAM SORAM 100         Ram SORam 100         1987-1998         6224         472           DAKOTA         WB=124"         1987-1998         6224         472           DAKOTA         WB=124"         1987-1998         6284         472           DAKOTA         WB=124"         1987-1998         6284         472           DAKOTA         WB=124"         1987-1998         6284         472           DAKOTA         WB=124"         1980-1998         6284         481           WINOWON         WB=124"         1981-1998         6284         481           UNENCOVE         6293         882					
DURANGO         Use 8 stiffness for end impacts, size value for side         1998-2000         18847         422           VISTA         4 X 4         1984-193         204         441           CARAVAN         Min-Ram, SE, ES: WB=119"         1984-1938         197         442           CARAVAN         Min-Ram, SE, ES: WB=112"         1984-1938         197         442           DSERIES VANS         Sportsman, Royal, Maxiwagon, Ram, B150-B350,         1900-1998         6280         461           DSG, COLT PU, RAM S0/RAM 100         Ram S0/Ram 100         1983-1998         126         471           DSG, COLT PU, RAM S0/RAM 100         Ram S0/Ram 100         1980-1998         6284         472           DAKOTA         WB=112"         1997-1998         6284         472           DAKOTA         WB=112"         16 </td <td></td> <td>Sport</td> <td></td> <td></td> <td>-</td>		Sport			-
Impacts.         Impacts.           VISTA         4 X 4         1984-1991         204         441           CARAVAN         Min-Ram, SE, ES: WB=119*         1984-1998         197         442           B-SERIES VANS         Sportsman, Royal, Maxivegon, Ram, B150-B350,         1900-1998         6280         461           VAN DERIVATIVE         Kary Van         1900-1998         6282         470           DSG, COLT PUL, RAM SORAM 100         DSG, Colt PU         1900-1998         6284         472           DSG, COLT PUL, RAM SORAM 100         DSG, Colt PU         1987-1998         6284         472           DAKOTA         WB=124*         1987-1998         6284         421           DAKOTA         WB=124*         1980-1998         6287         481           MIO-WERAVY: COE         6294<					
VISTA         4 × 4         1984-1991         204         441           CARAVAN         Mini-Ram, SE, ES: WB=112"         1984-1998         197         442           CARAVAN         Mini-Ram, SE, ES: WB=112"         1984-1998         197         442           D-SERIES VANS         Sportsman, Royal, Maxiwagon, Ram, B150-B350,         1900-1998         6280         461           VAN DERIVATIVE         Kary Van         1900-1998         6282         470           DSC, COLT FVJ, RAM 50/RAM 100         D50, Colt FVU         1907-1982         126         471           DAKOTA         WB=112"         1987-1998         6284         472           DAKOTA         WB=112"         1987-1998         6284         472           DW-SERIES PICKUP,         Ram, Custom, Royal, Miser, D100-D350         1900-1998         6284         472           OTHER LIGHT TRUCK         1500/2500/3500, P/U         1984-1998         6284         472           UNEDIVIMEAVY: COE LOW         6289         482         6481         483           UNENDWHEAVY: COE HIGH         6294         833         882         884           UNK TYPE TRUCK         27268         899         6284         989           UNKNOWN BUIS TYPE         6296 <td>DURANGO</td> <td></td> <td>1998-2000</td> <td>18847</td> <td>422</td>	DURANGO		1998-2000	18847	422
CARAVAN         Mini-Ram, SE, ES: WB=112"         1984-1998         197         442           B-SERIES VANS         Sportsman, Ryal, Maxiwagon, Ram, B150-B350, Tradesman         1900-1998         6280         461           VAN DERIVATIVE         Kary Van         1900-1998         6282         470           DSG, COLT PAJ, RAM 50/RAM 100         Ram 50/Ram 100         1983-1998         6284         422           DAKOTA         WB=112"         1987-1998         6284         472           DAKOTA         WB=114"         1987-1998         6284         422           UNKNOWN LIGHT TRUCK         16         989         482         483           MEDIUMHEAVY: COE HIGH         6296         890         6296         890     <	VISTA	•	1984-1991	204	441
B-SERIES VANS         Sportsman, Rayal, Maxiwagon, Ram, B150-B350, Tradesman         1900-1998         6280         461           VAN DERIVATIVE         Kany Van         1900-1998         6282         470           DS0, COLT PU, RAM 50/RAM 100         Bas 50/Ram 100         1983-1998         126         471           DS0, COLT PU, RAM 50/RAM 100         DS0, Colt PU         1900-1992         6284         472           DAKOTA         WB-124'         1987-1998         6284         472           DAKOTA         WB-124'         1987-1998         6284         472           DW 100-W350         1900-1998         6287         481           VMO-W350         1900-1998         6287         481           WIO-W350         1900-1998         6287         481           VIO-W350         1900-1998         6287         481           WIO-W350         1900-1998         6287         481           WINNOWN LIGHT TRUCK         1500/2500/3500, P/U         1984-1988         6284         482           WEDIUMHEAVY: COE HIGH         6294         883         482         483           WEDIUMHEAVY: COE HIGH         27268         899         21         898           UNKNOWN MEDIUMHEAVY         1980	CARAVAN	Mini-Ram, SE, ES: WB=119"	1984-1998	197	442
Tradesman         Tradesman           VAN DERIVATIVE         Kay Van         1900-1998         6282         470           DS0, COLT P/U, RAM S0RAM 100         DS0, Colt P/U         1980-1982         126         471           DAKOTA         WB=124'         1987-1998         6284         472           DAKOTA         WB=112'         1990-1998         6289         482           OTHER LIGHT TRUCK         1500/2500/3500, P/U         1994-1998         6289         482           OTHER LIGHT TRUCK         1500/2500/3500, P/U         6295         884           NEDIUMHEAVY: COE LOW         6295         884           NEDIUMHEAVY: COE HIGH         6294         883           INRY         MEDIUMHEAVY: TRUCK         18         898           UNKNOWN MEDIUMHEAVY         1900-1998	CARAVAN	Mini-Ram, SE, ES: WB=112"	1984-1998	197	442
DS0, COLT P/U, RAM S0RAM 100         Ram S0Ram 100         1983-1988         126         471           DS0, COLT P/U, RAM S0RAM 100         DS0, Cot P/U         1900-1982         126         471           DAKOTA         WB=124'         1997-1998         6284         472           DAKOTA         WB=112''         1987-1998         6284         472           DAKOTA         WB=112''         1994-1998         6284         472           VOWSERES PICKUP,         Ram, Custom, Royal, Miser, D100-D350         1994-1998         6289         482           OTHER LIGHT TRUCK         1500/2500/3500, P/U         1994-1998         6284         483           UNKNOWN LIGHT TRUCK         6291         883         882         883           PARY         WEDIUMHEAVY: COE LOW         6295         884           PORTON UNKNOWN         6296         800         991           OTHER WEDIUMHEAVY TRUCK         18         898         1900-1998         20         981 <td>B-SERIES VANS</td> <td></td> <td>1900-1998</td> <td>6280</td> <td>461</td>	B-SERIES VANS		1900-1998	6280	461
DS0_COLT P/U, RAM 50/RAM 100         DS0_Colt P/U         1907-1938         128         471           DAKOTA         WB=124''         1987-1998         6284         472           DAKOTA         WB=112''         1987-1998         6284         472           D, WSERIES PICKUP,         Ram, Custom, Royal, Miser, D100-D350         1900-1988         6287         481           VM00-W350         1500/2500/3500, P/U         1994-1998         6288         482           OTHER LIGHT TRUCK         17         499           MEDIUMHEAVY: CDE LOW         6291         881           ENTRY         6294         883           MEDIUMHEAVY: CDE HIGH         6294         883           ENTRY         6295         884           MEDIUMHEAVY: COE HIGH         6296         890           DYSITION LIMKNOWN         6295         884           MEDIUMHEAVY: COE ENTRY         6296         890           OTHER MEDIUMHEAVY: RUCK         18         898           UIKNOWN MEDIUMHEAVY         190         899           UIKNOWN MEDIUMHEAVY         22         988           UNKNOWN MEDIUMHEAVY         22         988           UNKNOWN MEDIUMHEAVY         22         988	VAN DERIVATIVE	Kary Van	1900-1998	6282	470
DAKOTA         WB=124"         1987-1998         6224         472           DAKOTA         WB=112"         1987-1998         6287         481           VIO-W350         1900-1998         6287         481           RAM         1500/2500/3500, P/U         1994-1998         6287         481           VINO-W350         1500/2500/3500, P/U         1994-1998         6287         481           VINO-W350         1500/2500/3500, P/U         1994-1998         6287         481           VINNOWN LIGHT TRUCK         17         499         6283         882           UNKNOWN LIGHT TRUCK         6291         881         6291         881           PEDIUMHEAVY: COE LIGH         6294         883         6296         890           POSITION UNKNOWN         6295         884         996         6296         890           POSITION UNKNOWN         18         988         20         981         21         988           UNKNOWN MEDIUMHEAVY         19         899         21         989         21         989           UNKNOWN NEUS TYPE         01 van based         1900-1998         20         981           UNKNOWN NEUS TYPE         6258         999         19	D50, COLT P/U, RAM 50/RAM 100	Ram 50/Ram 100	1983-1998	126	471
DAKOTA         WB=112"         1967-1998         6284         472           D, W-SERIES PICKUP, W100-W30         Ram, Custom, Royal, Miser, D100-D350         1900-1998         6287         481           RAM         1500/2500/3500, P/U         1994-1998         6289         482           OTHER LIGHT TRUCK         17         499           MEDIUMHEAVY: COE         6231         881           ENGRY         6294         883           MEDIUMHEAVY: COE HIGH         6294         883           ENRY         6295         884           MEDIUMHEAVY: COE HIGH         6296         890           POSITION UNKNOWN         6295         884           UNK TYPE TRUCK         6296         890           UNK TYPE TRUCK         18         898           UNKNOWN MEDIUMHEAVY TRUCK         18         898           UNKNOWN MEDIUMHEAVY         27268         899           UNKNOWN MEDIUMHEAVY         27268         899           UNKNOWN MEDIUMHEAVY         198         99           VINKNOWN MEDIUMHEAVY         22         998           UNKNOWN MEDIUMHEAVY         22         998           UNKNOWN VEHICLE         23         999           MOTORCYCLE (000-0	D50, COLT P/U, RAM 50/RAM 100	D50, Colt P/U	1900-1982	126	471
D. W.SERIES PICKUP, W100-W330         Ram, Custom, Royal, Miser, D100-D350         1900-1998         6287         481           RAM         1500/2500/3500, P/U         1994-1998         6289         482           OTHER LIGHT TRUCK         17         499         6283         882           MEDIUM/HEAVY: CBE         6291         881           MEDIUM/HEAVY: CDE LOW         6293         882           ENGRY         6293         882           MEDIUM/HEAVY: COE HIGH         6294         833           FNRY         6295         884           MEDIUM/HEAVY: UNKNOWN         6296         890           POSITION UNKNOWN         6296         890           POSITION UNKNOWN         6296         890           OTHER MEDIUM/HEAVY TRUCK         18         898           UNK TYPE TRUCK         19         899           UNKNOWN MEDIUM/HEAVY         19         899           OTHER BUS         not van based         1900-1998         20         981           UNKNOWN NUB STYPE         6255         989         21         988           T1 DUCATI         10         22         988         315         701           MOTORCYCLE (000-050CC)         316         7	DAKOTA	WB=124"	1987-1998	6284	472
W100-W350         1500/2500/3500, P/U         1994-1998         6228         422           RAM         1500/2500/3500, P/U         1994-1998         6289         428           UNKNOWN LIGHT TRUCK         17         499         6231         881           MEDIUMHEAVY: COE LOW         6233         882         6291         881           MEDIUMHEAVY: COE HIGH         6294         883         6296         890           POSITION UNKNOWN         6296         890         6296         890           POSITION UNKNOWN         6296         890         71         899         71         899           UNKNOWN MEDIUMHEAVY         18         898         990         71         999         71         999         71         999         71         999         71         999         71         71         703         717         703         707         703         717         703         717         703         717         703         717         703         717         703         717         703         717         703         717         703         717         703         717         703         717         703         717         703         717         717 </td <td>DAKOTA</td> <td>WB=112"</td> <td>1987-1998</td> <td>6284</td> <td>472</td>	DAKOTA	WB=112"	1987-1998	6284	472
OTHER LIGHT TRUCK         16         498           UNKNOWN LIGHT TRUCK         17         499           MEDIUMHEAVY: COE LOW         6291         881           MEDIUMHEAVY: COE HIGH         6294         883           ENTRY         6295         884           MEDIUMHEAVY: UNKNOWN         6295         884           ENTRY         6296         890           OTHER MEDIUMHEAVY: UNKNOWN         6296         890           OTHER MEDIUMHEAVY: UNKNOWN         6296         890           OTHER MEDIUMHEAVY: TRUCK         18         898           UNK TYPE TRUCK         27268         899           UNKNOWN MEDIUMHEAVY         19         893           TRUCK         21         988           MEDIUMHEAVY         19         899           UNKNOWN BUS TYPE         6286         890           OTHER BUS         1000-1998         20         981           UNKNOWN VEHICLE         23         999         21         988           UNKNOWN VEHICLE         23         999         315         701           MOTORCYCLE (125-343CC)         316         702         316         701           MOTORCYCLE (125-343CC)         316 <td< td=""><td></td><td>Ram, Custom, Royal, Miser, D100-D350</td><td>1900-1998</td><td>6287</td><td>481</td></td<>		Ram, Custom, Royal, Miser, D100-D350	1900-1998	6287	481
UNKNOWN LIGHT TRUCK         17         499           MEDIUMMEANY: CDE         6291         881           MEDIUMMEANY: CDE LOW         6293         882           ENGRY         6294         883           MEDIUMMEAVY: CDE HIGH         6295         884           ENGINE LOCATION         6295         884           MEDIUMMEAVY: COE ENTRY         6296         890           OTHER MEDIUMHEAVY TRUCK         18         898           UINKNOWN MEDIUMHEAVY         19         899           UICHT/MEDIMEAVY         19         899           UINKNOWN MEDIUMHEAVY         19         899           UNKNOWN MEDIUMHEAVY         19         899           UNKNOWN MEDIUMHEAVY         19         899           UNKNOWN NEDIUMHEAVY         19         899           UNKNOWN NEDIUMHEAVY         19         899           VINKNOWN NEDI TYPE         6258         989           OTHER VEHICLE         23         999           71         DUCATI         19         899           MOTORCYCLE (000-050CC)         316         701           MOTORCYCLE (000-050CC)         316         704           MOTORCYCLE (000-050CC)         317         703	RAM	1500/2500/3500, P/U	1994-1998	6289	482
MEDIUM/HEAVY: COE         6291         881           MEDIUM/HEAVY: COE LOW         6293         882           ENGRY         6294         883           MEDIUM/HEAVY: COE HIGH         6294         883           ENGRY         6295         884           MEDIUM/HEAVY: UNKNOWN         6296         880           POSITION UNKNOWN         6296         880           OTHER MEDIUM/HEAVY: UNKNOWN         6296         880           OTHER MEDIUM/HEAVY: UNKNOWN         6296         880           OTHER MEDIUM/HEAVY: TRUCK         18         898           UNK TYPE TRUCK         19         899           UNKNOWN MEDIUM/HEAVY         19         899           TRUCK         22         988           UNKNOWN BUS TYPE         6258         989           OTHER VEHICLE         22         988           UNKNOWN VEHICLE         22         988           UNKNOWN VEHICLE         315         701           MODDEL         INCLUDES         YEAR         ORACLE SAS           MOTORCYCLE (051-124CC)         315         701           MOTORCYCLE (405-1243CC)         316         704           MOTORCYCLE (450-7494CC)         318         704	OTHER LIGHT TRUCK			16	498
MEDIUM/HEAVY: COE LOW         6293         882           ENGRY         6294         833           MEDIUM/HEAVY: COE HIGH         6294         833           ENTRY         6295         884           MEDIUM/HEAVY: COE ENTRY         6296         890           POSITION UNKNOWN         6296         890           OTHER MEDIUM/HEAVY: COE ENTRY         6296         890           POSITION UNKNOWN         18         898           UNK TYPE TRUCK         18         899           UIGHTMED/HEAVY TRUCK         19         899           TRUCK         27268         899           UNKNOWN MEDIUM/HEAVY         19         899           TRUCK         22         981           OTHER BUS         not van based         1900-1998         20         861           OTHER VEHICLE         22         998         21         998         21         998           TH DUCATI         MODEL         INCLUDES         YEAR         ORACLE         SAS           MOTORCYCLE (000-050CC)         315         701         MOTORCYCLE (051-1424CC)         316         702           MOTORCYCLE (051-1424CC)         318         704         319         705	UNKNOWN LIGHT TRUCK			17	499
ENGRY         6294         883           MEDIUM/HEAVY:         6295         884           ENGRY         6296         890           POSITION UNKNOWN         6296         890           POSITION UNKNOWN         6296         890           OTHER MEDIUM/HEAVY:         6296         890           POSITION UNKNOWN         18         898           UNK TYPE TRUCK         19         899           UNKNOWN MEDIUM/HEAVY         19         899           UNKNOWN NEDIUM/HEAVY         20         841           OTHER BUS         01         20         841           UNKNOWN NUSTYPE         6258         899         21         998           UNKNOWN VEHICLE         23         999         22         98           MOTORCYCLE (000-050CC)         315         701           MOTORCYCLE (000-050CC)	MEDIUM/HEAVY: CBE			6291	881
ENTRY         6295         884           MEDIUMHEAVY: UNKNOWN         6296         800           POSITION UNKNOWN         18         898           OTHER MEDIUMHEAVY: COE ENTRY         27268         899           OTHER MEDIUMHEAVY: TRUCK         18         898           UNKNOWN         27268         899           UIGHT/MED/HEAVY)         19         899           UNKNOWN MEDIUM/HEAVY         19         899           TRUCK         21         988           OTHER BUS         not van based         1900-1998         20         981           OTHER VHICLE         22         988         1980         21         988           UNKNOWN BUS TYPE         6258         989         22         989           OTHER VHICLE         22         988         23         999           71         DUCATI         23         999         20         316         701           MOTORCYCLE (000-050CC)         315         701         316         702         316         702           MOTORCYCLE (051-124CC)         316         704         316         702           MOTORCYCLE (050-149CC)         318         704         318         704 <td></td> <td></td> <td></td> <td>6293</td> <td>882</td>				6293	882
ENGINE LOCATION       6296       890         MEDIUMHEAVY: COE ENTRY       18       898         OTHER MEDIUMHEAVY TRUCK       18       898         UNK TYPE TRUCK       27268       899         UIGHT/MED/HEAVY)       19       899         UNKNOWN MEDIUM/HEAVY       19       899         TRUCK       1900-1998       20       981         OTHER BUS       not van based       1900-1998       20       981         OTHER VEHICLE       22       998       21       988         UNKNOWN VEHICLE       22       998       23       999         71       DUCATI       23       999       20       315       701         MODEL       INCLUDES       YEAR       ORACLE       SAS         MOTORCYCLE (000-050CC)       315       701       316       702         MOTORCYCLE (000-050CC)       318       704       316       702         MOTORCYCLE (450-749CC)       318 </td <td></td> <td></td> <td></td> <td>6294</td> <td>883</td>				6294	883
POSITION UNKNOWN       18       898         OTHER MEDIUM/HEAVY TRUCK       18       899         UIGHT/MED/HEAVY)       19       899         UIGHT/MED/HEAVY)       19       899         UNK NOWN MEDIUM/HEAVY       19       899         MEDIUM BUS       not van based       1900-1998       20       981         OTHER BUS       21       988       21       988         UNKNOWN BUS TYPE       6258       989         OTHER VEHICLE       22       998         UNKNOWN VEHICLE       23       999         71 DUCATI       23       999         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (000-050CC)       318       704         MOTORCYCLE (155-349CC)       318       704         MOTORCYCLE (150				6295	884
UNK TYPE TRUCK (LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY TRUCK       19       899         MEDIUM BUS       not van based       1900-1998       20       981         OTHER BUS       1900-1998       20       981         OTHER BUS       21       988         OTHER VEHICLE       22       998         UNKNOWN BUS TYPE       6258       989         OTHER VEHICLE       23       999         T1 DUCATI       23       999         MODEL       INCLUDES       YEAR       ORACLE SAS         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (051-124CC)       316       702         MOTORCYCLE (125-349CC)       318       704         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (450-749CC)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       323       799				6296	890
(LIGHT/MED/HEAVY)       19       899         UNKNOWN MEDIUM/HEAVY       1900-1998       20       981         OTHER BUS       11       988       981         OTHER BUS       21       988         UNKNOWN BUS TYPE       6258       989         OTHER VEHICLE       22       998         UNKNOWN VEHICLE       23       999         71 DUCATI       71 DUCATI       71 DUCATI         MODEL       INCLUDES       YEAR       ORACLE SAS         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (051-124CC)       316       702         MOTORCYCLE (250-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (450-749CC)       320       706         MOTORCYCLE (450-749CC)       321       709         OTHER MOTORED CYCLE       322       788         UNKNOWN MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       323       799	OTHER MEDIUM/HEAVY TRUCK			18	898
TRUCK         not van based         1900-1998         20         981           OTHER BUS         21         988         21         988           UNKNOWN BUS TYPE         6258         989         22         998           UNKNOWN VEHICLE         22         998         23         999           71         DUCATI         23         999         71         DUCATI         23         999           MODEL         INCLUDES         YEAR         ORACLE         SAS           MOTORCYCLE (000-050CC)         315         701         316         702           MOTORCYCLE (051-124CC)         316         702         317         703           MOTORCYCLE (250-449CC)         318         704         318         704           MOTORCYCLE (450-749CC)         318         704         318         704           MOTORCYCLE (450-749CC)         320         706         320         706           MOTORCYCLE (UNKNOWN CC)         321         709         321         709           OTHER MOTORED CYCLE         323         798         10         EAGLE         323         799				27268	899
OTHER BUS       21       988         UNKNOWN BUS TYPE       6258       989         OTHER VEHICLE       22       998         UNKNOWN VEHICLE       23       999         71       DUCATI       INCLUDES       YEAR       ORACLE       SAS         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (051-124CC)       316       702         MOTORCYCLE (125-349CC)       317       703         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (750CC-0VER)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10       EAGLE       10       EAGLE				19	899
UNKNOWN BUS TYPE         6258         989           OTHER VEHICLE         22         998           UNKNOWN VEHICLE         23         999           71         DUCATI          23           MODEL         INCLUDES         YEAR         ORACLE           MOTORCYCLE (000-0500CC)         315         701           MOTORCYCLE (051-124CC)         316         702           MOTORCYCLE (125-349CC)         318         704           MOTORCYCLE (350-449CC)         318         704           MOTORCYCLE (750CC-OVER)         319         705           MOTORCYCLE (UNKNOWN CC)         320         706           MOTORCYCLE (UNKNOWN CC)         321         709           OTHER MOTORED CYCLE         322         798           UNKNOWN MOTORED CYCLE         323         799           10 EAGLE         10 EAGLE         10	MEDIUM BUS	not van based	1900-1998	20	981
OTHER VEHICLE       22       998         UNKNOWN VEHICLE       23       999         71 DUCATI       INCLUDES       YEAR       ORACLE SAS         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (001-124CC)       316       702         MOTORCYCLE (125-349CC)       317       703         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       I10 EAGLE       I10 EAGLE       I10 EAGLE	OTHER BUS			21	988
UNKNOWN VEHICLE       23 999         71 DUCATI       MODEL       INCLUDES       YEAR       ORACLE SAS         MOTORCYCLE (000-050CC)       315 701         MOTORCYCLE (001-124CC)       316 702         MOTORCYCLE (051-124CC)       316 702         MOTORCYCLE (125-349CC)       317 703         MOTORCYCLE (350-449CC)       318 704         MOTORCYCLE (450-749CC)       319 705         MOTORCYCLE (1750CC-OVER)       320 706         MOTORCYCLE (UNKNOWN CC)       321 709         OTHER MOTORED CYCLE       322 798         10 EAGLE       In EAGLE	UNKNOWN BUS TYPE			6258	989
71 DUCATI       YEAR       ORACLE SAS         MODEL       INCLUDES       YEAR       ORACLE SAS         MOTORCYCLE (000-050CC)       315       701         MOTORCYCLE (051-124CC)       316       702         MOTORCYCLE (125-349CC)       317       703         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (750CC-0VER)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       In EAGLE       In EAGLE	OTHER VEHICLE			22	998
MODEL         INCLUDES         YEAR         ORACLE         SAS           MOTORCYCLE (000-050CC)         315         701           MOTORCYCLE (051-124CC)         316         702           MOTORCYCLE (125-349CC)         317         703           MOTORCYCLE (350-449CC)         318         704           MOTORCYCLE (450-749CC)         319         705           MOTORCYCLE (750CC-OVER)         320         706           MOTORCYCLE (UNKNOWN CC)         321         709           OTHER MOTORED CYCLE         322         798           UNKNOWN MOTORED CYCLE         323         799           10 EAGLE         10 EAGLE         10 EAGLE	UNKNOWN VEHICLE			23	999
MOTORCYCLE (000-050CC)         315         701           MOTORCYCLE (051-124CC)         316         702           MOTORCYCLE (125-349CC)         317         703           MOTORCYCLE (350-449CC)         318         704           MOTORCYCLE (450-749CC)         319         705           MOTORCYCLE (750CC-OVER)         320         706           MOTORCYCLE (UNKNOWN CC)         321         709           OTHER MOTORED CYCLE         322         798           UNKNOWN MOTORED CYCLE         323         799           10 EAGLE         323         799	71 DUCATI				
MOTORCYCLE (051-124CC)       316       702         MOTORCYCLE (125-349CC)       317       703         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (750CC-OVER)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       323       799	MODEL	INCLUDES	YEAR	ORACLE	SAS
MOTORCYCLE (051-124CC)       316       702         MOTORCYCLE (125-349CC)       317       703         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (750CC-OVER)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       323       799				215	701
MOTORCYCLE (125-349CC)       317       703         MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (750CC-OVER)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       10       10	( , , , , , , , , , , , , , , , , , , ,				
MOTORCYCLE (350-449CC)       318       704         MOTORCYCLE (450-749CC)       319       705         MOTORCYCLE (750CC-OVER)       320       706         MOTORCYCLE (UNKNOWN CC)       321       709         OTHER MOTORED CYCLE       322       798         UNKNOWN MOTORED CYCLE       323       799         10 EAGLE       10       10	. , ,				
MOTORCYCLE (450-749CC)         319         705           MOTORCYCLE (750CC-OVER)         320         706           MOTORCYCLE (UNKNOWN CC)         321         709           OTHER MOTORED CYCLE         322         798           UNKNOWN MOTORED CYCLE         323         799           10 EAGLE         10         10					
MOTORCYCLE (750CC-OVER)         320         706           MOTORCYCLE (UNKNOWN CC)         321         709           OTHER MOTORED CYCLE         322         798           UNKNOWN MOTORED CYCLE         323         799           10 EAGLE         10         10					
MOTORCYCLE (UNKNOWN CC)321709OTHER MOTORED CYCLE322798UNKNOWN MOTORED CYCLE32379910 EAGLE1010					
OTHER MOTORED CYCLE322798UNKNOWN MOTORED CYCLE32379910 EAGLE44					
UNKNOWN MOTORED CYCLE     323     799       10 EAGLE     323     799	· · · · · · · · · · · · · · · · · · ·				
				-	
MODEL INCLUDES YEAR ORACLE SAS	10 EAGLE				
	MODEL	INCLUDES	YEAR	ORACLE	SAS

SUMMIT TALON PREMIER VISION MEDALLION OTHER AUTOMOBILE UNKNOWN AUTOMOBILE SUMMIT WAGON OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE	DL, LX, ES TSI LX, ES DL, LX WB=99.2"	1989-1998 1990-1998 1988-1992 1993-1998 1988-1990 1992-1998	65346737634068416244703987239966441734987449975999
2905 EXCALIBER			
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998 1900-1998	9573 398 9574 398
6905 FERRARI			
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			247 35 248 35
36 FIAT			
MODEL	INCLUDES	YEAR	ORACLE SAS
124 (COUPE/SEDAN) 124 SPIDER/RACER BRAVA - 131 850 (COUPE/SPYDER) 128 X-1/9 STRADA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN AUTOMOBILE MEDIUM/HEAVY COE LOW ENTRY MEDIUM/HEAVY COE HIGH ENTRY MEDIUM/HEAVY COE HIGH ENTRY MEDIUM/HEAVY COE ENTRY POSITION UNKNOWN OTHER MEDIUM/HEAVY TRUCK UNKNOWN MEDIUM/HEAVY TRUCK UNKNOWN VEHICLE	Sport Spider 2000/1500	1967-1975 1968-1983 1975-1982 1967-1973 1972-1979 1975-1983 1979-1983	64873176632765336489346491357683676737769398770399649388264948836495890771898772899773999
12 FORD			
12 FORD	INCLUDES	YEAR	ORACLE SAS

MUSTANG/MUSTANG II	Mach, Boss, Granada, Cobra	1965-1973	100	3
MUSTANG/MUSTANG II	Ghia, SVO, GT, LX, Shelby	1974-1998	100	3
THUNDERBIRD (ALL SIZES)	Landau, Heritage, Turbo coupe, Elan, Fila	1958-1971	118	4
THUNDERBIRD (ALL SIZES)	Landau, Heritage, Turbo coupe, Elan, Fila	1977-1979	118	4
THUNDERBIRD (ALL SIZES)	Landau, Heritage, Turbo coupe, Elan, Fila	1980-1988	118	4
THUNDERBIRD (ALL SIZES)	Landau, Heritage, Turbo coupe, Elan, Fila	1989-1998	118	4
THUNDERBIRD (ALL SIZES)	Landau, Heritage, Turbo coupe, Elan, Fila	1972-1976	118	4
THUNDERBIRD (ALL SIZES)	Landau, Heritage, Turbo coupe, Elan, Fila	1955-1957	118	4
LTD II	S, Squire, Brougham	1977-1979	98	5
LTD/CUSTOM/GALAXIE (ALL SIZES)	XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT	1978-1982	94	6
LTD/CUSTOM/GALAXIE (ALL SIZES)	XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT	1983-1986	94	6
LTD/CUSTOM/GALAXIE (ALL SIZES)	XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT	1900-1977	94	6
RANCHERO	Torino/LTD II based	1972-1979	6381	7
RANCHERO	Flacon/Fairlane based	1900-1971	6381	7
MAVERICK	Grabber	1970-1977	6384	8
PINTO	Pony, MPG, ESS	1971-1980	105	9
TORINO/GRAN TORINO/ELITE	GT, Cobra, Sport, Squire, Brougham	1971-1976	6386	10
GRANADA	ESS, Ghia	1975-1982	6388	11
FAIRMONT	Futura, Sport Coupe	1978-1983	87	12
ESCORT/EXP	L, GL, GLX, SS, GT, LX, ZX2	1981-1991	80	13
TEMPO	L, GL, GLX, Sport, 4X4	1992-1999	115	15
CROWN VICTORIA		1981-1989	79	16
TAURUS	Mt-5, L, GL, LX, SHO	1986-1989	110	17
PROBE	GL, LX, GT	1988-1998	6390	18
ENGLISH FORD	Cortina	1900-1998	6392	31
FIESTA	Sport, Ghia	1978-1980	92	32
FESTIVA		1988-1993	88	33
LASER		1900-1998	6394	34
CONTOUR		1994-1998	77	35
ASPIRE		1994-1998	76	36
FOCUS			28553	37
OTHER AUTOMOBILE			1084	398
UNKNOWN AUTOMOBILE			1085	399
BRONCO ii/BRONCO	Explorer	1990-1998	6396	401
(-77)/EXPLORER				
BRÓNCO ii/BRONCO (-77)/EXPLORER	Bronco IIEddie Bauer, XL, XLT, Limited	1983-1989	6396	401
BRONCO ii/BRONCO (-77)/EXPLORER	Bronco	1900-1977	6396	401
ESCAPE			37748	402
BRONCO-FULLSIZE	Eddie Bauer, Custom, XL, XLT	1978-1998	6400	421
EXPEDITION		1997-1998	6402	422
EXCURSION			37078	431
AEROSTAR	XLT, Cargo Van	1984-1998	6404	441
WINDSTAR		1994-1998	6406	442
E-SERIES VANS	Econoline, Clubwagon, Chateau, E150-E350	1900-1998	6408	461
VAN DERIVATIVE	Parcel van	1900-1998	6411	470
RANGER	Supercab, 4X4, STX, Splash: WB=108"	1982-1998	6413	471
RANGER	Supercab, 4X4, STX, Splash: WB=108"	1982-1998	6413	471
COURIER	Imported pickup	1900-1998	6416	472
SPORT TRAC			44658	473
F-SERIES PICKUP	F100-F350	1900-1998	6418	481
OTHER LIGHT TRUCK			1086	498

UNKNOWN LIGHT TRUCK F450/550 PICKUP >4536 GVWR			1087 39465	499 880
MEDIUM/HEAVY CBE	F-5 through F-8, L-series, FT-series	1900-1998	6420	881
MEDIUM/HEAVY COE LOW ENGRY	C/Ct series	1900-1998	6422	882
MEDIUM/HEAVY COE HIGH ENTRY	C/CLT series	1900-1998	6424	883
MEDIUM/HEAVY: UNKNOWN ENGINE LOCATION			6426	884
Medium/Heavy: Coe Entry Position Unknown			6427	890
OTHER MEDIUM/HEAVY TRUCK			1088	898
UNK TYPE TRUCK (LIGHT/MED/HEAVY)			27269	899
UNKNOWN MEDIUM/HEAVY TRUCK			1089	899
MEDIUM BUS	B-series	1900-1998	1090	981
OTHER BUS			1091	988
UNKNOWN BUS TYPE			6428	989
OTHER VEHICLE			1092	998
UNKNOWN VEHICLE			1093	999

#### 82 FREIGHTLINER/WHITE

MODEL	INCLUDES	YEAR	ORACLE	SAS
M-LINE WALK IN VAN OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK MEDIUM/HEAVY TRUCK BASED		1900-1998	27457 27455 27456 9691	470 498 499 850
MOTORHOME MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/LOW ENTRY		1900-1998 1900-1998	9693 9695	881 882
MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION		1900-1998 1900-1998	9697 9699	883 884
MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN MEDIUM/HEAVY - OTHER UNKNOWN		1900-1998 1900-1998	9701 9703 27458	890 898 899
LIGHT/MEDIUM/HEAVY TRUCK BUS CONVENTIONAL ENGINE OUT FRONT BUS FRONT ENGINE/FLAT			39977 39978	981 982
FRONT BUS REAR ENGINE/FLAT FRONT OTHER BUS UNKNOWN BUS TYPE UNKNOWN VEHICLE			39979 39980 39981 45156	983 988 989 999
83 FWD				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEIDUM/HEAVY TRUCK BASED			9705	850
MOTORHOME MEDIUM/HEAVY - CBE			9706	881

MEDIUM/HEAVY - COE/LOW ENTRY	9707	882
MEDIUM/HEAVY - COE/HIGH	9708	883
ENTRY		
MEDIUM/HEAVY - UNKNOWN	9709	884
ENGINE LOCATION		
MEDIUM/HEAVY - COE/ENTRY	9710	898
POSITION UNKNOWN		
MEDIUM/HEAVY - OTHER	9711	898
UNKNOWN MEDIUM/HEAVY	32526	899
TRUCK		

23 GMC

MODEL	INCLUDES	YEAR	ORACLE	SAS
CABALLERO/SPRINT	Sierra Madre del Sur, SP	1900-1977	6687	7
CABALLERO/SPRINT	Sierra Madre del Sur, SP	1978-1998	6687	7
OTHER AUTOMOBILE			914	398
UNKNOWN AUTOMOBILE			915	399
JIMMY/TYPHOON/ENVOY	S15 based	1983-1998	6690	401
FULLSIZE JIMMY/YUKON	fullsize pikup based	1900-1998	6692	421
SUBURBAN	all models	1900-1998	6694	431
SAFARI (MINIVAN)		1986-1998	6696	441
G-SERIES VAN	Rally Van, Vandura, G15-G35	1900-1998	6698	461
P-SERIES VAN		1900-1998	6700	466
VAN DERIVATIVE		1987-1987	6702	470
S15/T15/SONOMA	4X4, Cyclone	1982-1998	6704	471
C, K, R, V-SERIES PICKUP	C15-C35, K15-K35, R15-R35, V15-V35, SIERRA	1900-1998	6706	481
OTHER LIGHT TRUCK			916	498
UNKNOWN LIGHT TRUCK			917	499
MEDIUM/HEAVY CBE	W5000/6000/7000 series, Brigadier/General models	1900-1998	6709	881
MEDIUM/HDAVY COE LOW ENTRY	W6000/W7000, all other COE, low entry	1900-1998	6711	882
MEDIUM/HEAVY COE HIGH ENTRY	Astro 95, all other COE, high entry	1900-1998	6713	883
MEDIUM/HEAVY: UNKNOWN ENGINE LOCATION		1900-1998	6715	884
MEDIUM/HEAVY: COE ENTRY POSITION UNKNOWN			6717	890
OTHER MEDIUM/HEAVY TRUCK			918	898
UNK TYPE TRUCK			27270	899
(LIGHT/MED/HEAVY)				
UNKNOWN MEDIUM/HEAVY			919	899
	D0000	1000 1000	000	004
MEDIUM BUS	B6000	1900-1998	920	981
			921	988
			6718	989
UNKNOWN VEHICLE			922	999

## 25 GRUMMAN

MODEL	INCLUDES	YEAR	ORACLE S	SAS
LLV STEP-IN VAN OTHER LIGHT TRUCK	Postal vehicles Multi-stop, step van	1900-1998 1900-1998	6729	441 442 498

UNKNOWN LIGHT TRUCK MEDIUM/HEAVY TRUCK - CBE MEDIUM/HEAVY TRUCK - COE LOW ENTRY			927 6731 6732	499 881 882
MEDIUM/HEAVY TRUCK - COE			6733	883
HIGH ENTRY MEDIUM/HEAVY TRUCK			6734	884
UNKNOWN ENGINE LOCATION MEDIUM/HEAVY TRUCK ENTRY POSITION UNKNOWN			6735	890
OTHER MEDIUM/HEAVY TRUCK UNK TYPE TRUCK (LIGHT/MED/HEAVY)			928 27271	898 899
UNKNOWN MEDIUM/HEAVY			929	899
BUS-FLAT FRONT, REAR ENGINE OTHER BUS UNKNOWN BUS TYPE UNKNOWN VEHICLE	Transit	1900-1998	6736 930 6738 931	983 988 989 999

# 72 HARLEY-DAVIDSON

MODEL	INCLUDES	YEAR	ORACLE	SAS
MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE			324 325 326 327 328 329 330 331 332	701 702 703 704 705 706 709 798 799
6906 HILLMAN				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			249 250	36 36
9806 HINO				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9781 9785	806 806
MEDIUM/HEAVY - COE/HIGH ENTRY			9783	806
MEDIUM/HEAVY - COE/LOW ENTRY			9782	806
MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			9786 9784	806 806
			0700	000

MEDIUM/HEAVY BASED

MOTORHOME

9780 806

37 HONDA

MODEL	INCLUDES	YEAR	ORACLE	SAS
CIVIC/CRX/DEL SOL	1300, 1500, CVCC, DX, EX, VX, CRX, S, Si, HF, 4WD Wagon	1900-1998	775	31
CIVIC/CRX/DEL SOL	del Sol	1993-1998	775	31
ACCORD	LX, CVCC, SE-i, LX-i, EX, EX wagon	1900-1981	774	32
ACCORD	LX, CVCC, SE-i, LX-i, EX, EX wagon, 6 cylinder LX/EX	1987-1998	774	32
ACCORD	LX, CVCC, SE-i, LX-i, EX, EX wagon	1982-1986	774	32
PRELUDE	Si	1980-1983	651	33
PRELUDE	Si	1984-1998	651	33
600	Coupe, Sedan	1900-1998	6504	34
S2000	•		31630	35
INSIGHT			37080	37
OTHER AUTOMOBILE			653	398
UNKNOWN AUTOMOBILE			654	399
PASSPORT		1994-1998	6506	401
CR-V		1997-2000	16407	402
ODYSSEY		1995-1998	650	441
OTHER LIGHT TRUCK			655	498
UNKNOWN LIGHT TRUCK			656	499
MOTORCYCLE (000-050CC)			657	701
MOTORCYCLE (051-124CC)			658	702
MOTORCYCLE (125-349CC)			659	703
MOTORCYCLE (350-449CC)			660	704
MOTORCYCLE (450-749CC)			661	705
MOTORCYCLE (750CC-OVER)			662	706
MOTORCYCLE (UNKNOWN CC)			663	709
ATC/ATV (000-050CC)			664	731
ATC/ATV (051-124CC)			665	732
ATC/ATV (125-349CC)			666	733
ATC/ATV (350CC-OVER)			667	734
ATC/ATV (UNKNOWN CC)			668	739
UNKNOWN VEHICLE			670	999
2907 HUDSON				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE		1900-1998	9577	398
UNKNOWN AUTOMOBILE		1900-1998	9587	398
		1000 1000	0001	000
55 HYUNDAI				
MODEL	INCLUDES	YEAR	ORACLE	SAS
PONY		1984-1988	7878	31
EXCEL	GL, GLS	1984-1994	480	32
SONATA		1989-1998	482	33
SCOUPE		1991-1995	7880	34
ELANTRA		1992-1998	7882	35
ACCENT		1995-1998	7884	36
TIBURON		1997-1998	7886	37
XG300			44659	38
			-	

OTHER AUTOMOBILE UNKNOWN AUTOMOBILE	481 484	398 399
SANTA FE	31626	401
OTHER LIGHT TRUCK	31628	498
UNKNOWN LIGHT TRUCK	31629	499
UNKNOWN VEHICLE	485	999

8 IMPERIAL

MODEL	INCLUDES	YEAR	ORACLE	SAS
IMPERIAL IMPERIAL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE	Lebaron Mark Croww, Frank Sinatra editions	1900-1976 1981-1983	6297 6297 24 25 26	10 10 398 399 999

58 INFINITI

MODEL	INCLUDES	YEAR	ORACLE	SAS
M30		1990-1992	444	31
Q45		1990-1998	445	32
G20		1999-2000	442	33
G20		1991-1996	442	33
J30		1993-1998	443	34
130		1996-1998	7896	35
OTHER AUTOMOBILE			446	398
UNKNOWN AUTOMOBILE			447	399
QX4		1997-1998	7898	401
OTHER LIGHT TRUCK			7900	498
UNKNOWN LIGHT TRUCK			7901	499
UNKNOWN VEHICLE			448	999

# 84 INTERNATIONAL HARVESTER/NAVISTAR

MODEL	INCLUDES	YEAR	ORACLE	SAS
SCOUT	Scout II, Utility pu, SS-2, Roadstar, 800 series, Traveler, Terra Traveltop	1900-1998	9632	421
TRAVELALL	1010-1210, 100-200	1900-1998	9634	431
MULTISTOP VAN	Metro RM, 120-160, MS 1210, MS 1510	1900-1998	9636	466
PICKUP	R-100-500, 900A-1500C/D, 1010-1510	1900-1998	9638	481
OTHER LIGHT TRUCK			301	498
UNKNOWN LIGHT TRUCK			302	499
TRUCK BASED MOTORHOME			303	850
MEDIUM HEAVY - CBE	Loadstar/Fleetstar, Paystar, CBE Transtar, 4200, S-series Mixer	1900-1998	9641	881
MEDIUM/HEAVY - COE LOW ENTRY	CO, VCO, DCO, 190-1950, Cargostar, LFM, 5370	1900-1998	9643	882
MEDIUM/HEAVY - COE HIGH ENTRY	DCO, DCOT, UCO, VCOT, 405-series, COE Transtar, Unistar, Conco 707B, 9600	1900-1998	9645	883
MEDIUM/HEAVY: UNKNOWN ENGINE LOCATION			9647	884
MEDIUM/HEAVY: COE ENTRY POSITION UNKNOWN			9648	890

OTHER MEDIUM/HEAVY TRUCK UNK TYPE TRUCK (LIGHT/MED/HEAVY)	Fire Truck - R140-R306, CO 8190-	1900-1998	231 27275	898 899
UNKNOWN MEDIUM/HEAVY TRUCK			232	899
BUS BASED MOTOHOME			25907	950
CONVENTIONAL BUS	R153-1853 - Loadstar, 1603-1853	1900-1998	9649	981
BUS-FLAT FRONT, FRONT ENGINE	173FC, 183FC	1900-1998	9651	982
BUS-FLAT FRONT, REAR ENGINE	183RE, 193RD-transit	1900-1998	9653	983
OTHER BUS			234	988
UNKNOWN BUS TYPE			32531	989
OTHER VEHICLE			235	998
UNKNOWN VEHICLE			236	999

38 ISUZU

MODEL	INCLUDES	YEAR	ORACLE	SAS
I-MARK	S, RS, Turbo	1985-1989	672	31
IMPULSE	Turbo, RS	1984-1998	673	32
STYLUS		1990-1998	677	33
OTHER AUTOMOBILE			680	398
UNKNOWN AUTOMOBILE			681	399
TROOPER/TROOPER II	Deluxe, LS	1984-1998	678	401
RODEO		1991-1998	676	402
AMIGO		1989-1994	671	403
VEHICROSS			37454	404
AXIOM			44662	405
OASIS		1996-1998	674	441
P'UP (PICKUP) HOMBRE	4x4	1900-1995	675	471
P'UP (PICKUP) HOMBRE	Hombre	1996-1998	675	471
OTHER LIGHT TRUCK			682	498
UNKNOWN LIGHT TRUCK			683	499
MEDIUM/HEAVY - CBE			6517	881
MEDIUM/HEAVY COE LOW ENTRY			6540	882
MEDIUM/HEAVY COE HIGH ENTRY			6519	883
MEDIUM/HEAVY UNKNOWN ENGINE LOCATION			6523	884
MEDIUM/HEAVY COE ENTRY POSITION UNKNOWN			6524	890
OTHER MEDIUM/HEAVY TRUCK			684	898
UNK TYPE TRUCK			27272	899
(LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY			685	899
TRUCK				
CONVENTIONAL FRONT ENGINE			6525	981
FRONT ENGINE/FLAT FRONT			6526	982
REAR ENGINE/FLAT FRONT			6527	983
OTHER BUS			686	988
UNKNOWN BUS TYPE			6528	989
UNKNOWN VEHICLE			687	999

88 IVECO/MAGIRUS

MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY BASED			9736	850
MEDIUM/HEAVY - CBE			9737	881
MEDIUM/HEAVY - COE/LOW ENTRY			9738	882
MEDIUM/HEAVY - COE/HIGH ENTRY			9739	883
MEDIUM/HEAVY - UNKOWN ENGINE LOCATION			9740	884
MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9742	890
MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK			9743 32530	898 899

#### 39 JAGUAR

MODEL	INCLUDES	YEAR	ORACLE	SAS
XJ-S COUPE		1976-1998	688	31
VANDEN PLAS		1999-2000	20220	32
XJ6/12 SEDAN/COUPE/XJ8/	L, XJ, C, 340/420 Sedan	1900-1998	691	32
XKE	V12, Roadster, 120	1900-1998	6531	33
XKE	2+2	1900-1998	6531	33
S-TYPE			40034	34
X100		1997-1998	6534	34
X-TYPE			44661	35
OTHER AUTOMOBILE			693	398
UNKNOWN AUTOMOBILE			694	399
UNKNOWN VEHICLE			695	999

#### 2 JEEP / KAISER-JEEP

MODEL	INCLUDES	YEAR	ORACLE S	SAS
	Militory M/D 01"	1000 1066	6160	101
CJ-2/CJ-3/CJ-4	Military: WB=81"	1900-1966		401
CJ-2/CJ-3/CJ-4	Military: WB=101"	1900-1966	6169 4	401
CJ-5/CJ-6/CH-7/CH-8	Scrambler, Bolde Eagle, Renegade, Laredo, Wrangler: WB=84"	1967-1998	6174 4	402
CJ-5/CJ-6/CH-7/CH-8	Scrambler, Bolde Eagle, Renegade, Laredo, Wrangler: WB=104"	1967-1998	6174 4	402
YJ-SERIES	Wrangler	1986-1998	6178 4	403
CHEROKEE (1984 ON)	Grand	1992-1998	6180 4	404
CHEROKEE (1984 ON)	Limited, Loredo, Pioneer, Briarwood	1984-1998	6180 4	404
LIBERTY			45081 4	405
CHEROKEE (1963 - 1983)	Wide Track, Chief, Commando, Jeepster	1963-1983	6183 4	421
GRAND WAGONEER	Wagoneer	1971-1991	6186 4	431
GRAND WAGONEER	Custom, Bougham Limited	1971-1991	6186 4	431
PICKUP	J-10, J-20, Honcho	1900-1998	6189 4	481
COMANCHE	Chief: WB=111"	1986-1992	6191 4	482
COMANCHE	Chief: WB=119"	1986-1992	6191 4	482
OTHER LIGHT TRUCK			136 4	498
UNKNOWN LIGHT TRUCK			137 4	499
UNKNOWN VEHICLE			138 9	999

6907 JENSEN

MODEL	INCLUDES	YEAR	ORACLE SAS
HEALY OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998	9603 37 251 37 252 37
73 KAWASAKI			
MODEL	INCLUDES	YEAR	ORACLE SAS
MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) ATC/ATV (000-050CC) ATC/ATV (001-124CC) ATC/ATV (051-124CC) ATC/ATV (125-349CC) ATC/ATV (125-349CC) ATC/ATV (350CC-OVER) ATC/ATV (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE			333701334702335703336704337705338706339709340731341732342733343734344739345798346799
85 KENWORTH			
MODEL	INCLUDES	YEAR	ORACLE SAS
MEDIUM/HEAVY TRUCK BASED MOTORHOME MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/LOW ENTRY MEDIUM/HEAVY - COE/HIGH ENTRY MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION MEDIUM/HEAVY - COE/ENTRY			9712 850 9713 881 9714 882 9718 883 9719 884 9720 890
MEDION/HEAVY - COE/ENTRY POSITION UNKNOWN MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK			9720 890 9721 898 32527 899
63 KIA			
MODEL	INCLUDES	YEAR	ORACLE SAS
SEPHIA SPECTRA RIO OPTIMA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998	47131384803238482333848434473398474399

SPORTAGE SEDONA OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE 6919 LADA		1996-1998	472 45083 475 304 305	401 441 498 499 999
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			286 287	53 53
6908 LAMBORGHINI				
MODEL	INCLUDES	YEAR	ORACLE	SAS
COUNTACH 5000S JALPA OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 40 LANCIA		1900-1998 1900-1998	9605 9607 253 254	38 38 38 38
MODEL	INCLUDES	YEAR	ORACLE	SAS
BETA SEDAN-HPE BETA COUPE - ZAGATO SCORPION OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE		1900-1980 1900-1982 1900-1978	696 697 6538 698 699 700	31 32 33 398 399 999
62 LAND ROVER				0.4.0
MODEL DISCOVERY (LR) COUNTY LWB (RR) / COUNT CLASSIC (RR) COUNTY LWB (RR) / COUNT CLASSIC (RR) 4.0 SE (RR) DEFENDER 90 (LR) OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE	INCLUDES Count Classic County LWB	YEAR 1994-1998 1994-1998 1900-1994 1995-1998 1994-1998	ORACLE 7914 7918 7918 7922 7916 468 469 470	401 421
59 LEXUS				
MODEL	INCLUDES	YEAR	ORACLE	SAS
ES250/ES-300 LS400 SC-300/SC-400	2-door Coupe	1990-1998 1990-1998 1992-1998	449 452 453	31 32 33

#### 13 LINCOLN

MODEL	INCLUDES	YEAR	ORACLE	SAS
CONTINENTAL/TOWN CAR	Continental	1980-1981	1099	1
CONTINENTAL/TOWN CAR	Town Car	1982-1998	1099	1
CONTINENTAL/TOWN CAR	Continental	1900-1979	1099	1
MARK	VI	1980-1983	1096	2
MARK	I, II, III, IV, V	1900-1970	1096	2
MARK	VII	1984-1998	1096	2
MARK	VII	1993-1998	1096	2
MARK	LSC, all Signature/Designer Series	1971-1980	1096	2
CONTINENTAL (82-ON)	All Signature/Designer Series	1982-1987	6438	5
CONTINENTAL (82-ON)	All Signature/Designer Series	1988-1998	6438	5
VERSAILLES		1977-1980	1100	11
LS		2000-2000	20803	12
OTHER AUTOMOBILE			1101	398
UNKNOWN AUTOMOBILE			1102	399
NAVIGATOR		1997-1998	6441	421
BLACKWOOD			44663	481
OTHER LIGHT TRUCK			6443	498
UNKNOWN LIGHT TRUCK			6444	499
UNKNOWN VEHICLE			1103	999

# 6909 LOTUS

MODEL	INCLUDES	YEAR	ORACLE	SAS
ESPRIT EUROPE OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998 1900-1998	9611 9609 255 256	39 39 39 39

# 86 MACK

MODEL	INCLUDES	YEAR	ORACLE SAS
MEDIUM/HEAVY BASED MOTORHOME			9722 850
MEDIUM/HEAVY - CBE			9723 881
MEDIUM/HEAVY - COE/LOW ENTRY			9724 882
MEDIUM/HEAVY - COE/HIGH ENTRY			9725 883
MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			9726 884

Medium/Heavy - Coe/Entry Position Unknown Medium/Heavy - Other Unknown Medium/Heavy Truck			9727 9728 32528	890 898 899
9808 MARMON				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN MEDIUM/HEAVY - COE/HIGH			9795 9799 9797	898 898
ENTRY MEDIUM/HEAVY - COE/LOW			9796	898 898
ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN			9800 9798	898 898
ENGINE LOCATION MEDIUM/HEAVY BASED MOTORHOME			9794	898
6910 MASERATI				
MODEL	INCLUDES	YEAR	ORACLE	SAS
BITURBO OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 41 MAZDA		1900-1998	9613 257 258	40 40 40
MODEL	INCLUDES	YEAR	ORACLE	SAS
RX2 RX3 RX4 RX7 GLC/PROTEGE/323	S, GS, GSL, SE	1972-1974 1972-1978 1974-1978 1970-1908	6553 6555 6557	31 32 33 34
GLC/PROTEGE/323 GLC/PROTEGE/323 COSMO 626 808 MIZER R-100 616/618 1800 929 MX-6 MIATA MX-3 MILLENIA MP3	DX Protege 323 GT, GS, GSL, SE Turbo GS	1979-1998 1977-1998 1990-1998 1977-1994 1976-1978 1979-1998 1972-1977 1976-1976 1900-1972 1900-1972 1900-1972 1988-1996 1988-1998 1990-1998 1992-1998	714 701 701 6559 702 6563 6565 6565 6567 6569 6571 703 712 711 710 708 45085	35 35 35 36 37 38 39 40 41 42 43 44 45 46 47 48

	1991-1998	6573	401
		31624	402
	1989-1998	709	441
Cab Plus, B-4000	1994-1998	704	471
B-2000, B-2200, B-2600, SE-5, LX	1900-1998	704	471
		717	498
		718	499
		719	999
		1989-1998           Cab Plus, B-4000         1994-1998	31624           1989-1998         709           Cab Plus, B-4000         1994-1998         704           B-2000, B-2200, B-2600, SE-5, LX         1900-1998         704           717         718

## 42 MERCEDES BENZ

MODEL	INCLUDES	YEAR	ORACLE	SAS
200/220/230/240/250/260/280/300/ 320 SE,CD,D,SD,E	Sedan and 5 passenger "C" only, SE, CD, D, SD, TD, TE, CE, E,	1900-1998	725	31
230/280 SL	2 seater only	1900-1998	6588	32
300/350/380/450/500SL/560SL	300/500 SL	1990-1994	632	33
300/350/380/450/500SL/560SL	2 seater only	1900-1994	632	33
350/380/420/450/560/ SLC		1900-1998	6593	34
280/300SEL		1900-1998	616	35
380/420/450/500/560SEL/500SEC/ 560SEC/350SDL/300S		1900-1998	631	36
300 SE/380/450 SE	280 S, 300 SD Sedan/350 SD	1900-1998	621	37
300 SE/380/450 SE	280 SE	1975-1998	621	37
600, 6.9 SEDAB	Pullman	1900-1998	633	38
190	D, E, 2.3, 2,5	1900-1998	720	39
300	CE Cabriolet	1993-1998	727	40
400/500 E	SE	1992-1998	641	41
220/280 C		1994-1900	636	42
S CLASS			22152	43
SL CLASS			22154	44
SLK			22156	45
CL			22158	46
CLK			22160	47
E			22163	48
OTHER AUTOMOBILE			639	398
UNKNOWN AUTOMOBILE			495	399
Μ		1997-2000	6597	401
G CLASS			45087	402
VAN DERIVATIVE	Kurbstar	1982-1998	6600	470
OTHER LIGHT TRUCK			496	498
UNKNOWN LIGHT TRUCK			497	499
MEDIUM/HEAVE - CBE			6602	881
MEDIUM/HEAVY - COE LOW ENTRY			6604	882
MEDIUM/HEAVY - COE HIGH ENTRY			6606	883
MEDIUM/HEAVY; UNKNOWN ENGINE LOCATION			6610	884
MEDIUM/HEAVY: COE ENTRY POSITION UNKNOWN			6612	890
OTHER MEDIUM/HEAVY TRUCK			498	898
UNK TYPE TRUCK (LIGHT/MED/HEAVY)			27273	899
UNKNOWN MEDIUM/HEAVY TRUCK			499	899
MEDIUM BUS			500	981

OTHER BUS UNKNOWN BUS TYPE UNKNOWN VEHICLE 501 988 6618 989 502 999

14 MERCURY				
MODEL	INCLUDES	YEAR	ORACLE	SAS
CYCLONE	GT, CJ, Spoiler	1900-1971	6467	2
CAPRI-DOMESTIC	RS, Turbo, GS, Black Magic	1979-1986	1105	3
COUGAR/XR7	XR-7, RS, LS, GS, Eliminator, Brougham, Villager,	1989-1998	1109	4
COUGAR/XR7	XR-7, RS, LS, GS, Eliminator, Brougham, Villager,	1967-1976	1109	4
COUGAR/XR7	XR-7, RS, LS, GS, Eliminator, Brougham, Villager,	1980-1988	1109	4
COUGAR/XR7	XR-7, RS, LS, GS, Eliminator, Brougham, Villager,	1977-1979	1109	4
COUGAR/XR7	XR-7, RS, LS, GS, Eliminator, Brougham, Villager,	1977-1979	1109	4
MARQUIS/MONTEREY	Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis	1979-1982	1108	6
MARQUIS/MONTEREY	Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=106"	1982-1998	1108	6
MARQUIS/MONTEREY	Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=114"	1982-1998	1108	6
MARQUIS/MONTEREY	Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=124"	1900-1978	1108	6
MARQUIS/MONTEREY	Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis: WB=121"	1900-1978	1108	6
COMET	Capri	1966-1967	6469	8
COMET	Caliente, GT, Voyager, 202	1971-1977	6469	8
COMET	Caliente, GT, Voyager, 202	1962-1967	6469	8
BOBCAT	Runabout, Villager	1975-1980	1104	9
MONTEGO	GT, MX, Villager, Brougham: WB=114"	1972-1976	6473	10
MONTEGO	GT, MX, Villager, Brougham: WB=114"	1972-1976	6473	10
MONTEGO	GT, MX, Villager, Brougham	1968-1973	6473	10
MONTEGO	Comet	1968-1970	6473	10
MONARCH	Ghia	1975-1980	1119	11
ZEPHYR	GS, Z-7	1978-1983	1131	12
LYNX/LN-7 (82-83)	L, LS, GS, RS, XR-3	1981-1987	1113	13
TOPAZ	L, LS, GS, 4 X 4	1984-1998	1124	15
SABLE	LS, GS	1986-1998	1121	17
CAPRI-FOREIGN	Capri II	1970-1977	1106	31
CAPRI-FOREIGN	2+2	1989-1994	1106	31
PANTERA	deTomaso	1972-1974	6478	33
TRACER	L, GL	1994-1998	1129	36
MYSTIQUE		1994-1998	1120	37
COUGAR			22165	38
OTHER AUTOMOBILE			1132	398
UNKNOWN AUTOMOBILE			1133	399
MOUNTAINEER		1996-1998	6480	401
VILLAGER	LS, GS	1993-1998	6482	443
OTHER LIGHT TRUCK			6484	498
UNKNOWN LIGHT TRUCK			6485	499
UNKNOWN VEHICLE			1134	999

56 MERKUR

MODEL

INCLUDES

YEAR ORACLE SAS

XR4Ti SCORPIO OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE 43 MG	Turbo Turbo	1985-1989 1987-1990	487 486 488 489 490	31 32 398 399 999
MODEL	INCLUDES	YEAR	ORACLE	SAS
MIDGET MGB ('76-'79) MGB ('67-'75) MGA TA/TC/TD/TF MGC OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE	GT GT	1976-1979 1967-1975 1900-1998 1900-1998 1900-1969	6542 6621 6623 6625 6627 6629 503 504 505	31 32 33 34 35 36 398 399 999
52 MITSUBISHI				
MODEL	INCLUDES	YEAR	ORACLE	SAS
STARION TREDIA CORDIA GALANT GALANT MIRAGE PRECIS ECLIPSE SIGMA 3000GT DIAMANTE OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN AUTOMOBILE MONTERO MINIVAN EXPO WAGON EXPO WAGON EXPO WAGON PICKUP OTHER LIGHT TRUCK	2+2, LE, Turbo L, LS, Turbo L, Turbo Sigma ECS L, Turbo Spyder, VR-4 Sport LS LRV, Sport WB=107.1" LRV, Sport WB=99.2" Mighty Max, SPX, 4 X 4	1983-1990 1983-1988 1983-1988 1985-1988 1985-1998 1985-1998 1990-1998 1989-1990 1991-1998 1992-1998 1987-1998 1987-1998 1992-1995 1992-1995 1990-1998	389 399	31 32 33 34 34 35 36 37 38 39 40 398 399 401 441 442 442 441 442
UNKNOWN LIGHT TRUCK MEDIUM/HEAVY - COE LOW ENTRY OTHER MEDIUM/HEAVY TRUCK UNK TYPE TRUCK	FUSO FE	1900-1998	400 6821 401 27274	499 882 898 899
(LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY			402	899
TRUCK CONVENTIONAL FRONT ENGINE FRONT ENGINE/FLAT FRONT REAR ENGINE/FLAT FRONT OTHER BUS			6823 6825 6827 403	981 982 983 988

UNKNOWN TYPE BUS UNKNOWN VEHICLE			6829 6831	989 999
6911 MORRIS				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MINOR OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998	9615 259 260	41 41 41
74 MOTO-GUZZI				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MOTORCYCLE (000-050CC) MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC) MOTORCYCLE (750CC-OVER) MOTORCYCLE (UNKNOWN CC) ATC/ATV (000-050CC) ATC/ATV (000-050CC) ATC/ATV (051-124CC) ATC/ATV (051-124CC) ATC/ATV (125-349CC) ATC/ATV (125-349CC) ATC/ATV (350CC-OVER) ATC/ATV (UNKNOWN CC) OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE			347 348 349 350 351 352 353 354 355 356 357 358 359 360	701 702 703 704 705 706 709 731 732 733 734 739 798 799
9810 NEOPLAN				
MODEL	INCLUDES	YEAR	ORACLE	SAS
BUS - CONVENTIONAL FRONT ENGINE BUS - FRONT ENGINE/FLAT FRONT BUS - REAR ENGINE/FLAT FRONT BUS BASED MOTORHOME OTHER BUS 35 NISSAN / DATSUN			9810 9811 9812 9809 9813	902 902 902 902 902
MODEL	INCLUDES	YEAR	ORACLE	SAS
F10 200/240 SX 200/240 SX 1200/210/B210 Z-CAR, ZX Z-CAR, ZX Z-CAR, ZX 310 510	Honeybee 2+2 2+2 240/260/280Z, 300 ZX, Turbo PL	1977-1978 1984-1998 1974-1983 1971-1982 1979-1998 1975-1978 1970-1998 1979-1982 1978-1981	6855 846 842 849 849 849 849 843 843	31 32 33 34 34 34 35 36

CUTLASS (RWD-ONLY)	350, Hurst Olds, 442, Calais Supreme, S, LS, Salon, Brougham, Vista Cruiser, Rallye	1900-1977	1052	1
CUTLASS (RWD-ONLY)	Supreme, S, LS, Salon, Brougham, Vista Cruiser, Rallye	1978-1988	1052	1
MODEL	INCLUDES	YEAR	ORACLE	SAS
21 OLDSMOBILE				
UNKNOWN MOTORED CYCLE			369	799
OTHER MOTORED CYCLE			368	798
MOTORCYCLE (UNKNOWN CC)			367	709
MOTORCYCLE (750CC-OVER)			366	705
MOTORCYCLE (350-449CC) MOTORCYCLE (450-749CC)			364 365	704 705
MOTORCYCLE (125-349CC) MOTORCYCLE (350-449CC)			363 364	703 704
MOTORCYCLE (051-124CC)			362	702
MOTORCYCLE (000-050CC)			361	701
	-			
MODEL	INCLUDES	YEAR	ORACLE	SAS
75 NORTON				
TRUCK UNKNOWN VEHICLE			764	999
(LIGHT/MED/HEAVY) UNKNOWN MEDIUM/HEAVY			763	899
			27276	899
OTHER MEDIUM/HEAVY TRUCK			762	898
MEDIUM/HEAVY COE HIGH ENTRY			6870	883
UNKNOWN LIGHT TRUCK			761	499
OTHER LIGHT TRUCK	Patrol	1900-1998	760	498
DATSUN/NISSAN PU/FRONTIER	PL620, King Cab, Hardbody	1973-1998	743	471
QUEST		1993-1998	747	443
AXXESS	,	1989-1990	6833	442
VAN	XE, GXE	1988-1998	757	441
XTERRA		1900-1990	31619	401
UNKNOWN AUTOMOBILE PATHFINDER		1986-1998	759 6867	399 401
			758	398
ALTIMA		1993-1999	12227	47
NX 1600/2000		1992-1998	742	46
MICRA		1987-1998	6865	45
PULSAR	NX	1983-1990	745	44
PULSAR	EXA	1986-1990	745	44
SENTRA		1983-1998	750	43
STANZA	XE	1982-1992	756	42
PL411, RL411	Si E 311, Si E 311, 1000, 2000, convenible	1900-1970	6863	40
ROADSTER	SPL 311, SRL 311, 1600, 2000, convertible	1977-1998	6861	39 40
710 810/MAXIMA	PL	1974-1977 1977-1998	6859 738	38 39
610	PL PL	1973-1976	6857	37
<b>A</b> 4 <b>A</b>		4070 4070	~~~~	~-

CUTLASS (RWD-ONLY)	Supreme, S, LS, Salon, Brougham, Vista Cruiser, Rallye 350, Hurst Olds, 442, Calais	1900-1977	1052
CUTLASS (RWD-ONLY)	Classic	1988-1988	1052
CUTLASS (RWD-ONLY)	F85	1900-1972	1052

1 1

DELTA 88	Royale, Custom, Delta, Jetstar 88, Delmont 88, Custom Cruiser	1985-1998	1051	2
DELTA 88	Royale, Custom, Delta, Jetstar 88, Delmont 88, Custom Cruiser	1977-1985	1051	2
DELTA 88	Royale, Custom, Delta, Jetstar 88, Delmont 88, Custom Cruiser	1900-1976	1051	2
DELTA 88	Starfire	1900-1966	1051	2
NINETY-EIGHT	Regency, Luxury	1986-1998	1071	3
NINETY-EIGHT	Regency, Luxury	1977-1984	1071	3
NINETY-EIGHT	Regency, Luxury	1900-1976	1071	3
TORONADO	XSR, Trofeo, Brougham, Custom	1986-1992	1079	5
TORONADO	XSR, Trofeo, Brougham, Custom	1979-1985	1079	5
TORONADO	XSR, Trofeo, Brougham, Custom	1966-1978	1079	5
COMMERCIAL SERIES	Ambulance/Hearse	1900-1998	6646	6
STARFIRE	SX, GT	1975-1980	1078	12
OMEGA	RWD	1975-1979	1076	15
OMEGA	X-body type FWD	1980-1985	1076	15
FIRENZA	S, LS, SX, Cruiser, GT	1982-1988	1069	16
CIERA	Cutlass Ciera, Brougham, ES	1982-1998	1054	17
CALAIS	GT, ES, 500	1985-1991	1050	18
CUTLASS (FWD)	Supreme	1988-1998	1060	20
ACHIEVA	SC	1992-1998	1046	21
AURORA		1994-1998	1049	22
INTRIGUE			22167	23
ALERO			22169	24
OTHER AUTOMOBILE			1081	398
UNKNOWN AUTOMOBILE			1082	399
BRAVADA		1991-1994	22171	401
SILHOUETTE		1990-1998	1077	441
OTHER LIGHT TRUCK			1083	498
UNKNOWN LIGHT TRUCK			853	499
OTHER VEHICLE			854	998
UNKNOWN VEHICLE			855	999

#### 9805 OSHKOSH

MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE			9774	805
MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9778	805
MEDIUM/HEAVY - COE/HIGH ENTRY			9776	805
MEDIUM/HEAVY - COE/LOW ENTRY			9775	805
MEDIUM/HEAVY - OTHER			9779	805
MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			9777	805
MEDIUM/HEAVY BASED MOTORHOME			9773	805

# 29 OTHER DOMESTIC MANUFACTURER (light vehicles)

MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER MAKE UNKNOWN MAKE			932 398 933 399

OTHER LIGHT TRUCK OTHER MEDIUM/HEAVY TRUCK OTHER BUS OTHER VEHICLE			12917 498 12919 898 12921 988 12923 998
69 OTHER FOREIGN MAI	NUFACTURER (light vehicles)		
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER MAKE UNKOWN MAKE OTHER LIGHT TRUCK OTHER MEDIUM/HEAVY TRUCK OTHER BUS OTHER VEHICLE			129163983253339912918498129208981292298812924998
15691 OTHER MAKE (med	/heavy truck/bus or "other")		
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE OTHER LIGHT TRUCK TRUCK BASED MOTORHOME OTHER MEDIUM/HEAVY TRUCK BUS BASED MOTORHOME OTHER BUS OTHER VEHICLE			12911398129134982612685012914898259089501291298812915998
78 OTHER MAKE MOPE	)		
MODEL	INCLUDES	YEAR	ORACLE SAS
0-50cc 51-124cc UNKNOWN cc OTHER MOTORED CYCLE UNKNOWN MOTORED CYCLE			325087013250970232510709299798300799
79 OTHER MAKE MOTOR	RED CYCLE		
MODEL	INCLUDES	YEAR	ORACLE SAS
0-50cc 51-124cc 125-349cc 350-449cc 450-749cc 750c or greater Unknown cc ATC/ATV 0-50cc ATC/ATV 51-124cc ATC/ATV 125-349cc ATC/ATV 350cc OR GREATER ATV/ATC UNKNOWN cc OTHER MOTORED CYCLE		1900-1998 1900-1998 1900-1998 1900-1998 1900-1998 1900-1998 1900-1998	9625701962670296277039628704962970596307069631709325117313251273232513733325147343251573932516798

UNKNOWN MOTORED CYCLE

32517 799

#### 87 PETERBILT

MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY BASED			9729	850
MEDIUM/HEAVY - CBE			9730	881
MEDIUM/HEAVY - COE/LOW ENTRY			9731	882
MEDIUM/HEAVY - COE/HIGH ENTRY			9732	883
MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			9733	884
MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9734	890
MEDIUM/HEAVY - OTHER UNKNOWN MEDIUM/HEAVY TRUCK			9735 32529	898 899

#### 44 PEUGEOT

MODEL	INCLUDES	YEAR	ORACLE	SAS
304		1971-1973	6635	31
403		1900-1967	6637	32
404		1900-1970	6639	33
404	Station Wagon	1900-1970	6639	33
504/505	Station Wagon	1970-1991	6642	34
504/505	STI, STX, Turbo, S, GL GLS, Liberte	1970-1991	6642	34
604	SL, D	1977-1984	6645	35
405		1989-1991	6647	36
OTHER AUTOMOBILE			506	398
UNKNOWN AUTOMOBILE			507	399
MOTORCYCLE (000-050CC)			508	701
MOTORCYCLE (051-124CC)			509	702
MOTORCYCLE (UNKNOWN CC)			510	709
UNKNOWN MOTORED CYCLE			511	799
UNKNOWN VEHICLE			512	999

# 9 PLYMOUTH

MODEL	INCLUDES	YEAR	ORACLE	SAS
VALIANT/DUSTER/SCAMP	100, 200, Brougham, Signet, Custom, Special, 340/360, Twister: WB=108"	1900-1976	6320	1
VALIANT/DUSTER/SCAMP	100, 200, Brougham, Signet, Custom, Special, 340/360, Twister: WB=111"	1900-1976	6320	1
SATELLITE/BELVEDERE	Belveder I/II, GTX, Roadrunner, Sebring, Sebring Plus, Superbird, Brougham	1900-1974	6323	2
FURY	Roadrunner	1975-1975	6325	3
FURY	Salon, VIP, Sport, Suburban	1975-1978	6325	3
FURY	I, II, III	1900-1974	6325	3
GRAN FURY	Sedan, Brougham, Custom Sport, Suburban	1975-1981	36	4
GRAN FURY	Sedan, Brougham, Custom Sport, Suburban	1982-1989	36	4
BARRACUDA	Formula, S, 340, AAR, 'Cuda, Gran Coupe	1965-1973	6329	5

VOLARE	Custom, Premier, Roadrunner, Police: WB=109"	1976-1980	53	6
VOLARE	Custom, Premier, Roadrunner, Police: WB=113"	1976-1980	53	6
CARAVELLE	Turbo, SE	1985-1989	29	7
HORIZON	TC-3, Miser, Turismo 2.2, Custom, SE, America Expo	1978-1990	40	8
HORIZON	Duster	1985-1990	40	8
RELIANT (K)	SE, LE	1981-1989	44	11
SCAMP (CAR BASED PICKUP)	GT, 2.2	1982-1984	6331	13
SUNDANCE	Turbo	1987-1998	47	17
ACCLAIM	LX, LE	1989-1998	27	19
NEON	Expresso	1994-1998	42	20
CRICKET		1971-1972	32518	31
ARROW	Fire Arrow, GS, GT	1976-1980	28	32
SAPPORO	all imported	1978-1983	46	33
CHAMP/COLT (EXCLUDES	Turbo, Custom	1979-1994	30	34
VISTA)				
CHAMP/COLT (EXCLUDES VISTA)	Station Wagon	1984-1994	30	34
CONQUEST	TSI	1984-1989	34	35
LASER	RS, Turbo	1989-1998	41	37
BREEZE		1996-1998	6333	38
PROWLER			6335	39
OTHER AUTOMOBILE			57	398
UNKNOWN AUTOMOBILE			58	399
TRAILDUSTER		1900-1998	6337	421
COLT VISTA	4 X 4	1987-1998	32	441
VOYAGER (MINIVAN)	SE, LX: WB=112"	1984-1998	37	442
VOYAGER (MINIVAN)	SE, LX: WB=119"	1984-1998	37	442
VAN-FULLSIZE (B-SERIES)	Includes Voyager, Sport, Premier	1965-1995	32520	461
ARROW PICKUP (FOREIGN)		1900-1998	6341	471
OTHER LIGHT TRUCK			59	498
UNKNOWN LIGHT TRUCK			60	499
UNKNOWN VEHICLE			61	999
22 PONTIAC				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER LIGHT			40759	
LEMANS/TEMPEST (THRU 79)	Safari, T-37, Luxury, Grand Sport, GT-37, Sprint, Judge Grand AM, Grand Lemans	1973-1975	893	1
LEMANS/TEMPEST (THRU 79)	Safari, T-37, Luxury, Grand Sport, GT-37, Sprint, Grand	1976-1977	893	1
LEMANS/TEMPEST (THRU 79)	Lemans Safari, T-37, Luxury, Grand Sport, GT-37, Sprint, Grand	1978-1979	893	1

Safari, T-37, Luxury, Grad Sport, GTO, GT-37, Sprint,

Brougham, Gand Safari, Safari, Granville, 2+2

GES Coding and Editing Manual-2001

LEMANS/TEMPEST (THRU 79)

NNE

NNE

NNE

NNE

NNE

NNE

BONNEVILLE/CATALINA/PARISIE

BONNEVILLE/CATALINA/PARISIE

BONNEVILLE/CATALINA/PARISIE

BONNEVILLE/CATALINA/PARISIE

BONNEVILLE/CATALINA/PARISIE

BONNEVILLE/CATALINA/PARISIE

Lemans

Grand Lemans

Executive, Starchief

Executive, Starchief

Executive, Starchief

Executive, Starchief

Parisienne

SE, SSE, SSEi

1900-1973

1977-1981

1969-1976

1982-1984

1983-1984

1987-1998

1900-1968

893

895

895

895

895

895

895

1

2

2

2

2

2

2

FIERO	2M4, 2M6, GT, SE	1984-1988	873	5
VENTURA	II, SJ, Sprint, Custom	1971-1977	6681	8
VENTURA	GTO	1974-1977	6681	8
FIREBIRD/TRANS AM	Esprit, Formula, GTA, Redbird, Yellowbird, Skybird, SE	1982-1998	875	9
FIREBIRD/TRANS AM	Esprit, Formula, GTA, Redbird, Yellowbird, Skybird, SE	1967-1981	875	9
GRAND PRIX (RWD)	J, LJ, SJ, Brougham, 2+2	1973-1977	885	10
GRAND PRIX (RWD)	J, LJ, SJ, Brougham, 2+2	1978-1987	885	10
GRAND PRIX (RWD)	J, LJ, SJ, Brougham, 2+2	1963-1972	885	10
ASTRE	Safari, SJ, Custom	1975-1977	6684	11
SUNBIRD (THRU 80)	Safari, Sport, Formula	1976-1980	897	12
T1000/1000	4 door	1981-1987	905	13
T1000/1000	2 door	1981-1987	905	13
PHOENIX	LJ, SJ	1980-1984	896	15
PHOENIX	LJ, SJ	1977-1979	896	15
J2000/SUNBIRD/SUNFIRE	Sunfire-GT/SE	1995-1998	901	16
J2000/SUNBIRD/SUNFIRE	Sunbird	1984-1994	901	16
J2000/SUNBIRD/SUNFIRE	Le, Se, GT, Convertible	1982-1994	901	16
6000	STE, SE, LE	1982-1998	858	17
GRAND AM	SE, LE	1985-1998	881	18
GRAND AM	SE, LE	1980-1980	881	18
GRAND PRIX (FWD)	SE, McLaren Turbo, GTP	1988-1998	886	20
LEMANS (88-on)	SE, Tempest	1988-1998	894	31
OTHER AUTOMOBILE			909	398
UNKNOWN AUTOMOBILE			910	399
AZTEK			40755	401
VIBE			45089	402
TRANS SPORT/MONTANA		1990-1998	906	441
OTHER LIGHT TRUCK			911	498
UNKNOWN LIGHT TRUCK			912	499
UNKNOWN VEHICLE			913	999

#### 45 PORSCHE

MODEL	INCLUDES	YEAR	ORACLE	SAS
911	Panorama	1996-1998	516	31
911	L, S, E, T, SC, Carrera, Slopenose, Speedstar	1900-1998	516	31
912	E, T	1900-1969	6654	32
914	S, 1.8, 2.0, 914/6	1970-1976	6656	33
924	Turbo, S	1977-1988	513	34
928	S	1978-1998	514	35
930	Turbo	1989-1994	6658	36
944	Turbo, S	1983-1992	515	37
959		1989-1994	6661	38
968		1992-1995	6663	39
986 BOXSTER			22173	40
OTHER AUTOMOBILE	Spyder, Speedster, 356	1900-1998	518	398
UNKNOWN AUTOMOBILE			519	399
UNKNOWN VEHICLE			520	999
6917 RELIANT				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE			282	49

#### UNKNOWN AUTOMOBILE

283 49

#### 46 RENAULT/AMC

MODEL	INCLUDES	YEAR	ORACLE S	SAS
LECAR	5	1976-1983	521	31
DAUPHINE/10/R-8/CARAVELLE		1900-1971	6671	32
12	R12L, R12TL	1972-1977	6674	33
15	R14TL	1973-1976	6676	34
16	R16	1969-1972	6678	35
17	R17, Gordini Coupe, R17TL	1973-1980	6680	36
R18I	Sportwagon	1981-1998	522	37
FUEGO	TL, TS, GTL, GTS, Turbo	1982-1985	525	38
ALLIANCE/ENCORE/GTA, CONVERTIBLE	L, DL, Limited, X-37	1983-1998	523	39
ALPINE	GT	1987-1998	6682	41
MEDALLION	DL, LX	1987-1987	526	44
PREMIER		1987-1987	6685	45
OTHER AUTOMOBILE			527 3	398
UNKNOWN AUTOMOBILE			528 3	399
UNKNOWN VEHICLE			529 9	999
6912 ROLLS ROYCE/BE	INTLEY			

# MODELINCLUDESYEARORACLESASCLOUD/SHADOW SERIES1900-199826142OTHER AUTOMOBILE27242UNKNOWN AUTOMOBILE27342

47 SAAB

MODEL	INCLUDES	YEAR	ORACLE	SAS
99/99E/900 SONNETT 95/96/97 9000, CS 9000, CS 9 - 3 9 - 5 OTHER AUTOMOBILE UNKNOWN AUTOMOBILE	S, Turbo, Cabriolet II, III, V-4 CS S, Trubo	1900-1998 1968-1974 1900-1973 1993-1998 1985-1998	530 6707 6710 531 531 22175 22177 533 534	31 32 33 34 34 35 36 398 399
UNKNOWN VEHICLE			535	999

#### 24 SATURN

MODEL	INCLUDES	YEAR	ORACLE SAS
SL	SL1, SL2, SL3	1991-1998	6719 1
SC	SC1, SC2	1991-1996	6721 2
SC	includes 3 door coupe	1997-2000	6721 2
SW	SW1, SW2	1993-1998	6723 3
EV	EV1	1997-1998	6725 4

LS LW OTHER AUTOMOBILE UNKNOWN AUTOMOBILE VUE OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE			31617 37084 923 924 45091 45158 45159 925	5 6 398 399 401 498 499 999
9807 SCANIA				
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9788 9792	807 807
MEDIUM/HEAVY - COE/HIGH ENTRY			9790	807
MEDIUM/HEAVY - COE/LOW ENTRY			9789	807
MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			9793 9791	807 807
MEDIUM/HEAVY BASED MOTORHOME			9787	807
6913 SIMCA				
MODEL	INCLUDES	YEAR	ORACLE	SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE			274 275	44 44
61 STERLING				
MODEL	INCLUDES	YEAR	ORACLE	SAS
827S OTHER AUTOMOBILE UNKNOWN AUTOMOBILE UNKNOWN VEHICLE	Li	1986-1991	7912 465 466 467	31 398 399 999
24428 STERLING TRUCKS	3			
MODEL	INCLUDES	YEAR	ORACLE	SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN MEDIUM/HEAVY - COE/HIGH			24429 24437 24433	808 808 808
ENTRY MEDIUM/HEAVY - COE/LOW			24433	808
ENTRY MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			24439 24435	808 808

# 2901 STUDEBAKER

MODEL	INCLUDES	YEAR	ORACLE SAS
CRUISER GRAN TURISMO HAWK LARK OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1966 1900-1966 1900-1966 1900-1966	9542 1 9538 1 9540 1 9536 1 9544 1 9545 1
2906 STUTZ			
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE		1900-1998 1900-1998	9575 398 9576 398
48 SUBARU			
MODEL	INCLUDES	YEAR	ORACLE SAS
DL/FE/G/GF/GL/GLF/STD/LOYALE DL/FE/G/GF/GL/GLF/STD/LOYALE STAR 360 LEGACY XT/XT6 JUSTY SVX IMPREZA BRAT DL, GL OTHER AUTOMOBILE UNKNOWN AUTOMOBILE FORESTER OTHER LIGHT TRUCK UNKNOWN LIGHT TRUCK UNKNOWN VEHICLE 6914 SUNBEAM	4 wheel drive, Turbo Loyale Brighton, Outback, Outback II 4WD Turbo, convertible, DL DL, GL Outback, Outback II	1972-1989 1990-1994 1970-1971 1969-1970 1989-1998 1986-1998 1987-1994 1992-1998 1993-1998	543       31         543       31         6720       32         6722       33         541       34         546       35         540       36         545       37         539       38         6724       43         550       398         551       399         22179       401         32522       498         32523       499         552       999
MODEL	INCLUDES	YEAR	ORACLE SAS
OTHER AUTOMOBILE UNKNOWN AUTOMOBILE 53 SUZUKI			276 45 277 45
MODEL	INCLUDES	YEAR	ORACLE SAS
SA310 SWIFT ESTEEM OTHER AUTOMOBILE UNKNOWN AUTOMOBILE	GLX GTi, GTX	1986-1998 1989-1998 1995-1998	6839 31 411 34 405 35 416 398 417 399

SAMURAI	Standard, Deluxe	1985-1995	406	401
SIDEKICK/GRAND VITARA			407	402
X-90/VITARA			415	403
OTHER LIGHT TRUCK			418	498
UNKNOWN LIGHT TRUCK			419	499
MOTORCYCLE (000-050CC)			420	701
MOTORCYCLE (051-124CC)			421	702
MOTORCYCLE (125-349CC)			422	703
MOTORCYCLE (350-449CC)			423	704
MOTORCYCLE (450-749CC)			424	705
MOTORCYCLE (750CC-OVER)			425	706
MOTORCYCLE (UNKNOWN CC)			426	709
ATC/ATV (000-050CC)			427	731
ATC/ATV (051-124CC)			428	732
ATC/ATV (125-349CC)			429	733
ATC/ATV (350CC-OVER)			430	734
ATC/ATV (UNKNOWN CC)			431	739
UNKNOWN MOTORED CYCLE			432	799
UNKNOWN VEHICLE			433	999

# 49 ΤΟΥΟΤΑ

MODEL	INCLUDES	YEAR	ORACLE	SAS
CORONA	Mark II, Custom, 1900, 2000, Deluxe	1900-1982	561	31
COROLLA	FX-16	1986-1998	560	32
COROLLA	1100, 1200, 1600, SR-5, LE, Deluxe, Custom	1969-1985	560	32
CELICA	1900, 2000, GT, ST	1972-1998	556	33
CELICA	GTS	1972-1993	556	33
SUPRA	Celica Supra, Soarer	1979-1998	559	34
CRESSIDA		1978-1992	562	35
CROWN	2300, 2600	1900-1971	6746	36
CARINA	2000	1972-1973	6748	37
TERCEL	Corolla Tercel, 4WD Wagon	1980-1998	571	38
STARLET		1981-1984	568	39
CAMRY	LE, Deluxe, XLE, Coupe	1983-1998	555	40
MR-2		1985-1995	564	41
PASEO		1992-1998	565	42
AVALON		1995-1998	554	43
SOLARA			22182	44
ECHO			31612	45
PRIUS			44664	46
OTHER AUTOMOBILE			608	398
UNKNOWN AUTOMOBILE			607	399
4-RUNNER		1985-1998	553	401
RAV-4		1996-1998	6750	402
HIGHLANDER			45095	403
HIGHLANDER			44666	403
MATRIX			45093	404
LANDCRUISER		1976-1998	563	421
SEQUOIA			40895	422
MINVAN/PREVIA	Previea	1991-1998	567	441
MINVAN/PREVIA	LE, Cargo	1984-1990	567	441
SIENNA			22184	442
PICKUP	SR-5, Extra Cab, Sport, LN44, Chinook, Wonder Wagon	1974-1998	566	471

ТАСОМА		6752	472
T-100	1993-1998	570	481
TUNDRA		31615	482
OTHER LIGHT TRUCK		610	498
UNKNOWN LIGHT TRUCK		611	499
UNKNOWN VEHICLE		612	999

50 TRIUMPH

MODEL	INCLUDES	YEAR	ORACLE S	SAS
SPITFIRE	I, II, III, IV, 1500	1900-1981	6754	31
GT-6	МКЗ	1967-1973	6756	32
TR4	TR2, TR3, TR4A	1900-1968	6758	33
TR6		1969-1976	6760	34
TR7/8		1975-1981	6762	35
HERALD	Vitesse	1900-1998	6764	36
STAG		1971-1973	6766	37
OTHER AUTOMOBILE	2000, 1200 series	1900-1998	572	398
UNKNOWN AUTOMOBILE			573	399
MOTORCYCLE (000-050CC)			574	701
MOTORCYCLE (051-124CC)			575	702
MOTORCYCLE (125-349CC)			576	703
MOTORCYCLE (350-449CC)			577	704
MOTORCYCLE (450-749CC)			578	705
MOTORCYCLE (750CC-OVER)			579	706
MOTORCYCLE (UNKNOWN CC)			580	709
UNKNOWN MOTORED CYCLE			581	799
UNKNOWN VEHICLE			582	999
6915 TVR				
MODEL	INCLUDES	YEAR	ORACLE S	SAS
OTHER AUTOMOBILE			278	46
UNKNOWN AUTOMOBILE			279	46
2999 UNKNOWN DOMES	TIC MANUFACTURER			

MODEL	INCLUDES	YEAR	ORACLE S	AS
UNKNOWN AUTOMOBILE			24515 3	399
UNKNOWN LIGHT TRUCK			732 4	199
UNKNOWN MOTORED CYCL	E		728 7	799
UNKNOWN MEDIUM/HEAVY			734 8	399
TRUCK UNKNOWN BUS TYPE UNKNOWN VEHICLE				989 999
6999 UNKNOWN FOR	REIGN MANUFACTURER			
MODEL	INCLUDES	YEAR	ORACLE S	AS
UNKNOWN AUTOMOBILE				399
UNKNOWN LIGHT TRUCK			733 4	199

UNKNOWN MOTORED CYCLE UNKNOWN MEDIUM/HEAVY TRUCK	1993-1998	729 735	799 899
UNKNOWN BUS TYPE		731	989
UNKNOWN VEHICLE		737	999

# 99 UNKNOWN MANUFACTURER

MODEL	INCLUDES	YEAR	ORACLE	SAS
UNKNOWN AUTOMOBILE UNKNOWN LIGHT TRUCK UNKNOWN MOTORED CYCLE			10351 624 238	399 499 799
UNK TYPE TRUCK (LIGHT/MED/HEAVY)			27277	899
UNKNOWN MEDIUM/HEAVY			626	899
UNKNOWN BUS TYPE UNKNOWN VEHICLE			623 627	989 999

# 9899 UNKNOWN MEDIUM/HEAVY TRUCKS AND BUSES

MODEL	INCLUDES	YEAR	ORACLE SA	AS
Unknown medium/heavy truck Unknown bus type		1900-1999 1900-1999		399 988

# 30 VOLKSWAGEN

MODEL	INCLUDES	YEAR	ORACLE	SAS
KARMANN GHIA		1900-1974	6759	31
BEETLE 1300/1500	flat windshield, 94.5" WB	1900-1977	6761	32
SUPER BEETLE	Distinguished by curved windshield, 95.3" WB	1971-1980	5820	33
411/412	Squareback/Fastback	1971-1974	6763	34
SQUAREBACK/FASTBACK	Type 3, 1600	1900-1974	6765	35
RABBIT	L, GTI, Sport, LS, Custom, DL, Deluxe	1975-1984	964	36
DASHER		1974-1981	6767	37
SCIROCCO	16V	1975-1988	965	38
JETTA	GL, GLI	1981-1992	950	40
QUANTUM	Synco	1982-1988	961	41
GOLF/CABRIOLET	Synco, GTI, Cabriolet, GT, GL	1985-1992	934	42
RABBIT PICKUP	car/based pickup	1980-1983	6769	43
FOX	GL	1987-1998	941	44
CORRADO		1989-1998	937	45
PASSAT		1990-1998	958	46
JETTA III		1993-1998	957	47
GOLF III		1993-1998	946	48
NEW BEETLE			22187	49
OTHER AUTOMOBILE			968	398
UNKNOWN AUTOMOBILE			969	399
THE THING (181)		1973-1975	6771	401
VANAGON/CAMPER	Bus, Kombi, Van	1900-1998	935	441
EUROVAN		1992-1998	940	442
OTHER LIGHT TRUCK			781	498
UNKNOWN LIGHT TRUCK			782	499

783 998

784 999

OTHER VEHICLE UNKNOWN VEHICLE

51 VOLVO

MODEL	INCLUDES	YEAR	ORACLE	SAS
122	S	1900-1968	6774	31
142/144/145	S, E, GL, GLS, Deluxe	1900-1974	6777	32
164	S, E	1969-1975	6780	33
240/242/244/245	DL. GL, GLE, GLT, Deluxe	1975-1998	583	34
262/264/265	GL	1976-1982	587	35
1800	E, S, ES	1900-1973	6782	36
760/780	GLE, Turbo	1983-1990	596	38
760/780	GLE, Turbo	1987-1992	596	38
740	GLE, GT, Turbo, GL	1986-1992	590	39
940	GLE, Turbo, SE	1991-1998	6784	40
960		1992-1998	6786	41
850	GLT, Wagon	1993-1998	6788	42
70 SERIES			24066	43
90 SERIES			24068	44
80 SERIES	S80		31610	45
40 SERIES	Includes S40, V40		31608	46
60 SERIES			44667	47
OTHER AUTOMOBILE			600	398
UNKNOWN AUTOMOBILE			601	399
MEDIUM/HEAVY CBE			6790	881
MEDIUM/HEAVY COE LOW ENTRY			6791	882
MEDIUM/HEAVY COE HIGH ENTRY			6792	883
MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			6793	884
MEDIUM/HEAVY: COE ENTRY POSITION UNKNOWN			6794	890
OTHER MEDIUM/HEAVY TRUCK			602	898
UNKNOWN MEDIUM/HEAVY TRUCK			603	899
MEDIUM BUS			604	981
OTHER BUS			379	988
UNKNOWN TYPE BUS			6796	989
UNKNOWN VEHICLE			6798	999

# 9809 WARD LAFRANCE

MODEL	INCLUDES	YEAR	ORACLE SA	٩S
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9802 89 9806 89	
MEDIUM/HEAVY - COE/HIGH			9804 89	98
entry Medium/Heavy - Coe/Low Entry			9803 89	98
MEDIUM/HEAVY - OTHER			9807 89	98
MEDIUM/HEAVY - UNKNOWN ENGINE LOCATION			9805 89	98

9801 898

MEDIUM/HEAVY BASED
MOTORHOME

9804 WESTERN STAR

MODEL	INCLUDES	YEAR	ORACLE SAS
MEDIUM/HEAVY - CBE MEDIUM/HEAVY - COE/ENTRY POSITION UNKNOWN			9767 804 9771 804
MEDIUM/HEAVY - COE/HIGH ENTRY			9769 804
MEDIUM/HEAVY - COE/LOW ENTRY			9768 804
MEDIUM/HEAVY - OTHER MEDIUM/HEAVY - UNKNOWN			9772 804 9770 804
ENGINE LOCATION MEDIUM/HEAVY BASED MOTORHOME			9766 804
30189 WINNEBAGO			
MODEL	INCLUDES	YEAR	ORACLE SAS
VAN BASED MOTORHOME LIGHT TRUCK BASED MOTORHOME			3025047030251498
UNKNOWN TYPE LIGHT MOTORHOME			30252 499
MOTOR HOME MEDIUM / HEAVY OTHER			30195 850 30198 898
MEDIUM / HEAVY UNKNOWN			30199 899
UNKNOWN VEHICLE			45160 999
76 YAMAHA			
MODEL	INCLUDES	YEAR	ORACLE SAS
MOTORCYCLE (000-050CC)			370 701
MOTORCYCLE (051-124CC) MOTORCYCLE (125-349CC)			371 702 372 703
MOTORCYCLE (350-449CC)			373 704
MOTORCYCLE (450-749CC)			374 705
MOTORCYCLE (750CC-OVER)			375 706
MOTORCYCLE (UNKNOWN CC)			376 709
ATC/ATV (000-050CC) ATC/ATV (051-124CC)			377 731 378 732
ATC/ATV (051 12400) ATC/ATV (125-349CC)			294 733
ATC/ATV (350CC-OVER)			295 734
ATC/ATV (UNKNOWN CC)			296 739
OTHER MOTORED CYCLE			297 798
UNKNOWN MOTORED CYCLE			298 799
57 YUGO			
MODEL	INCLUDES	YEAR	ORACLE SAS

# **Consistency Checks:**

	IF	THEN
VV003A	MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 <sup>th</sup> and 5 <sup>th</sup> characters of the VIN (V07) equal ZN, ZP, ZR or ZY	BODY TYPE (V05) must equal 17.
VV601	BODY TYPE (V05) equals 1-13, 17	MODEL (V04) must equal 1-399.
VV602	MODEL (V04) equals 1-399	BODY TYPE (V05) must equal 1-13 or 17.
VV603	BODY TYPE (V05) equals 14	MODEL (V04) must equal 401-420, 498 or 499.
VV604	BODY TYPE (V05) equals 15	MODEL (V04) must equal 421-430, 498 or 499.
VV605	BODY TYPE (V05) equals 16	MODEL (V04) must equal 431-440, 498 or 499.
VV606	BODY TYPE (V05) equals 19	MODEL (V04) must equal 498 or 499.
VV607	BODY TYPE (V05) equals 20	MODEL (V04) must equal 441-460, 498 or 499.
VV608	BODY TYPE (V05) equals 21	MODEL (V04) must equal 461-470, 498 or 499.
VV609	BODY TYPE (V05) equals 22-29	MODEL (V04) must equal 441-470, 498 or 499.
VV611	BODY TYPE (V05) equals 30	MODEL (V04) must equal 471-480, 498 or 499.
VV612	BODY TYPE (V05) equals 31	MODEL (V04) must equal 481-490, 498 or 499.
VV613	BODY TYPE (V05) equals 32, 33 or 39	MODEL (V04) must equal 471-490, 498 or 499.
VV615	BODY TYPE (V05) equals 40-42 or 45	MODEL (V04) must equal 498.
VV616	BODY TYPE (V05) equals 48	MODEL (V04) must equal 499.
VV617	BODY TYPE (V05) equals 49	MODEL (V04) must equal 999.
VV618	BODY TYPE (V05) equals 50 or 59	MODEL (V04) must equal 902, 981- 983, 988 or 989.

VV619	BODY TYPE (V05) equals 58	MODEL (V04) must equal 902, 950, 981-983, 988 or 989.
VV620	BODY TYPE (V05) equals 60, 64 or 66	MODEL (V04) must equal 801-808, 881-890, 898 or 899.
VV621	BODY TYPE (V05) equals 65	MODEL (V04) must equal 850, 898, 899 or Oracle values 9744, 9752, 9759, 9766, 9773, 9780 or 9787.
VV622	BODY TYPE (V05) equals 78	MODEL (V04) must equal 801-808, 881-890, 898 or 899.
VV623	BODY TYPE (V05) equals 79	MODEL (V04) must equal 899.
VV624	BODY TYPE (V05) equals 80-82 or 89	MODEL (V04) must equal 701-706, 709 or 799.
VV625	BODY TYPE (V05) equals 88	MODEL (V04) must equal 798.
VV627	BODY TYPE (V05) equals 90	MODEL (V04) must equal 731-734, 739 or 799.
VV628	BODY TYPE (V05) equals 91-93 or 97	MODEL (V04) must equal 998.
VV629	BODY TYPE (V05) equals 99	MODEL (V04) must equal 999.
RANGE	MAKE (V03) equals 29 or 69	MODEL, (V04) must not equal 498, 898, 988 or 998.
RANGE	MAKE (V03) equals 98	MODEL (v04) must not equal 398 or 498
RANGE	MODEL (V04) must not equal null.	
<u>Warnings</u>		

	IF	THEN
VV300E	VIN (V07) passes the check digit test	MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known.

Notify NHTSA

	IF	THEN
NOTIFY NHTSA	Please notify NHTSA of the specific m make/model is selected.	nake and model when "other"

# **V05 BODY TYPE**

Screen Heading:	Vehicle Data
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Screen Name: Body Type (395-E)

- Long Name: What is the vehicle body type?
- **SAS Name:** Vehicle.Body\_Typ
- Oracle Name: GES.Vehicle.BodyTypeID

### Element Values:

Screen Oracle SAS

### AUTOMOBILES

- 1 01 Convertible (excludes sun-roof, t-bar)
  - 2 02 2-Door Sedan, Hardtop, Coupe
  - 3 03 3-Door/2-Door Hatchback
- 4 04 4-Door Sedan, Hardtop
- 5 05 5-Door/4-Door Hatchback
- 6 06 Station Wagon (excluding van and truck based)
- 7 07 Hatchback, Number of Doors Unknown
- 17 17 3-Door Coupe
- 8 08 Other Automobile Type
- 9 09 Unknown Automobile Type

### AUTOMOBILE DERIVATIVES

- 10 10 Auto Based Pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit Pickup)
- 11 11 Auto Based Panel (Cargo Station Wagon, auto based Ambulance/Hearse)
- 12 12 Large Limousine (More than four side doors or stretched chassis)
- 13 13 Three Wheel Automobile or Automobile Derivative

### UTILITY VEHICLES

- 14 14 Compact Utility (Jeep CJ-2 CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky)
- 15 15 Large Utility (Jeep Cherokee (83 and before), Ramcharger, Trailduster, Bronco-full size (78 and after), full size Blazer, full size Jimmy, Hummer, Land Cruiser, Rover, Scout, and Yukon)

 16 16 Utility Station Wagon (Chevrolet Suburban, GMC Suburba, Travelall, Grand Wagoneer; also includes suburban limousine)
 19 19 Utility Vehicle, Unknown Body Type

# VAN BASED LIGHT TRUCKS (**#** 4,536 KG GVWR)

- 20 20 Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Windstar, Villager, Lumina APV, Silhouette, Trans Sport, Astro, Safari, Vanagon/Camper, Toyota Van and Minivan, Previa, Nissan Minivan, Quest, Expo Wagon, and Mitsubishi Minivan)
- 21 21 Large Van (B150-350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, and Vandura)
- 22 22 Step Van or Walk-in Van (4,536 kg GVWR)
- 23 23 Van Based Motorhome
- 24 24 Van Based School Bus
- 25 25 Van Based Other Bus
- 28 28 Other Van Type (Hi-Cube, Kary)
- 29 29 Unknown Van Type

## LIGHT CONVENTIONAL TRUCKS (pickup style cab **#** 4,536 kg GVWR)

- 30 30 Compact Pickup (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- 31 31 Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- 32 32 Pickup With Slide-In Camper
- 33 33 Convertible Pickup
- 39 39 Unknown (Pickup Style) Light Conventional Truck

# OTHER LIGHT TRUCKS (# 4,536 kg GVWR)

- 40 40 Cab Chassis Based (includes Rescue Vehicle, Light Stake, Dump, and Tow Truck)
- 41 41 Truck Based Panel
- 42 42 Light Truck Based Motorhome (Chassis Mounted)
- 45 45 Other Light Truck Type
- 48 48 Unknown Light Truck Type (Utility, Van, Pickup or Other Light Truck)
- 49 49 Unknown Light Vehicle Type (Automobile, Utility, Van or Light Truck)

#### BUSES

- 50 50 School Bus (designed to carry students, not cross country or transit)
- 58 58 Other Bus Type (transit, intercity, bus based motorhome)
- 59 59 Unknown Bus Type

### MEDIUM/HEAVY TRUCKS (>4,536 kg GVWR)

- 60 60 Step Van
- 64 64 Single Unit Straight Truck
- 65 65 Medium/Heavy Truck Based Motorhome
- 66 66 Truck-Tractor (Cab only or with any number of trailing units)
- 78 78 Unknown Medium/Heavy Truck Type
- 79 79 Unknown Truck Type (light/medium/heavy)

### MOTORED CYCLES (does not include all-terrain vehicle/cycles)

- 80 80 Motorcycle
- 81 81 Moped (motorized bicycle)
- 82 82 Three Wheeled Motorcycle or Moped
- 88 88 Other Motored Cycle Type (minibike, motorscooter)
- 89 89 Unknown Motored Cycle Type

### OTHER VEHICLES

- 90 90 ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- 91 91 Snowmobile
- 92 92 Farm Equipment Other Than Trucks
- 93 93 Construction Equipment Other Than Trucks (includes graders)
- 97 97 Other Type Vehicle (includes go-cart, fork lift, city street sweeper, motorized wheelchairs)
- 99 99 Unknown Body Type

\* The screen values displayed are determined by the make and model of vehicle selected. For example, if the make/model selected is Cadillac/Catera, only AUTOMOBILE body types are displayed. The screen values for the body types displayed are sequential numbers beginning with one (1).

### Remarks:

### **AUTOMOBILES**

These attributes are used to classify different types of passenger cars. These type of light vehicles, referred to as automobiles, are designed primarily to transport passengers.

**Convertible (excludes sun-roof and t-bar)** refers to a passenger car equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over 2-door or 4-door codes.

**2-door sedan, hardtop, coupe** refers to a passenger car equipped with two doors for ingress/egress and a separate trunk area for cargo (i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**3-door/2-door hatchback** refers to a passenger car equipped with two doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

**3-door coupe** refers to a passenger car equipped with three doors for ingress/egress in which 2 of the doors are located on the driver's side and a separate trunk area for cargo(i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**4-door sedan**, hardtop refers to a passenger car equipped with four doors for ingress/egress and a separate trunk area for cargo (i.e., trunk lid hinged below the backlight). Folding rear seats do not necessarily violate the separate "trunk area" concept.

**5-door/4-door hatchback** refers to a passenger car equipped with four doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

**Station wagon (excluding van and truck based)** refers to a passenger car with an enlarged cargo area. The entire roof covering the cargo area is generally equal in height from front to rear and full height side glass is installed between the C and D-pillars. The rearmost area is not permanently partitioned from the forward passenger compartment area (e.g., "horizontal window shades" to hide cargo do not constitute partitions).

**Hatchback**, number of doors unknown refers to a passenger car with an unknown number of doors for ingress/egress and a rear hatch opening for cargo (i.e., hinged above the backlight). The cargo area is not permanently partitioned from the passenger compartment area.

**Other Automobile Type** refers to any passenger car that cannot be described by other automobile codes.

**Unknown Automobile Type** is used when it is known that the vehicle is a passenger car, but there is insufficient data to determine the type.

### AUTOMOBILE DERIVATIVES

This describes certain passenger cars that have been modified to perform cargo-related tasks.

Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup) refers to a passenger car based, pickup type vehicle. The roof area (and side glass) rearward of the front seats on a station wagon have been removed and converted into a pickup-type cargo box.

Auto based panel (cargo station wagon, auto based ambulance/hearse) refers to an automotive station wagon that may have sheet metal rearward of the B-pillar rather than glass.

**Large Limousine** - more than four side doors or stretched chassis refers to an automobile that has sections added within its wheelbase to increase length and passenger/cargo carrying capacity.

Three-wheel automobile or automobile derivative refers to three-wheel vehicles with an enclosed passenger compartment.

### UTILITY VEHICLES (#4,536 kg GVWR)

**Multi-purpose vehicles (MPV)** are designed to have off-road capabilities. These vehicles are: generally four wheel drive  $(4 \times 4)$ , have increased ground clearance, and are equipped with a strong frame. Four wheel drive automobiles are not considered MPVs.

**Compact Utility** (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky) refers to a short wheelbase and narrow tracked multi-purpose vehicle designed to operate in rugged terrain.

**Large Utility** (Jeep Cherokee (83 and before), Ramcharger, Trailduster, Bronco-full size (78 and after), full size Blazer, full size Jimmy, Hummer, Land Cruiser, Rover, Scout, and Yukon) refers to fullsize multi-purpose vehicles primarily designed around a shortened pickup truck chassis. Generally a station wagon style body, some model are equipped with a removable top.

**Utility Station Wagon** (Chevrolet Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine) refers primarily to a pickup truck based chassis enlarged to a station wagon.

**Utility Vehicle, Unknown Body Type** is used when it is known that the vehicle is a utility vehicle, but there is insufficient data to determine the specific type.

### VAN BASED LIGHT TRUCKS (#4,536 kg GVWR)

Light trucks (#4,536 kg GVWR) are designed to maximize cargo/passenger area versus overall length. Basically a "box on wheels", these vehicles are identifiable by their enclosed cargo/passenger area and relatively short (or non-existent) hood.

**Minivan** (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper) refers to down-sized cargo or passenger vans.

**Large Van** (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura) refers to a standard cargo or passenger van. These vans will generally have a larger capacity in both volume and GVWR.

**Step Van or Walk-In Van** (#4,536 kg GVWR) refers to a multi-stop delivery vehicle with a GVWR less than or equal to 4,536 kilograms. Examples are the Grumman LLV used by the US Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.

**Van Based Motorhome** (#4,536 kg GVWR) refers to a van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in attributes minivans, large van, step van; however, a frame mounted recreational unit is added behind the driver/cab area. This code takes priority over attributes minivan and large van.

**Van Based School Bus** (#4,536 kg GVWR) is a passenger van designed to carry students (passengers) to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. Van based school buses converted for other uses (e.g., church bus) also use this code.

**Van Based Other Bus** (#4,536 kg GVWR) is a van derivative (e.g., taxi, small local transit) designed to carry passengers for low occupancy functions or purposes. Van based school buses do not use this code.

**Other Van Type** (Hi-Cube Van, Kary) refers to a cargo or delivery van where the chassis and cab portions from the B-pillar forward of this vehicle are the same as in Minivans or Large Vans with a frame mounted cargo area unit added behind the driver/cab area or if the van cannot be described as a Minivan, Large Van, Step-van or a Van-based motorhome. Annotate the van type when using this code. This code takes priority over Minivans and Large Vans.

**Unknown Van Type** is used when it is known that this vehicle is a light van, but its specific type cannot be determined.

# LIGHT CONVENTIONAL TRUCKS (Pickup Style Cab, #4,536 kg GVWR)

Light Conventional Trucks are used to describe vehicles commonly referred to as pickup trucks and some of their derivatives. These light trucks are characteristically designed with a small cab containing a single row of seats (extended cabs with additional seats are available for some models), a large hood covering a conventional engine placement, and a separate open box area (approximately 180 to 240 centimeters long) for cargo.

**Compact Pickup** (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup) is used to describe a pickup truck having a width of 178 centimeters or less.

**Large Pickup** (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100) is used to describe a pickup truck having a width of greater than 178 centimeters.

**Pickup with Slide-in Camper** is used to describe any pickup truck that is equipped with a slide-in camper. A slide-in camper is a unit that mounts within a pickup bed. Pickup bed caps, tonneau covers or frame mounted campers are not applicable for this code.

**Convertible Pickup** refers to a pickup truck equipped with a removable or retractable roof. To qualify for this code, the entire roof must open. Convertible roofs are generally fabric; however, removable hardtops are also included. This code takes priority over compact and large pickups.

**Unknown Pickup Style Light Conventional Truck** is used when this vehicle is a Light Conventional Truck, but there is insufficient data to determine the specific code. OTHER LIGHT TRUCKS (#4,536 kg GVWR)

**Other Light Trucks** are used to describe vehicles that are based upon a conventional light pickup frame, but a commercial or recreational body has been affixed to the frame rather than a pickup box.

**Cab Chassis Based** (includes rescue vehicles, light stake, dump and tow truck) is used to describe a light vehicle with a pickup style cab and a commercial (non-pickup) body attached to the frame. Included are pickup based ambulances and tow trucks.

**Truck Based Panel** is used to describe a truck based station wagon that has sheet metal rather than glass above the beltline rearward of the B-pillars.

**Light Truck Based Motorhome** (chassis mounted) is used to describe a frame mounted recreational unit attached to a light van or conventional chassis.

**Other Light Conventional Truck Type** is used for light conventional trucks that cannot be described elsewhere.

**Unknown Light Truck Type** is used when it is known that the vehicle is a light truck chassis based vehicle but insufficient data exist to specify utility, van, pickup or other light vehicle.

**Unknown Light Vehicle Type** (automobile, utility, van or light truck) is used when it is known that the vehicle is a light vehicle, but insufficient data exists to specify what type of light vehicle it is.

### BUSES (Excludes Van Based)

**Buses** are defined as any medium/heavy motor vehicle designed primarily to transport large groups of passengers.

**School Bus** (designed to carry students, not cross country or transit) is a bus designed to carry passengers to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this code.

**Other Bus Type** (e.g., transit, intercity, bus based motorhome) is a transport device designed to carry passengers for longer periods of time. These vehicle may be classified as over-the-road, transit, intercity, bus related motorhome (other than school bus based) or other.

**Unknown Bus Type** is used when it is known the transport device is a bus but there is insufficient data to choose between attributes School Bus or Other Bus Type.

#### MEDIUM/HEAVY TRUCKS (>4,536 kg GVWR)

Medium/Heavy Trucks describe a single unit truck specifically designed for carrying cargo on the same chassis as the cab.

They pertain to a truck-tractor designed for towing trailers or semi-trailers. Although towing is their primary purpose, some truck-tractors are equipped with cargo areas located rearward of the cab.

**Step Van** (>4,536 kg GVWR) defines a single unit enclosed body with a GVWR greater than 4,536 kilograms and an integral driver's compartment and cargo area. Step vans are generally equipped with a folding driver seat mounted on a pedestal and a sliding door for easy ingress/egress.

**Single Unit Straight Truck** describes a non-articulated truck designed to carry cargo. The gross vehicle weight rating of the vehicle must exceed 4,536 kilograms. Ford F-450 and Ford F-550 super duty series are coded **Single Unit Straight Truck**.

**Medium/Heavy Truck Based Motorhome** describes a recreational vehicle mounted on a single unit medium/heavy truck chassis.

**Truck-Tractor** (Cab only or with any number of trailing units) describes a fifth wheel equipped tractor-trailer power unit. The number of trailing units is not a consideration.

**Unknown Medium/Heavy Truck Type** is used when it is unknown whether the medium/heavy truck is a single unit truck or a truck-tractor and/or trailer combination and it is known that the vehicle is either a medium or heavy truck with GVWR >4,536 kilograms. **Unknown Truck Type** (light/medium/heavy) is used when it is known that this vehicle is a truck, but there is insufficient data to classify the vehicle further.

#### MOTORED CYCLES (Does Not Include All Terrain Vehicles/Cycles)

**Motorcycle** is used when the vehicle is a two-wheeled open (i.e., no enclosed body) vehicle propelled by an internal combustion engine. Motorcycles equipped with a side car also use this code.

**Moped** (motorized bicycle) is used when the vehicle is a motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

**Three-Wheeled Motorcycle or Moped** is used when the vehicle is a three-wheeled open vehicle propelled by an internal combustion engine or a three-wheeled motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

**Other Motored Cycle** (minibike, motor scooter) is used when the vehicle in question does not qualify for attributes motorcycle, moped, three-wheeled motorcycle or moped (e.g., motor scooter).

**Unknown Motored Cycle Type** is used when it is known that the vehicle is a motored cycle, but no further data is available.

### OTHER VEHICLES

Other Vehicles describes all motored vehicles that are designed primarily for off-road use.

**ATV** (All-Terrain Vehicle) and ATC (All-Terrain Cycle) is used for off-road recreational vehicles which cannot be licensed for use on public roadways. ATVs have 4 or more wheels and ATCs have 2 or 3 wheels. Generally, the tires have low pressure and wide profile (i.e., flotation/balloon).

**Snowmobile** refers to a vehicle designed to be operated over snow propelled by an internal combustion engine.

**Farm Equipment Other Than Trucks** refers to farming implements other than trucks propelled by an internal combustion engine (e.g., farm tractors, combines, etc.).

**Construction Equipment Other Than Trucks** refers to construction equipment other than trucks propelled by an internal combustion engine (e.g., bulldozer, roadgrader, etc.).

**Other Vehicle Type** is used when the motorized vehicle in question does not qualify for Construction equipment other than trucks, Farm equipment other than trucks, Snowmobile, ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle) (e.g., go-kart, dune buggy, "kit"car, motorized wheelchair, etc.).

**Unknown Body Type** is used when there is no available information regarding the type of vehicle. This lack of information prohibits the accurate classification of this vehicle within one of the preceding codes.

### **Consistency Checks:**

	IF	THEN
AV149	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) equal to 80-89	at least one ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29 or 99.
PV001	PERSON TYPE (P03) equals 1 and BODY TYPE (V05) equals 80-89	SEATING POSITION (P04) must not equal 00, 12-53 or 99.
PV005	PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 80-89	SEATING POSITION (P04) must not equal 13-19 or 22-53.
PV007	PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50-59	SEATING POSITION (P04) must not equal 11-39, 50, 52 or 99.

PV010	PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59	SEATING POSITION (P04) must not equal 12-50 or 52.
PV011	PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08	BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93.
PV066	RESTRAINT SYSTEM USE (P15) equals 1-3 or 6	BODY TYPE (V05) must not equal 80-89 or 90.
PV125	EJECTION (P06) equals 1or 2	BODY TYPE (V05) must not equal 80-89, 90 or 91.
PV172	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2	BODY TYPE (V05) must equal 01-39, 48 or 49; 60-79 [if MODEL YEAR (V06) is >1996] or 40-42, 45, 50, 58 or 59 [if MODEL YEAR (V06) is > 1993].
PV196A	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 1- 9,17 or 49	MODEL YEAR (V06) must be greater than 1971.
PV196B	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 20- 25, 28, 29 or 48	MODEL YEAR (V06) must be greater than 1990.
PV196C	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 14- 16, 19, 30-33, 39	MODEL YEAR (V06) must be greater than 1992.
VP002	PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01-02, 04, 10, 30-32, 39, 41, 90 or 91	SEATING POSITION (P04) must not equal 50 or 51.
VP207	If BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS CODED (V10) is greater than 00	EJECTION (P06) must equal 0.
VP207A	If BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS (V10B) is greater than 00	EJECTION (P06) must equal 0.
VP208	HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) must equal 0.
VV003	SPECIAL USE (V08) equals 01	BODY TYPE (V05) must equal 02-09, 12, 17, 20-29 or 49.

VV003A	MAKE (V03) equals 24 and MODEL (V04) equals 2 and the 4 <sup>th</sup> and 5 <sup>th</sup> characters of the VIN (V07) equal ZN, ZP, ZR or ZY	BODY TYPE (V05) must equal 17.
VV006	SPECIAL USE (V08) equals 02	BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24, 28-29, 45, 48-49, 50 or 59.
VV009	BODY TYPE (V05) equals 80-89	SPECIAL USE (V08) must not equal 01-03, 06, 07, 10, 11 or 12.
VV010	SPECIAL USE (V08) equals 03	BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59 or 99.
VV012	BODY TYPE (V05) equals 01-05, 07-09 or 17	NUMBER OF OCCUPANTS CODED (V10) must not be greater than 15.
VV012A	BODY TYPE (V05) equals 01-05, 07-09 or 17	NUMBER OF OCCUPANTS (V10B) must not be greater than 15.
VV013	BODY TYPE (V05) equals 06, 11, 14 or 15	NUMBER OF OCCUPANTS CODED (V10) must not be greater than 22.
VV013A	BODY TYPE (V05) equals 06, 11, 14 or 15	NUMBER OF OCCUPANTS (V10B) must not be greater than 22.
VV015	BODY TYPE (V05) equals 80-89	NUMBER OF OCCUPANTS CODED (V10) must not be > 5.
VV015A	BODY TYPE (V05) equals 80-89	NUMBER OF OCCUPANTS (V10B) must not be greater than 5.
VV025	SPECIAL USE (V08) equals 06	BODY TYPE (V05) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 64, 79, 97 or 99.
VV085	BODY TYPE (V05) equals 25 or 58	SPECIAL USE (V08) must not equal 00 or 02.
VV086	BODY TYPE (V05) equals 59	SPECIAL USE (V08) must = 99.
VV101	BODY TYPE (V05) equals 92	SPECIAL USE (V08) must equal 11.
VV102	SPECIAL USE (V08) equals 11	BODY TYPE (V05) must equal 92.
VV110	BODY TYPE (V05) is not equal to 50-64, 66-79 or 99	CARRIER'S IDENTIFICATION NUMBER (V31) must equal 000000.
VV110A	BODY TYPE (V05) equals 50-64, 66-79 or 99	the NGA variable must not equal null.
VV110B	BODY TYPE (V05) does not equal 50-64, 66-79 or 99	the NGA variable must not equal null.

VV111	BODY TYPE (V05) equals 80-89	ROLLOVER TYPE (V30) must equal 00.
VV112	BODY TYPE (V05) equals 93	SPECIAL USE (V08) must equal 12.
VV113	SPECIAL USE (V08) equals 12	BODY TYPE (V05) must equal 93.
VV115	VEHICLE TRAILING (V13) equals 5 or 6 and BODY TYPE (V05) equals 50, 59-64 or 66-79	NUMBER OF AXLES ON VEHICLE, INCL TRAILER (V32) must not equal 00.
VV116	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) does not equal 80-89	ROLLOVER TYPE (V30) must not equal 00.
VV145	CARGO BODY TYPE (V33) equals 01	BODY TYPE (V05) must equal 50, 58 or 59.
VV153	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.
VV154	BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99	HAZARDOUS MATERIALS RELEASE (V36) must equal 0.
VV155	BODY TYPE (V05) equals 99	HAZARDOUS MATERIALS RELEASE (V36) must equal 9.
VV156	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS RELEASE (V36) must equal 0.
VV157	BODY TYPE (V05) equals 99	HAZARDOUS MATERIALS PLACARDED (V34) must equal 9.
VV160	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV161	BODY TYPE (V05) equals 99	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999.
VV162	BODY TYPE (V05) is not equal to 60,64, 66-79 or 99	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.
VV163	BODY TYPE (V05) equals 99	CARGO BODY TYPE (V33) must equal 99.
VV164	BODY TYPE (V05) is not equal to 50-64, 66-79 or 99	CARGO BODY TYPE (V33) must equal 00.
VV165	BODY TYPE (V05) is not equal to 50-64, 66-79 or 99	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (V32) must equal 00.

VV166	BODY TYPE (V05) equals 99	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (V32) must equal 99.
VV167	BODY TYPE (V05) equals 99	CARRIER'S IDENTIFICATION NUMBER (V31) must equal 999999.
VV169	BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV174	VEHICLE TRAILING (V13) equals 1 and BODY TYPE (V05) equals 66	CARGO BODY TYPE (V33) must equal 98.
VV219	BODY TYPE (V05) equals 50, 59-64, 66-79 or 99	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.
VV220	BODY TYPE (V05) equals 50, 59-64, 66-79 or 99	CARGO BODY TYPE (V33) must not equal 00.
VV221	BODY TYPE (V05) equals 60, 64 or 66-79 and SPECIAL USE (V08) equals 07	CARGO BODY TYPE (V33) must equal 98.
VV223	CARRIER'S IDENTIFICATION NUMBER (V31) does not equal 000000 or 999999	BODY TYPE (V05) must equal 50-64, 66-79 or 99.
VV248	BODY TYPE (V05) equals 50 or 59	CARGO BODY TYPE (V33) must equal 01.
VV249	BODY TYPE (V05) equals 58	CARGO BODY TYPE (V33) must equal 01 or 98.
VV601	BODY TYPE (V05) equals 1-13, 17	MODEL (V04) must equal 1-399.
VV602	MODEL (V04) equals 1-399	BODY TYPE (V05) must equal 1-13 or 17.
VV603	BODY TYPE (V05) equals 14	MODEL (V04) must equal 401-420, 498 or 499.
VV604	BODY TYPE (V05) equals 15	MODEL (V04) must equal 421-430, 498 or 499.
VV605	BODY TYPE (V05) equals 16	MODEL (V04) must equal 431-440, 498 or 499.
VV606	BODY TYPE (V05) equals 19	MODEL (V04) must equal 498 or 499.
VV607	BODY TYPE (V05) equals 20	MODEL (V04) must equal 441-460, 498 or 499.
VV608	BODY TYPE (V05) equals 21	MODEL (V04) must equal 461-470, 498 or 499.

VV609	BODY TYPE (V05) equals 22-29	MODEL (V04) must equal 441-470, 498 or 499.
VV611	BODY TYPE (V05) equals 30	MODEL (V04) must equal 471-480, 498 or 499.
VV612	BODY TYPE (V05) equals 31	MODEL (V04) must equal 481-490, 498 or 499.
VV613	BODY TYPE (V05) equals 32, 33 or 39	MODEL (V04) must equal 471-490, 498 or 499.
VV615	BODY TYPE (V05) equals 40-42 or 45	MODEL (V04) must equal 498.
VV616	BODY TYPE (V05) equals 48	MODEL (V04) must equal 499.
VV617	BODY TYPE (V05) equals 49	MODEL (V04) must equal 999.
VV618	BODY TYPE (V05) equals 50 or 59	MODEL (V04) must equal 902, 981- 983, 988 or 989.
VV619	BODY TYPE (V05) equals 58	MODEL (V04) must equal 902, 950, 981-983, 988 or 989.
VV620	BODY TYPE (V05) equals 60, 64 or 66	MODEL (V04) must equal 801-808, 881-890, 898 or 899.
VV621	BODY TYPE (V05) equals 65	MODEL (V04) must equal 850, 898, 899 or Oracle values 9744, 9752, 9759, 9766, 9773, 9780 or 9787.
VV622	BODY TYPE (V05) equals 78	MODEL (V04) must equal 801-808, 881-890, 898 or 899.
VV623	BODY TYPE (V05) equals 79	MODEL (V04) must equal 899.
VV624	BODY TYPE (V05) equals 80-82 or 89	MODEL (V04) must equal 701-706, 709 or 799.
VV625	BODY TYPE (V05) equals 88	MODEL (V04) must equal 798.
VV627	BODY TYPE (V05) equals 90	MODEL (V04) must equal 731-734, 739 or 799.
VV628	BODY TYPE (V05) equals 91-93 or 97	MODEL (V04) must equal 998.
VV629	BODY TYPE (V05) equals 99	MODEL (V04) must equal 999.
RANGE	BODY TYPE (V05) must not be null.	

# <u>Warnings</u>

	IF	THEN
AV100	STRATUM (A23) equals 3 or 4 and BODY TYPE (V05) equals 01-49	MANNER OF LEAVING SCENE (V19) should not equal 2.
AV121	STRATUM (A23) equals 1 or 3	BODY TYPE (V05) should not equal 60-79.
AV230	STRATUM (A23) equals 4 and at least one BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 1, 2, 3 or 4.
PP045	PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) should equal 0.
PV068	RESTRAINT SYSTEM USE (P15) equals 5	BODY TYPE (V05) should equal 80-90.
PV166	SEATING POSITION (P04) equals 31-39	BODY TYPE (V05) should not equal 01, 02, 03, 04 or 05.
PV171	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and BODY TYPE (V05) equals 20	VEHICLE MAKE (V03) should equal 06, 07, 09, 12, 14, 20, 21, 22, 35, 41 or 49.
PV172A	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and VEHICLE MODEL YEAR (V06) > 1996	BODY TYPE (V05) should not equal 40, 41, 42, 45 or 50-99.
VA102	BODY TYPE (V05) equals 24 or 50	SCHOOL BUS RELATED (A21) should equal 1.
VP173	BODY TYPE (V05) equals 40-45 or 50-97	AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 0.
VP174D	BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11	AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9.
VP192	SEATING POSITION (P04) equals 53 and BODY TYPE (V05) does not equal 01,06 or 30-39	EJECTION (P06) should equal 0.
VV030	VEHICLE TRAILING (V13) equals 2	BODY TYPE (V05) should not equal 50-58, 80-89, 90 or 91.
VV032	BODY TYPE (V05) equals 01-05, 07-09, 17 or 97	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 8.

VV032A	BODY TYPE (V05) equals 01-05, 07-09, 17 or 97	NUMBER OF OCCUPANTS (V10B) should not be greater than 8.
VV033	BODY TYPE (V05) equals 12	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 15.
VV033A	BODY TYPE (V05) equals 12	NUMBER OF OCCUPANTS (V10B) should not be > 15.
VV034	BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 12.
VV034A	BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79	NUMBER OF OCCUPANTS (V10B) should not be > 12.
VV036	BODY TYPE (V05) equals 80-89 or 91	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 2.
VV036A	BODY TYPE (V05) equals 80-89 or 91	NUMBER OF OCCUPANTS (V10B) should not be > 2.
VV037	BODY TYPE (V05) equals 90	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 6.
VV037A	BODY TYPE (V05) equals 90	NUMBER OF OCCUPANTS (V10B) should not be greater than 6.
VV076	BODY TYPE (V05) equals 66	VEHICLE TRAILING (V13) should not equal 1.
VV084	BODY TYPE (V05) equals 24 or 50	SPECIAL USE (V08) should equal 02.
VV109	BODY TYPE (V05) equals 50-64 or 66-79	CARRIER'S IDENTIFICATION NUMBER (V31) should not equal 000000.
VV114	SPECIAL USE (V08) equals 10	BODY TYPE (V05) should =11.
VV185	CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V05) equals 66	VEHICLE TRAILING (V13) should equal 1.
VV244	BODY TYPE (V05) equals 66 or 78 and VEHICLE TRAILING (V13) equals 1	NUMBER OF AXLES ON VEHICLE, INCL TRAILER (V32) should equal 2, 3 or 99.
VV300E	VIN (V07) passes the check digit test	MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known.

# Post Entry

	IF	THEN
AV099	STRATUM (A23) equals 1	MANNER OF LEAVING SCENE (V19) should equal 2 for at least one vehicle where BODY TYPE (V05) equals 1-49.
AV145	STRATUM (A23) equals 1	at least one BODY TYPE (V05) should equal 01-49.
AV146	STRATUM (A23) equals 2	at least one BODY TYPE (V05) should equal 60-79.
AV231	STRATUM (A23) equals 4 and no BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 2, 3 or 4.
AV236	SCHOOL BUS RELATED (A21) equals 1	at least one BODY TYPE (V05) should equal 24 or 50.
PV188	(any) INJURY SEVERITY (P09) equals 1, 2, 3, 4 or 5 and (any) BODY TYPE (V05) equals 60-79	STRATUM (A23) should equal 02.
PV233	INJURY SEVERITY (P09) equals 1 and at least one BODY TYPE (V23) equals 60-79	STRATUM (A23) should not equal 4.
VP143	no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 2-5 and no BODY TYPE (V05) EQUALS 60-79 -or- no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 1-5 and at least 1 BODY TYPE (V05) EQUALS 60-79	STRATUM (A23) should equal 4.
VP224	BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2	RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9.
VV116A	ROLLOVER TYPE (V30) equals 10-99 and BODY TYPE (V05) does not equal 80-89	at least one HARMFUL EVENT (A06) must equal 01.

## V06 VEHICLE MODEL YEAR

Screen Heading:		Vehicle	Vehicle Data	
Screen Name:		Year (	Year (400-E)	
Long Name:		What i	What is the vehicle model year?	
SAS Name:		Vehicle	Vehicle.Model_Yr	
Oracle Name:		GES.V	GES.Vehicle.ModelYear	
Element Values:				
Screen	Oracle	SAS		
xxxx	XXXX	xxxx	Four Digit Model Year	
*	-9999	9999	Unknown	
Domorko				

### Remarks:

Enter the 4 digit model year.

# Consistency Checks:

	IF	THEN
PV172	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2	BODY TYPE (V05) must equal 01-39, 48 or 49; 60-79 [if MODEL YEAR (V06) is >1996] or 40-42, 45, 50, 58 or 59 [if MODEL YEAR (V06) is > 1993].
PV196A	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 1- 9,17 or 49	MODEL YEAR (V06) must be greater than 1971.
PV196B	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 20- 25, 28, 29 or 48	MODEL YEAR (V06) must be greater than 1990.
PV196C	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 14- 16, 19, 30-33, 39	MODEL YEAR (V06) must be greater than 1992.

VV300A	VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present	the VEHICLE MODEL YEAR (V06) must match the 10 <sup>th</sup> character of the VIN (V07).
<u>Warnings</u>		
	IF	THEN
PV172A	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and VEHICLE MODEL YEAR (V06) > 1996	BODY TYPE (V05) should not equal 40, 41, 42, 45 or 50-99.
VP174D	BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11	AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9.
VV300A	VEHICLE MODEL YEAR (V06) is greater than 1980	the VEHICLE MODEL YEAR (V06) should match the 10 <sup>th</sup> character of the VIN (V07).
VV300D	VEHICLE MODEL YEAR (V06) is greater than 1980 and all 17 characters of the VIN (V07) are present	VIN (V07) should pass the check digit test.
VV300E	VIN (V07) passes the check digit test	MAKE (V03), Model (V04), BODY TYPE (V05) and Model Year (V06) should be known.

# V13 VEHICLE TRAILING

: Vehicle	Vehicle Data		
Trailing	Trailing Unit (460-E)		
Was th	Was this vehicle towing trailing units?		
Vehicle	Vehicle.Trailer		
GES.V	GES.Vehicle.Trailing		
e SAS			
2 3 4 5	No Trailing Units One Trailing Unit Two Trailing Units Three or More Trailing Units Yes, Number of Units Unknown Unknown		
	Trailing Was th Vehicle GES.V e SAS 1 2 2 3 3 4 4		

### Remarks:

Any unit that trails behind a power unit is a trailing unit. Examples of trailing units include: horse trailers, fifth wheel trailers, travel trailers, camper trailers, boat trailers, truck trailers (semi, full, log, tanker, etc), towed motor vehicles or any other trailer.

This variable is attempting to determine if the vehicle was towing a trailing unit. If the linkage is fixed, then the trailing unit is considered a towed unit. If the linkage is not fixed (e.g., one vehicle is pulling another using a rope), then each vehicle is considered to be separate.

Enter **No Trailing Units** when this vehicle was not towing a wheeled unit.

Enter **One Trailing Unit** when one unit was being towed by this vehicle.

Enter **Two Trailing Units** when this vehicle was towing two units.

Enter Three or More Trailing Units when this vehicle was towing three or more units.

Enter **Yes, Number of Units Unknown** when it is known that there was a towed unit but the number can not be determined.

Enter **Unknown** when it can not be determined from any information on the PAR if a unit was being towed.

# Consistency Checks:

# <u>Errors</u>

	IF	THEN
AV106	HARMFUL EVENT (A06) equals 05	VEHICLE TRAILING (V13) for the involved vehicle must not equal 1.
PV006	SEATING POSITION (P04) equals 52	VEHICLE TRAILING (V13) must not equal 1.
VV005	JACKKNIFE (V14) equals 1	VEHICLE TRAILING (V13) must not equal 1or 6.
VV115	VEHICLE TRAILING (V13) equals 5 or 6 and BODY TYPE (V05) equals 50, 59-64 or 66-79	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.
VV091	HARMFUL EVENT (A06) equals 05	VEHICLE TRAILING (V13) must not equal 1 or 6.
VV153	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.
VV156	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS RELEASE (V36) must equal 0.
VV160	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV174	VEHICLE TRAILING (V13) equals 1 and BODY TYPE (V05) equals 66	CARGO BODY TYPE (V33) must equal 98.

# <u>Warnings</u>

	IF	THEN
VV030	VEHICLE TRAILING (V13) equals 2	BODY TYPE (V05) should not equal 50-58, 80-89, 90 or 91.
VV076	BODY TYPE (V05) equals 66	VEHICLE TRAILING (V13) should not equal 1.
VV185	CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V05) equals 66	VEHICLE TRAILING (V13) should equal 1.
VV244	BODY TYPE (V05) equals 66 or 78 and VEHICLE TRAILING (V13) equals 1	NUMBER OF AXLES ON VEHICLE, INCL TRAILER (V32) should equal 02, 03 or 99.

# V14 JACKKNIFE

Screen Heading:		Vehicle Data			
Screen Name:		Jackki	Jackknife (470-R)		
Long Name:		Did a jackknife situation occur?			
SAS Name:		Vehicle.Jacknife			
Oracle Name:		GES.Vehicle.Jacknife			
Element Values:					
Screen	Oracle	SAS			
1 2	0 1	0 1	No Jackknife Noted on the PAR Jackknife Occurred		

### **Remarks:**

Jackknife can occur at any time during the crash sequence. This variable includes jackknife for all vehicle/trailer combinations (e.g., light utility vehicle/trailer combination).

Uncontrolled Articulation (jackknife) occurs when the tractor does not follow directly behind the truck - tractor (tracking), and the driver did not initiate the "non-tracking" situation.

Turning and backing are examples of driver initiated "non-tracking" controlled articulation and are not coded as a jackknife.

Enter **No Jackknife Noted on the PAR** when no uncontrolled articulation was reported between a vehicle and trailer. In addition, enter "No" when it is unknown if an uncontrolled articulation occurred.

Enter Jackknife Occurred when an uncontrolled articulation between a vehicle and trailer occurred during the crash. The uncontrolled articulation (Jackknife) can occur at any time during the crash sequence.

### **Consistency Checks:**

Errors

IF

### THEN

VV005

JACKKNIFE (V14) equals 1

VEHICLE TRAILING (V13) must not equal 1 or 6.

VV008	JACKKNIFE (V14) equals 1	TRAVEL SPEED (V11) must not equal 0.
VV026	JACKKNIFE (V14) equals 1	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 4-5, 7- 9 or 13.
VV193	JACKKNIFE (V14) equals 1	DRIVER PRESENCE (D01) must not equal 0.

Post Entry

	IF	THEN
AV105	HARMFUL EVENT (A06) equals 05	JACKKNIFE (V14) for the involved vehicle must equal 1.

### A11 TRAFFICWAY FLOW

Screen Heading:	Environmental Conditions
Screen Name:	Traffic Flow (170-E)
Long Name:	What is the trafficway flow for this vehicle's trafficway?
SAS Name:	Accident.Traf_Way
Oracle Name:	GES.Roadway.TrafficFlowID
Element Values:	
Oracle	242

Screen	Oracle	SAS	
1	1	1	Not Physically Divided (two way traffic)
2	2	2	Divided Trafficway (Median Strip, Barrier, Etc.)
3	4	3	One way traffic
4	5	9	Unknown

#### **Remarks:**

Enter **Not Physically Divided (Two Way Trafficway)** when the PAR indicates that the trafficway was not divided and traffic travels in opposing directions.

Although gores separate roadways and traffic islands (associated with channels) separate travel lanes, neither is involved in the determination of trafficway flow.

Enter **Divided Highway**, (Median Strip, Barrier, Etc.) whenever a trafficway division is reported. It is presumed that the traffic travels in but one direction on this vehicle's roadway.

Enter **One Way Trafficway** whenever the trafficway is undivided and traffic flows in but one direction (e.g., one-way streets). However, this code can also be used where a division is present so long as all the traffic on the trafficway goes in the same direction. An example occurs where the opposing roadway of the same named trafficway had to be split by such a distance that the right-of-way divides to accommodate other property.

Use this code for entrance/exit ramps where traffic is permitted to flow in only one direction.

### **Consistency Checks:**

<u>Errors</u>

IF

THEN

AA008

RELATION TO ROADWAY (A10) equals 3

TRAFFICWAY FLOW (A11) must not equal 1, 3 or 9.

	RANGE	TRAFFICWAY FLOW (A11) must equal 1, 2, 3 or 9.		
<u>Warning</u>	<u>s</u>			
		IF	THEN	
	AA019	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	TRAFFICWAY FLOW (A11) should not equal 3.	
	AA027	TRAFFICWAY FLOW (A11) equals 1 or 2	NUMBER OF TRAVEL LANES (A12) should not equal 1.	
	AA102	NUMBER OF TRAVEL LANES (A12) equals 7	TRAFFICWAY FLOW (A11) should not equal 2.	
	VA138	ACCIDENT TYPE (V23) equals 06-10 and TRAFFICWAY FLOW (A11) equals 2	RELATION TO ROADWAY (A10) should equal 3.	
Post Ent	try			
		IF	THEN	
	AV244	MANNER OF COLLISION (A07) equals 2 and TRAFFICWAY FLOW (All) equals 3	for at least one vehicle, MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 00 or 97.	

### A12 NUMBER OF TRAVEL LANES

Screen Heading:	Environmental Conditions
Screen Name:	Number Travel Lanes (180-E)
Long Name:	What is the number of travel lanes for this vehicle's roadway?
SAS Name:	Accident.Num_Lan
Oracle Name:	GES.Roadway.NumLanes

### **Element Values:**

Screen	Oracle	SAS	
1	1	1	One Lane
2	2	2	Two Lanes
3	3	3	Three Lanes
4	4	4	Four Lanes
5	5	5	Five Lanes
6	6	6	Six Lanes
7	7	7	Seven or More Lanes
8	8	9	Unknown

### Remarks:

Enter the value indicated on the PAR. If traffic flows in both directions and is undivided, code the total number of lanes in both directions. If the trafficway is divided into two or more roadways, code only the number of lanes for the roadway on which this vehicle was traveling. Be aware that the PAR may indicate the total number of lanes on the divided trafficway.

The number of lanes counted does not include any which are rendered unusable by restriction of the right-of-way (e.g., closed due to construction).

Enter **Unknown** when the PAR contains no information regarding the number of travel lanes.

### **Consistency Checks:**

<u>Errors</u>

IFTHENRANGENUMBER OF TRAVEL LANES (A12) must equal 1, 2, 3, 4, 5, 6, 7 or 9.

# <u>Warnings</u>

	IF	THEN
AA018	INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	NUMBER OF TRAVEL LANES (A12) should not equal 1.
AA027	TRAFFICWAY FLOW (A11) equals 1 or 2	NUMBER OF TRAVEL LANES (A12) should not equal 1.
AA071	NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14	INTERSTATE HIGHWAY (A08) should not equal 1.
AA102	NUMBER OF TRAVEL LANES (A12) equals 7	TRAFFICWAY FLOW (A11) should not equal 2.
VA183	PRECRASH LOCATION (V29) equals 02	NUMBER OF TRAVEL LANES (A12) should not equal 1.

### A13 ROADWAY ALIGNMENT

Screen Heading:	Environmental Conditions
Screen Name:	Alignment (190-E)
Long Name:	What is the roadway alignment for this vehicle's roadway?
SAS Name:	Accident.Align
Oracle Name:	GES.Roadway.AlignmentID
Element Values:	

Screen	Oracle	SAS	
1	1	1	Straight
2	2	2	Curve
3	3	9	Unknown

### Remarks:

Enter the element value indicated on the PAR.

Enter **Straight** if the PAR indicates this vehicle's roadway is straight.

Enter **Curve** if the PAR indicates this vehicle's roadway is curved.

Enter **Unknown** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

### **Consistency Checks:**

	IF	THEN
VA090	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 14	ROADWAY ALIGNMENT (A13) must equal 2.
RANGE	ROADWAY ALIGNMENT (A13) must	t equal 1, 2 or 9.

## A14 ROADWAY PROFILE

Screen Heading:	Environmental Conditions
Screen Name:	Profile (200-E)
Long Name:	What is the roadway profile for this vehicle's roadway?
SAS Name:	Accident.Profile
Oracle Name:	GES.Roadway.ProfileID

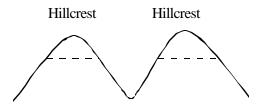
### **Element Values**:

Screen	Oracle	SAS	
1	1	1	Level
2	2	2	Grade
3	3	3	Hillcrest
4	8	8	Other
5	9	9	Unknown

### **Remarks:**

Enter the element value indicated on the PAR.

**Hillcrest** refers to the area of transition between an upgrade and a downgrade as in the following example:



Other refers to any other profile description indicated on the PAR; for example, a "sag."

Enter **Unknown** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

### **Consistency Checks:**

<u>Errors</u>

IF

#### THEN

RANGE ROADWAY PROFILE (A14) must equal 1, 2, 3, 8 or 9.

## A15 ROADWAY SURFACE CONDITION

Screen Heading:	Environmental Conditions
Screen Name:	Condition (210-E)
Long Name:	What is the roadway surface condition for this vehicle's roadway?
SAS Name:	Accident.Sur_Cond
Oracle Name:	GES.Roadway.SurfaceID

### **Element Values**:

Oracle	SAS	
1	1	Dry
2	2	Wet
3	3	Snow or Slush
4	4	lce
5	5	Sand, dirt or oil
6	8	Other
7	9	Unknown
	1 2 3 4 5	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

### **Remarks:**

Enter the element value indicated on the PAR.

A road made of sand or dirt would be coded Dry under normal conditions, not Sand, Dirt, Oil.

Enter **Unknown** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

### **Consistency Checks:**

	IF	THEN
RANGE	ROADWAY SURFACE CONDITION (A15) must equal 1, 2, 3, 4, 5, 8 or 9.	
<u>Warnings</u>		
	IF	THEN
AA028	ATMOSPHERIC CONDITION (A20) equals 2-4, 6 or 7	ROADWAY SURFACE CONDITION (A15) should not equal 1, 5, 8 or 9.

AA035	MONTH (A01) equals 05-09	ROADWAY SURFACE CONDITION (A15) should not equal 3 or 4.
AA084	ROADWAY SURFACE CONDITION (A15) equals 1	ATMOSPHERIC CONDITION (A20) should not equal 2, 3, 4, 6 or 7.
AD091	ROADWAY SURFACE CONDITION (A15) equals 1	DRIVER'S VISION OBSCURED BY (D04) should not equal 08.

### A18 SPEED LIMIT

Screen H	leading:	Environmental Conditions	
Screen N	lame:	Speed Limit (250-E)	
Long Na	me:	What is the legal speed limit for this vehicle's roadway?	
SAS Nam	ne:	Accident.Spd_Lim	
Oracle N	ame:	GES.Roadway.SpeedLimit	
Element	Values:		
Screen	Oracle	SAS	
0	0	0	No Statutory Limit
5-75	5-75	5-75	Actual Speed Limit (MPH-in increments of 5)
*	-9999	99	Unknown

#### Remarks:

Code the speed limit shown on the PAR.

Disregard advisory or other speed signs which do not indicate the legal speed limit.

Furthermore, do not confuse advisory signs on entrance/exit ramps or near intersections with the actual legal maximum speed limit.

If a state has a statute that uniformly reduces the maximum allowable speed within or near a construction zone, then code the indicated reduced limit.

Enter **No Statutory Limit** on roadways which have no statutory limit (e.g., parking lot roadways or entrance/exits, service station entrance/exits or driveways, etc.).

### **Consistency Checks:**

	IF	THEN
VA245A	SPEED LIMIT (A18) must be in 5 mile	per hour increments.
RANGE	SPEED LIMIT (A18) must not equal -	1 or null.

#### <u>Warnings</u>

#### THEN

AA022

INTERSTATE HIGHWAY (A08) equals 1 and RELATION TO JUNCTION (A09) is not equal to 14 SPEED LIMIT (A18) should not equal 01-40.

# **V02 HIT AND RUN**

Screen Heading:		Vehicle Characteristics			
Screen Name:		Hit and	Hit and Run (360-E)		
Long Name:		Is this a hit-and-run vehicle?			
SAS Name:		Vehicle.Hit_Run			
Oracle Name:		GES.Vehicle.HitRun			
Element Values:					
Screen	Oracle	SAS			
1 2 3	1 2 3	0 1 9	No, Did Not Leave Scene Yes, Driver or Car & Driver Left Scene Unknown		

#### Remarks:

A hit-and-run may occur when a motor vehicle in-transport has contact with: (a) another motor vehicle in-transport, (b) a motor vehicle not in-transport, (c) a motor vehicle not in-transport which contains a non-motorist, (d) a pedestrian, (e) pedalcyclist, (f) another non-motorist or (g) an object. Hit-and-run is only considered when a motor vehicle in-transport or its driver, departs from the scene; therefore, fleeing pedestrians and motor vehicles not in-transport are excluded.

It does not matter whether the hit-and-run vehicle was striking or struck. The hit-and-run vehicle(s) is (are) the one(s) that "departed prior to investigation by the police," or that vehicle which is "abandoned" at the scene "when its occupant(s) fled" from the area (see exceptions below). If the police report indicates that the vehicle was involved in a collision which was investigated, but there is no information on that vehicle or the driver/owner because of departure prior to police arrival on-scene, then hit-and-run is indicated.

Exceptions to the "departed prior to investigation by the police" rule exist. One exception occurs if an occupant(s) of a vehicle are taken or go directly from the scene to a medical treatment facility or physician. If doubt exists concerning the departure for treatment, assume hit-and-run. A second exception involves a driver who leaves the scene but furnishes name, address, vehicle make, model, and model year such that it is recorded on the PAR and the PAR does not indicate hit-and-run. A third exception involves vehicles which set an object in motion such that (1) the object is contacted, before it stabilizes, by another in-transport motor vehicle, and (2) the vehicle which set the object in motion leaves the scene without providing the pertinent information (compare with exception two above), and (3) the PAR does not indicate hit-and-run.

**No, Did Not Leave Scene** indicates the driver of the motor vehicle in-transport did not leave the scene of the crash after the crash occurred. This element also includes exceptions (2) and (3).

Yes, Driver or Car & Driver Left Scene applies when it has been determined that a hit-and-run has occurred.

When the presence of a hit-and- run vehicle is indicated and the PAR does not state the number of occupants, the number of occupants coded must equal 1 (the driver). If the PAR indicates that a hit-and -run vehicle contained a known number of occupants at the time of its involvement, then all the occupants are coded even though most of the variables will be unknown.

#### **Consistency Checks:**

	IF	THEN
VP208	HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) must equal 0.
VP234	HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0.
VV073	VEHICLE CONTRIBUTING FACTORS (V12) equals 50	HIT-AND-RUN (V02) must equal 1.
VV083	HIT-AND-RUN (V02) equals 1	VEHICLE CONTRIBUTING FACTORS (V12) must not equal 99.
VV197	VIOLATIONS CHARGED (D02) equals 50	HIT-AND-RUN (V02) must equal 1.
VV198	DRIVER PRESENCE (D01) equals 2	HIT-AND-RUN (V02) must equal 1.
VV199	DRIVER'S VISION OBSCURED BY (D04) equals 50	HIT-AND-RUN (V02) must equal 1.
VV200	DRIVER MANEUVERED TO AVOID (D06) equals 50	HIT-AND-RUN (V02) must equal 1.
VV202	HIT-AND-RUN (V02) equals 1	DRIVER PRESENCE (D01) must equal 2.
VV203	HIT-AND-RUN (V02) equals 1	VIOLATIONS CHARGED (D02) must not equal 99.
VV204	HIT-AND-RUN (V02) equals 1	DRIVER'S VISION OBSCURED BY (D04) must not equal 99.
VV205	HIT-AND-RUN (V02) equals 1	DRIVER MANEUVERED TO AVOID (D06) must not equal 96 or 99.
RANGE	HIT AND RUN (V02) must equal 0, 1	or 9.

# <u>Warnings</u>

IF

# THEN

VV073A	HIT AND RUN (V02) equals 1 and MANNER OF LEAVING	VEHICLE CONTRIBUTING FACTORS (V12) should not
	SCENE (V19) equals 1	equal 0.

# **V08 SPECIAL USE**

Screen Heading:		Vehicle Characteristics	
Screen Name:		Special Use (420-E)	
Long Name:		What special use category applies to this vehicle?	
SAS Name:		Vehicle.Spec_Use	
Oracle Name:		GES.Vehicle.SpecialUseID	
Element Values:			
Screen	Oracle	SAS	
4	26075		

School Bus
Other Bus
Car
it
uipment

#### Remarks:

**No Special Use** is used when the PAR does not indicate or imply that this vehicle was applicable to any of the special uses listed above.

**Taxi** is used when this vehicle was being used during this trip (at the time of the crash) on a "fee-for-hire" basis to transport persons. Most of these vehicles will be marked and formally registered as taxis; however, vehicles which are used as taxis, even though they are not registered (e.g., "Gypsy Cabs"), are included here. <u>Taxis and drivers which are off-duty</u> at the time of the crash <u>are not included</u>. If it is unknown whether or not the taxi is on-duty, use this code.

Vehicle used as School Bus is used if this motor vehicle satisfies all of the following criteria:

- Ž externally identifiable to other traffic units as a school/pupil transport vehicle; the vehicle may be equipped with flashing lights and/or a sway stop arm, and traffic may be required to stop for the vehicle when occupants enter or exit,
- Ž operated, leased, owned or contracted by a public or private school-type institution;
- Ž whose occupants, if any, are associated with the institution; and

Ž the vehicle is in operation at the time of the crash to and from the school or on a school-sponsored activity or trip.

In most cases, the decision to use this code will be based on a reference to the vehicle as a school bus on the PAR. In this situation, assume the criteria are met unless it is otherwise stated on the PAR.

Vehicle used as Other Bus is used when a motor vehicle is designed for transporting more than ten persons and does not satisfy the above "school bus" criteria.

**Military** is used for any vehicle which is owned by any of the Armed Forces regardless of body type. This code includes:

- Ž military police vehicles;
- Ž military ambulances;
- Ž military hearses; and
- Ž military fire vehicles.

**Police** is used for any readily identifiable (lights or markings) vehicle which is owned by any local, county, state or federal police agency. Vehicles not owned by the agency or not readily identifiable which are used by officers or agents (e.g., undercover) are excluded.

**Ambulance** is used for any readily identifiable (lights or markings) vehicles: (1) whose sole purpose is to provide ambulance service or (2) who serve the dual purposes of a hearse – used for funeral services, and an ambulance – used for emergency services. For these dual purpose vehicles (ambulance/hearse), use this code only when the vehicle is used as an ambulance.

**Fire Truck and Car** is used for any readily identifiable (lights or markings) vehicle which is owned by any government (typically local) or cooperative agency for the purpose of fire protection. For volunteer fire companies, fire fighting apparatus and other vehicles owned by the company or government qualify for this code. Privately owned vehicles, which are not in authorized use, even if equipped with lights, do not qualify (i.e., the volunteer firemen's vehicle).

**Hearse** is used when the vehicle is (at the time of the crash) being used to transport a dead body and is identified as a hearse.

**Farm Equipment** is used when the body type of the vehicle equals "Farm Equipment other than Trucks". Examples of Farm Equipment include: balers, reapers, combines, and farm tractors.

**Construction Equipment** is used when the body type of the vehicle equals "Construction Equipment Other Than Trucks". Examples of Construction Equipment include: bulldozers, steamrollers, forklifts, etc.

**Unknown** is used when no information is available on the vehicle's special use for this trip (i.e., hit-and-run vehicle).

# Consistency Checks:

	IF	THEN
VV003	SPECIAL USE (V08) equals 01	BODY TYPE (V05) must equal 02-09, 12, 17, 20-29 or 49.
VV006	SPECIAL USE (V08) equals 02	BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24, 28-29, 45, 48-49, 50 or 59.
VV009	BODY TYPE (V05) equals 80-89	SPECIAL USE (V08) must not equal 01-03, 06, 07, 10, 11 or 12.
VV010	SPECIAL USE (V08) equals 03	BODY TYPE (V05) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59 or 99.
VV025	SPECIAL USE (V08) equals 06	BODY TYPE (V05) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 64, 79, 97 or 99.
VV085	BODY TYPE (V05) equals 25 or 58	SPECIAL USE (V08) must not equal 00 or 02.
VV086	BODY TYPE (V05) equals 59	SPECIAL USE (V08) must equal 99.
VV087	EMERGENCY USE (V09) equals 1 or 9	SPECIAL USE (V08) must equal 04-07.
VV101	BODY TYPE (V05) equals 92	SPECIAL USE (V08) must equal 11.
VV102	SPECIAL USE (V08) equals 11	BODY TYPE (V05) must equal 92.
VV112	BODY TYPE (V05) equals 93	SPECIAL USE (V08) must equal 12.
VV113	SPECIAL USE (V08) equals 12	BODY TYPE (V05) must equal 93.
VV221	BODY TYPE (V05) equals 60, 64 or 66-79 and SPECIAL USE (V08) equals 07	CARGO BODY TYPE (V33) must equal 98.

# <u>Warnings</u>

	IF	THEN
VV048	UNLIKELY: SPECIAL USE (V08) is a	equal to 02, 03, 04 or 06.
VV084	BODY TYPE (V05) equals 24 or 50	SPECIAL USE (V08) should equal 02.
VV114	SPECIAL USE (V08) equals 10	BODY TYPE (V05) should equal 11.
VV241	SPECIAL USE (V08) equals 01	NUMBER OF OCCUPANTS CODED (V10) should be greater than 01.
VV241A	SPECIAL USE (V08) equals 01	NUMBER OF OCCUPANTS (V10B) should be greater than 01.

# Post Entry

	IF	THEN
AV210	SCHOOL BUS RELATED (A21) equals 1	at least one SPECIAL USE (V08) should equal 02.
VA002	SPECIAL USE (V08) for any vehicle equals 02	SCHOOL BUS RELATED (A21) must equal 1.

## **V09 EMERGENCY USE**

Screen Heading:		Vehicle Characteristics		
Screen Name:		Emerg	ency Use (430-E)	
Long Name:		Was this vehicle on an emergency run at the time of the crash?		
SAS Name:		Vehicle	e.Emcy_Use	
Oracle Name:		GES.V	ehicle.EmergencyUse	
Element	Values			
Screen	Oracle	SAS		
1 2 3	-1,0, 1 2 3	0 1 9	No Yes Unknown	
Remarks:				

If the vehicle is a police vehicle, ambulance, fire truck or military vehicle (i.e., Special Use equals "Military", "Police", "Ambulance" or "Fire Truck and Car"), then refer to the narrative section of the PAR to determine if the vehicle was on an emergency run (i.e., "red lights flashing", "siren sounding", "on route to hospital", etc.) at the time of the crash. Police vehicle, ambulance, fire truck, and military vehicle are considered applicable vehicles for purposes of this variable.

**No** is used when the applicable vehicle is <u>not</u> on an emergency run or this vehicle is not one of the applicable vehicles.

Yes is used when the applicable vehicle is on an emergency run.

**Unknown** is used when this vehicle is an applicable vehicle but the PAR is unclear as to whether it was on an emergency run. This code also applies if it is unknown whether the vehicle is an applicable vehicle.

#### **Consistency Checks:**

	IF	THEN
VV087	EMERGENCY USE (V09) equals 1 or 9	SPECIAL USE (V08) must equal 04-07.
RANGE	EMERGENCY USE (V09) must ee	qual 0, 1 or 9.

## Post Entry

	IF	

#### THEN

AV041

PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0230 at least one EMERGENCY USE (V09) should equal 1.

# V11 TRAVEL SPEED

Screen Heading:		Vehic	Vehicle Data		
Screen Name:		Trave	Travel Speed (440-E)		
Long Name:		What	What is this vehicle's travel speed (MPH)?		
SAS Nam	ne:	Vehic	le.Speed		
Oracle Name:		GES.	GES.Vehicle.TravelSpeed		
Element	Values:				
Screen	Oracle	SAS			
0	0	0	Stopped Vehicle		
1-998	1-998	1-998	Reported Speed in Miles Per Hour		
*	-9999	999	Unknown		

### Remarks:

Code the travel speed for this vehicle; do not enter the "Speed Limit". Do not use estimates by other drivers or witnesses reported in the "narrative" section of the PAR.

Code the nearest mph for this vehicle as reported on the PAR. If the travel speed is reported as a range, then code the average. Examples:

Reported Speed:	40.2mph	40.5mph	45-50mph
Code:	"40"	"41"	"48"

**Stopped Vehicle** is used when this vehicle is stopped or traveling less than 0.5 mph.

**Unknown** is used when the estimated travel speed is indicated unknown or not provided on the PAR.

# **Consistency Checks:**

## <u>Errors</u>

	IF	THEN
AV213	NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) <> 13	VEHICLE ROLE (V22) must equal 1 or 3.
VV008	JACKKNIFE (V14) equals 1	TRAVEL SPEED (V11) must not equal 0.
VV051	ACCIDENT TYPE (V23) equals 21, 22 or 23	TRAVEL SPEED (V11) must equal 0.
VV255	TRAVEL SPEED (V11) equals 00 and DRIVER PRESENCE (D01) not equal to 0	SPEED RELATED (D09) must equal 0.

# <u>Warnings</u>

	IF	THEN
VV031	TRAVEL SPEED (V11) equals 00	VEHICLE ROLE (V22) should not equal 1.
VV118	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07	TRAVEL SPEED (V11) should equal 00.
VV177	POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00	VEHICLE ROLE (V22) should not equal 2.

# Post Entry

	IF	THEN
AV011	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) is not equal to 02, 06, 10, 21, 22, 25, 27 or 28	TRAVEL SPEED (V11) should not equal 00.
AV011A	HARMFUL EVENT (A06) equals 25 and EVENT NUMBER (E01) equals 1	TRAVEL SPEED (V11) should not equal 00 for both vehicles.
AV019	NUMBER OF MOTOR VEHICLES (A03) is greater than 01	there should be at least one vehicle with TRAVEL SPEED (V11) > 00 or unknown.

## V16 FIRE OCCURRENCE

Screen Heading:		Vehicle Characteristics		
Screen Name:		Fire (48	30-E)	
Long Name:		Does this vehicle sustain fire damage?		
SAS Name:		Vehicle.Fire		
Oracle Name:		GES.Vehicle.Fire		
Element Values:				
Screen	Oracle	SAS		
1 2	0 1	0 1	No Fire Noted on the PAR Fired Occurred in the Vehicle	

### Remarks:

**No Fire Noted on the PAR** is used when there is no mention made on the PAR of a fire to this vehicle.

This code also includes those vehicles with smoke damage but sustained no fire.

**Fire Occurred In the Vehicle** is used when the PAR indicates this vehicle sustained fire damage. For the purposes of this variable, "vehicle" is defined to mean the power unit plus any and all trailing units associated with the power unit.

#### **Consistency Checks:**

Post Entry

	IF	THEN
AV009	HARMFUL EVENT (A06) equals 2	at least one vehicle should have FIRE OCCURRENCE (V16) equal 1.
AV009A	FIRE OCCURRENCE (V16) equals 1	at least one HARMFUL EVENT (A06) must equal 2.
RANGE	FIRE OCCURRENCE (V16) must eq	ual 0 or 1.

### V18 DAMAGE SEVERITY

Screen Heading:		Vehicle	e Characteristics
Screen N	lame:	Damag	ge Severity (490-E)
Long Name:		What is	s the damage severity for this vehicle?
SAS Name:		Vehicle.Veh_Sev	
Oracle Name:		GES.V	ehicle.DamageSeverityID
Element	Values:		
Screen	Oracle	SAS	
4	00004	0	Nege

1	26831	0	None
2	26832	1	Minor
3	26833	2	Functional (Moderate)
4	26834	3	Disabling (Severe)
5	26835	9	Unknown

#### **Remarks:**

None is used when there is no damage indicated on the PAR for this vehicle.

**Minor** is used when this attribute is indicated on the PAR <u>and</u> the vehicle is not towed due to damage. Examples of minor damage include:

- dented or bent fenders,
- bumpers,
- grills,
- body panels, and
- destroyed hubcaps.

**Minor** applies only when V19, MANNER OF LEAVING SCENE, is Driven Away, Towed Not Due to Damage, Abandoned or Unknown if Towed.

**Functional (Moderate)** is used when the PAR specifically indicates the damage is functional/moderate <u>and</u> the vehicle is not towed due to damage. Examples of functional damage include:

doors, windows, hood, and trunk lids which will not operate properly; broken glass which obscures vision;

damage which would prevent the motor vehicle from passing an official motor vehicle inspection;

tire damage even though the tire may be changed at the scene;

bumpers which are loose;

damage which can be remedied temporarily at the scene without special tools or parts other than tires;

tire disablement without other damage, even if no spare tire is available;

headlamp or taillight damage which would make night driving hazardous but would not affect daytime driving; and

damage to turn signals, horn or windshield wipers which makes them inoperative.

**Functional** applies only when V19, MANNER OF LEAVING SCENE is Driven Away, Towed Not Due to Damage, Abandoned or Unknown if Towed.

**Disabling** is used when the PAR indicates that the damage to the vehicle renders the vehicle not driveable.

**Unknown** is used when the PAR specifically indicated the damage severity to be unknown or the information on the PAR is inadequate to determine the level of severity. If the PAR is blank or not reported, use this code unless the narrative states otherwise or a State specific rule applies.

#### **Consistency Checks:**

	IF	THEN
VV061	MANNER OF LEAVING SCENE (V19) equals 2	DAMAGE SEVERITY (V18) must not equal 0, 1 or 2.
VV088	DAMAGE SEVERITY (V18) equals 0	DAMAGE AREAS (V25) must equal 00000.
VV089	DAMAGE SEVERITY (V18) equals 3	MANNER OF LEAVING SCENE (V19) must not equal 3.
VV222	DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0	DAMAGE SEVERITY (V18) must equal 0.

# <u>Warnings</u>

	IF	THEN
VV059	DAMAGE SEVERITY (V18) equals 3	MANNER OF LEAVING SCENE (V19) should equal 2.
VV060	DAMAGE SEVERITY (V18) is equal to 3	MANNER OF LEAVING SCENE (V19) should not equal 1.

## **V19 MANNER OF LEAVING SCENE**

Screen Heading:	Vehicle Characteristics			
Screen Name:	Leave Scene (500-E)			
Long Name:	What is the disposition of this vehicle at the crash scene?			
SAS Name:	Vehicle.Towed			
Oracle Name:	GES.Vehicle.MannerLeftID			
Element Values:				
Screen Oracle	SAS			
126836226837326838426839526840	<ol> <li>Driven Away</li> <li>Towed Due to Damage</li> <li>Towed Not Due to Damage</li> <li>Abandoned</li> <li>Unknown if Towed</li> </ol>			

#### Remarks:

The mode in which the vehicle or power unit of an articulated combination left the scene of the crash:

**Driven Away** is used when the vehicle was driven from the scene of the crash. A vehicle which is reported by the police as towed out of a ditch or snowbank and subsequently driven away is coded here. In addition, this attribute is used if a vehicle was driven from the scene and subsequently disabled. Do not use this attribute if this vehicle was abandoned.

**Towed Due to Damage** is used for any towing which is due to disabling damage caused by this crash which prohibits vehicle movement under its own power. Towed due to damage includes any towing, when the reason for towing is unknown. In other words, if a vehicle is reported on the PAR as towed but it cannot be determined whether it was due to damage or for other reasons, then the <u>default assumption</u> is that this vehicle was towed due to damage.

If a vehicle was pushed by hand or by another vehicle after the crash because it was not driveable, then code this vehicle as **Towed Due to Damage**.

Rules for Medium/Heavy Trucks (Power Unit Only):

Medium/Heavy Truck (power unit only) is towed due to damage if:

The PAR indicates a tow facility; or

The PAR indicates a tow facility and moderate damage; or

The PAR indicates disabling, extensive, severe or total damage; or

The PAR indicates towed (block or narrative) and tow status is not due to driver negligence (alcohol/other drugs), illness or inappropriate actions.

Medium/Heavy Truck (power unit only) is not towed due to damage if:

The PAR indicates minor damage (excludes jackknife) or The PAR indicates that only the trailer was towed.

NOTE: The PAR narrative may be used to supercede and/or clarify the above information.

**Towed Not Due to Damage** is used when the vehicle has been towed but the towing results from other than damage (e.g., mired vehicles, driver arrested, injured driver, etc.).

**Abandoned** is used when it is specifically indicated on the PAR or when the preponderance of the information available indicates that the vehicle remained at the scene. Do not use this attribute if the vehicle was left at the scene because this location was the vehicle's destination at the time of the accident.

**Unknown** is used when the PAR does not indicate the manner in which the vehicle left the scene of the crash.

#### **Consistency Checks:**

	IF		THEN
VV061		INER OF LEAVING SCENE )) equals 2	DAMAGE SEVERITY (V18) must not equal 0, 1 or 2.
VP208	MAN (V19	AND-RUN (V2) equals 1 and INER OF LEAVING SCENE I) equals 1 and BODY TYPE I) not equal to 80-89	EJECTION (P06) must equal 0.
VV089	DAM 3	IAGE SEVERITY (V18) equals	MANNER OF LEAVING SCENE (V19) must not equal 3.
<u>Warnings</u>			
	IF		THEN
AV100	STR	ATUM (A23) equals 3 or 4 and Y TYPE (V05) equals 01-49	THEN MANNER OF LEAVING SCENE (V19) should not equal 2 or 3.
AV100 VV058	STR BOD		MANNER OF LEAVING SCENE
	STR BOD DAM	Y TYPE (V05) equals 01-49	MANNER OF LEAVING SCENE (V19) should not equal 2 or 3. MANNER OF LEAVING SCENE

VV062	MOST HARMFUL EVENT (V20) equals 21, 22 or 27	MANNER OF LEAVING SCENE (V19) should not equal 2.
VV073A	HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1	VEHICLE CONTRIBUTING FACTORS (V12) should not equal 0.
VV074	MANNER OF LEAVING SCENE (V19) equals 2	DAMAGE AREAS (V25) should be greater than 00000.
VV080	DAMAGE AREAS (V25) equals 00000 and MOST HARMFUL EVENT (V20) does not equal 1- 6 or 8-10	MANNER OF LEAVING SCENE (V19) should not equal 2.
Post Entry		
	IF	THEN

AV099	STRATUM (A23) equals 1	MANNER OF LEAVING SCENE (V19) should equal 2 for at least one vehicle where BODY TYPE (V05) equals 1-49.
VP143	no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 2-5 and no BODY TYPE (V05) EQUALS 60-79 -or- no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 1-5 and at least 1 BODY TYPE (V05) EQUALS 60-79	STRATUM (A23) should equal 4.

## V20/V20A MOST HARMFUL EVENT / MOST HARMFUL EVENT NUMBER

Screen Heading:	Vehicle Crash
Screen Name:	Most Harmful Event (510-E)
Long Name:	What is the most harmful event for this vehicle?
SAS Name:	Vehicle.V_Event. Vehicle.MHENum
Oracle Name:	GES.Vehicle.MostHarmfulID, GES.Events.ObjectHitID, GES.Events.EventNumber

## **Element Values**:

Screen (	Oracle*	SAS*
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### Non-Collision

n/a	10231	1	Rollover/Overturn
n/a	10232	2	Fire/Explosion
n/a	10233	3	Immersion
n/a	19433	4	Gas Inhalation
n/a	10234	5	Jackknife
n/a	10235	6	Non-Collision Injury (Injured In or Fell From Vehicle)
n/a	19434	7	Pavement Surface Irregularity (ruts, potholes, grates, etc.)
n/a	10236	8	Other Non-Collision
n/a	10237	9	Non-Collision - No Details
n/a	10238	10	Thrown Or Falling Object

Collision With Object Not Fixed

n/a	10239	21	Pedestrian
n/a	10240	22	Cycle Or Cyclist (Pedalcycle/Pedalcyclist)
n/a	10241	23	Railway train
n/a	10242	24	Animal
n/a	**	25	Motor Vehicle In Transport
n/a	10244	26	Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)
n/a	10245	27	Other Type Non-Motorist
n/a	10246	28	Other Object Not Fixed
n/a	10247	29	Object Not Fixed - No Details

Collision with Fixed Object

n/a	10248	31	Ground
n/a	10249	32	Building
n/a	10250	33	Impact Attenuator/Crash Cushion
n/a	10251	34	Bridge Structure
n/a	10252	35	Guardrail

n/a n/a n/a n/a	10253 10254 10255 10256	36 37 38 39	Concrete Traffic Barrier Or Other Longitudinal Barrier Type Sign Post, Utility Pole or Other Support Culvert Or Ditch Curb
n/a	10257	40	Embankment
n/a	10258	41	Fence
n/a	10259	42	Wall
n/a	10260	43	Fire Hydrant
n/a	10261	44	Shrubbery Or Bush
n/a	10262	45	Tree
n/a	10263	46	Boulder
n/a	10265	58	Other Fixed Object
n/a	10266	59	Fixed Object - No Details
n/a	10267	99	Unknown

\* The most harmful event identifier (GES.Events.EventID) is stored in GES.Vehicle.MostHarmfulID. This identifier indicates which event is the most harmful one for the vehicle. To obtain the most harmful event Oracle value shown above, the GES.Vehicle and GES.Events tables are joined "where ges.vehicle.parid=ges.events.parid and GES.Vehicle.MostHarmfulID = GES.Events.EventID"; the Oracle value for the most harmful event is stored in GES.Events.ObjectHitID of this table join.

The SAS Values listed are for SAS variable V20, Most Harmful Event (vehicle.V\_Event). The SAS variable V20A, Most Harmful Event Number (Vehicle.MHENum) is the number of the event which produced the most severe injury or property damage for the vehicle. To obtain the most harmful event number associated with the vehicle, the Oracle events and vehicle tables are joined "where ges.vehicle.parid=ges.events.parid and GES.Vehicle.MostHarmfulID = GES.Events.EventID"; the Oracle value for the most harmful event number is stored in GES.Events.Eventnumber of this table join.

\*\* The Oracle value is set equal to the value of GES.Vehicle.VehicleID for the other intransport motor vehicle involved in the event.

### Remarks:

The event number for this vehicle's most harmful event is entered. When a vehicle is involved in multiple harmful events, select the event which, for this vehicle, produced the most severe injury or property damage.

The element value is generated by the computer.

See A06, Harmful Event, for attribute definitions.

# **Consistency Checks:**

	IF	THEN
PV103	EJECTION (P06) equals 1 or 2	this person's vehicle's MOST HARMFUL EVENT (V20) must not equal 06.
<u>Warnings</u>		
	IF	THEN
VV062	<b>IF</b> MOST HARMFUL EVENT (V20) equals 21, 22 or 27	THEN MANNER OF LEAVING SCENE (V19) should not equal 2.

# V21 MOVEMENT PRIOR TO CRITICAL EVENT (PRECRASH 1)

Screen H	eading:	Vehicle Crash			
Screen N	ame:	Pre Movement (520-E)			
Long Nan	lame: What is this vehicle's movement prior to the critical even				
SAS Name: Vehicle.P_Crash1			e.P_Crash1		
Oracle Na	ame:	GES.P	PreCrash.PriorMovementID		
Element	/alues:				
Screen	Oracle	SAS			
1 2 3 4 5 6 7 8 9 10 11 12	0 1 2 3 4 5 6 7 8 9 10 11	0 1 2 3 4 5 6 7 8 9 10 11	No driver present Going straight Decelerating in traffic lane Accelerating in traffic lane Starting in traffic lane Stopped in traffic lane Passing or overtaking another vehicle Disabled or parked in travel lane Leaving a parking position Entering a parking position Turning right Turning left		
13 14	12 13	12 13	Making a U-turn Backing up (other than for parking position)		

141313Backing up (other than for parking position)151414Negotiating a curve

Unknown

15 15 Changing lanes 16 17 Merging 16 16 Successful avoidance maneuver to a previous critical event 17 17 18 97 19 18 Other

#### Remarks:

20

Enter the attribute which best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took action or had no time to attempt any evasive maneuvers.

NOTE: Actions taken by the driver, of this vehicle, after realization of an impending danger are coded in Corrective Actions.

No driver present applies if no driver was in this vehicle when the accident occurred.

19

99

Enter **Going straight** when this vehicle's path was straight ahead on a straight stretch of roadway. The length need not be very long. For example, vehicles going straight in a left or right turn lane can be entered as "going straight".

Enter **Decelerating in traffic lane** when this vehicle was traveling straight ahead within the travel lane and was decelerating (slowing). If the driver was also involved in any other action (e.g., passing or overtaking, changing lanes etc) enter the appropriate movement.

Enter **Accelerating in traffic lane** When this vehicle was traveling straight ahead within the travel lane and was accelerating. If the driver was involved in any other action (e.g., starting in traffic, passing etc) enter the appropriate movement.

Enter **Starting in traffic lane** when this vehicle was in the process of starting forward from a stopped position within the traffic lane (e.g., start up from traffic signal).

Enter **Stopped in traffic lane** when this vehicle was stopped momentarily, with the motor running within the traffic lane (e.g., stopped for traffic signal).

Enter **Passing or overtaking another vehicle** when this vehicle was traveling straight ahead and was in the process of passing or overtaking another vehicle on the left or right.

Enter **Disabled or parked in travel lane** when this vehicle was parked in a travel lane with a driver present in the vehicle. If the driver was not in the vehicle when the accident occurred, enter **No driver present**.

Enter **Leaving a parking position** when this vehicle was entering the travel lane from a parking area (parallel or diagonal) adjacent to the traffic lanes. If the vehicle, leaving the parked position, is impacted while the driver is in the process of changing from reverse to forward gears, then enter this element value.

Enter **Entering a parking position** when this vehicle was leaving the travel lane to a parking area (parallel or diagonal) adjacent to the traffic lanes (i.e., in the process of parking). The vehicle can be in forward or reverse gear. If the driver is decelerating for the purpose of parking, enter this element value instead of "Decelerating in traffic lane".

Enter **Turning right** when this vehicle was moving forward and the driver turned right, changing from one roadway to a different roadway (e.g., from or to a driveway, parking lot or intersection).

Enter **Turning left** when this vehicle was moving forward and the driver turned left, changing from one roadway to a different roadway (e.g., from or to a driveway, parking lot or intersection).

Enter **Making a U-turn** when this vehicle was making a U-turn (i.e., 180 degree directional change, opposite the original direction of travel) on the roadway.

Enter **Backing up [other than for parking position]** when this vehicle was traveling backwards within the trafficway and the backing was not to enter or leave a parking position.

Enter **Negotiating a curve** when this vehicle was continuing along a roadway that curved to the right or left.

Enter **Changing lanes** when this vehicle was traveling straight ahead and changed travel lanes to the right or left while on the same roadway.

Enter **Merging** when this vehicle was moving forward and merging from the left or right into a traffic lane (e.g., roadway narrows exit/entrance ramps).

Enter **Successful avoidance maneuver to a previous critical event** when this vehicle responded to a previous critical event and successfully avoided an impact. However, this precipitated a subsequent critical crash envelope which resulted in an impact for this vehicle.

Enter **Other** when this vehicle's pre-event movement is known but none of the specified elements are applicable (e.g., A vehicle travels the wrong way on a one-way trafficway or A vehicle is pushed by another vehicle or pedestrian etc).

Enter **Unknown** when this vehicle's movement was unknown prior to its involvement in the crash. Also, enter unknown if the information is inadequate to determine which applicable element applies.

#### **Consistency Checks:**

	IF	THEN
AV022	HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97.
AV213	NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13	VEHICLE ROLE (V22) must equal 1 or 3.
VA090	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 14	ROADWAY ALIGNMENT (A13) must equal 2.
VV026	JACKKNIFE (V14) equals 1	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 4-5, 7- 9 or 13.
VV094	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10	ACCIDENT TYPE (V23) must not equal 44-67, 68, 69, 71, 72, 73, 76, 77, 79, 81, 82, 83, 86-91 or 92.
VV095	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11	ACCIDENT TYPE (V23) must not equal 44-67, 69, 70, 71, 73, 77, 78, 79, 80, 81, 83, 86-91 or 92.

VV106	ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99	VEHICLE ROLE (V22) must equal 1 or 3.
VV213	DRIVER MANEUVERED TO AVOID (D06) equals 00	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 17.
VV231	DRIVER PRESENCE (D01) equals 0	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.
VV232	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	CORRECTIVE ACTION ATTEMPTED (V27) must equal 00.
VV232A	CORRECTIVE ACTION ATTEMPTED (V27) equals 00.	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.
VV233	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	PRECRASH VEHICLE CONTROL (V28) must equal 00.
VV233A	PRECRASH VEHICLE CONTROL (V28) equals 00	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00
VV235	PRECRASH LOCATION (V29) equals 00	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.
VV235A	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	PRECRASH LOCATION (V29) must equal 00.
VV236	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	DRIVER PRESENCE (D01) must equal 0.
VV243A	ACCIDENT TYPE (V23) equals 46 or 47 and CORRECTIVE ACTION ATTEMPTED (V27) equals 01 or 99	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01.
VV250	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 0	SPEED RELATED (D09) must equal 8.

# <u>Warnings</u>

	IF	THEN
AV071	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13	ACCIDENT TYPE (V23) should equal 13.
VA242	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 or 11	RELATED TO JUNCTION (A09) should not equal 00 or 10.
VV049	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07	VEHICLE ROLE (V22) should not equal 1.
VV053	ACCIDENT TYPE (V23) equals 68, 72, 76 or 82	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 11 or 97.
VV054	ACCIDENT TYPE (V23) equals 70, 78 or 80	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10 or 97.
VV055	ACCIDENT TYPE (V23) equals 29, 30 or 31	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 02.
VV063	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 12	ACCIDENT TYPE (V23) should equal 98.
VV070	ACCIDENT TYPE (V23) equals 46 or 47	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 06, 15 or 16.
VV071	ACCIDENT TYPE (V23) equals 92	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 08, 09, 13, 97 or 99.
VV078	ACCIDENT TYPE (V23) equals 25, 26, 27, 29, 30 or 31	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 05 or 07.
VV096	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13	ACCIDENT TYPE (V23) should equal 92 or 98.
VV118	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07	TRAVEL SPEED (V11) should equal 00.
VV243	ACCIDENT TYPE (V23) equals 46 or 47	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 01.

# Post Entry

	IF	THEN
AV030	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0011	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97.
AV031	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0035	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8 or 9.
AV032	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0022, 0023 or 0033	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 11 or 17.
AV033	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0010, 0024 or 0034	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 10 or 17.
AV042	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0720	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, 12, 16, 97 or 99.
AV055	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019 or 0021	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 01.
AV134	RELATION TO JUNCTION (A09) equals 03 or 13	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) for the vehicles involved in the first harmful event should equal 10, 11, 13 or 97.
AV244	MANNER OF COLLISION (A07) equals 2 and TRAFFICWAY FLOW (All) equals 3	for at least one vehicle, MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 00 or 97.
VA218	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00; at least one PERSON TYPE (P03) equals 5 and, for that person, NON- MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.
VP046	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.
VP047	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720.

VP056	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049.
VP057	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011.
VP136	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024, 0034, 0048 or 0049.

# **V22 VEHICLE ROLE**

Screen Heading:		Vehicle Crash		
Screen N	ame:	Vehicle Role (530-E)		
Long Nar	ne:	What is the vehicle's role in the crash?		
SAS Name:		Vehicle.Veh_Role		
Oracle Name:		GES.Vehicle.RoleID		
Element Values:				
Screen	Oracle	SAS		
1 2 3 4 5	26845 26846 26847 26848 26849	0 1 2 3 9	Non-collision Striking Struck Both Unknown	

#### Remarks:

**Non-collision** is used only when the non-collision occurred first, even if subsequent impacts occurred. Non-collision includes rollover/overturn (which includes overturning motorcycles), fire/explosion, jackknifed or immersion.

A vehicle that sets an object (e.g., cargo, spewed gravel, etc) in motion which strikes or is struck by another motor vehicle prior to stabilization of the object receives this attribute. The other intransport vehicle is coded as "Striking" unless it is stationary, in which case it is coded as "Struck", irrespective of the wording of the narrative.

**Striking** is used if a vehicle in motion contacts another vehicle, pedestrian, non-motorist or object with its leading end and/or side. A vehicle must be in motion to be a striking vehicle.

It is possible for both vehicles to be considered striking. This occurs in the cases of head-on collisions, and for sideswiping vehicles (including front or rear endswipes).

**Struck** is used if a vehicle is moving forward and is not in rotation and contacts another vehicle, pedestrian or non-motorist with other than its front. A vehicle not in motion is struck unless subsequent impacts result in which the vehicle is striking (use Both in these situations).

**Both** is used when a vehicle is both striking and struck. The two impacts can not occur with the same vehicle, object or person. For example, if the crash involves two events where event 1 is the front of moving vehicle (V1) impacting the side of stopped vehicle (V2) and event two is the side of V1 impacting the side of V2, V1 is coded **STRIKING** and V2 is coded **STRUCK**. The classic example of a vehicle which is both striking and struck is the chain reaction rear-end where the vehicle which is striking and struck is located within the chain.

The decision should be based on the above stated rules and not necessarily the wording in the narrative. The decision may; therefore, contradict the narrative in some cases (e.g., the narrative describes V1 as striking V2 yet the damage indicates that V2 was striking and V1 was struck).

#### **Consistency Checks:**

	IF	THEN
AV131	the first HARMFUL EVENT (A06) for the vehicle equals 1-9	VEHICLE ROLE (V22) must equal 0.
AV213	NUMBER OF MOTOR VEHICLES (A03) equals 02, MANNER OF COLLISION (A07) equals 2, TRAVEL SPEED (V11) > 00 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) not equal to 13	VEHICLE ROLE (V22) must equal 1 or 3.
VA093	VEHICLE ROLE (V22) equals 2 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 31-46, 07, 58 or 59.
VA096	VEHICLE ROLE (V22) equals 0 and NUMBER OF MOTOR VEHICLES (A03) equals 01 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 01-10.
VV064	VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92	POINT OF IMPACT (V24) must not equal 01.
VV067	ACCIDENT TYPE (V23) equals 86 or 88	VEHICLE ROLE (V22) must not equal 2.
VV068	ACCIDENT TYPE (V23) equals 87 or 89	VEHICLE ROLE (V22) must not equal 1.
VV075	ACCIDENT TYPE (V23) equals 01-12, 14, 20, 24, 28, 34, 36, 38 or 40	VEHICLE ROLE (V22) must not equal 2.
VV079	ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30 or 31	VEHICLE ROLE (V22) must not equal 1.
VV082	ACCIDENT TYPE (V23) equals 0	VEHICLE ROLE (V22) must equal 0.

VV106	ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99	VEHICLE ROLE (V22) must equal 1 or 3.
VV222	DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0	DAMAGE SEVERITY (V18) must equal 0.
VV227	CRITICAL EVENT (V26) equals 53	VEHICLE ROLE (V22) must not equal 1.

## <u>Warnings</u>

	IF	THEN
AV014	MANNER OF COLLISION (A07) equals 2	VEHICLE ROLE (V22) should equal 1 or 3.
AV232	HARMFUL EVENT (A06) equals 21-99	no VEHICLE ROLE (V22) must not equal 0.
VV028	UNLIKELY: VEHICLE ROLE (V22) is	equal to 9.
VV031	TRAVEL SPEED (V11) equals 00	VEHICLE ROLE (V22) should not equal 1.
VV049	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 05 or 07	VEHICLE ROLE (V22) should not equal 1.
VV072	ACCIDENT TYPE (V23) equals 50, 51, 52 or 53	VEHICLE ROLE (V22) should equal 1.
VV104	ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2	POINT OF IMPACT (V24) should not equal 03.
VV177	POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00	VEHICLE ROLE (V22) should not equal 2.
VV190	DRIVER PRESENCE (D01) equals 0	VEHICLE ROLE (V22) should not equal 0 or 9.
VV228	CRITICAL EVENT (V26) equals 51 or 52	VEHICLE ROLE (V22) should not equal 2.

# Post Entry

	IF	THEN
AV089	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0840	at least one VEHICLE ROLE (V22) must equal 2.
AV197	NUMBER OF MOTOR VEHICLES (A03) equals 02 and one vehicle's VEHICLE ROLE (V22) equals 2	the other vehicle's VEHICLE ROLE (V22) must not equal 2.

# V23 ACCIDENT TYPE (CATEGORY)

Screen H	leading:	Vehicle Crash			
Screen N	lame:	Category (540-E)			
Long Nar	ne:	What is	What is the crash type category for the first harmful event?		
SAS Nam	ie:	none			
Oracle N	ame:	GES.Vehicle.CrashCatID			
Element Values:					
Screen	Screen Oracle SAS				
1 2 3 4 5 6	27790 27791 27792 27793 27794 27795	n/a n/a n/a n/a n/a	Category I. Single Driver Category II. Same Trafficway, Same Direction Category III. Same Trafficway, Opposite Direction Category IV. Changing Trafficway, Vehicle Turning Category V. Intersecting Paths (Vehicle Damage) Category VI. Miscellaneous		

#### Remarks:

Variables V23, Accident Type (Category); V23, Accident Type (Configuration); and V23, Accident Type (Crash Type), are used for categorizing the collisions of drivers involved in crashes. A collision is defined here as the first harmful event in a crash between a vehicle and some object, accompanied by property damage or human injury. The object may be another vehicle, a person, an animal, a fixed object, the road surface or the ground. The first harmful event may also involve plowing into soft ground, if severe vehicle deceleration results in damage or injury. A road departure without damage or injury is not defined as a collision.

A summary of the crash types is shown in figure 1.

To determine the proper crash type, refer to the three step decision process outlined below:

- Step 1 Determine the appropriate category-V23, Accident Type (Category).
- Step 2 Determine the appropriate configuration-V23, Accident Type (Configuration).
- Step 3 Determine the specific crash type-V23, Accident Type (Crash Type).

The attributes for this variable are the categories. The configuration and specific crash type attributes are further discussed under variables V23, Accident Type (Configuration), and V23, Accident Type (Crash Type).

Cate- gory	Configur- ation	ACCIDENT TYPES (Includes Intent)		
d	A Right Roadside Departure	OT CONTROL: ROAD CONTROL: ROAD CONTROL: AVOID COLLISION WIT- VEH., PED., AVIM	04 SPECIFICS OTHER	C5 SPECIFICS UNKNOWN
l. Single Driver	B Lef) Roadside Departure	OC 07 06 07 06 07 06 07 06 07 06 07 06 07 06 07 06 07 07 06 07 07 07 07 07 07 07 07 07 07 07 07 07	09 SPECIFICS OTHER	10 Shed Filos UNKNOWA
_	C. Forward Impact	PARKED STATIONARY PEDESTRIAN' END VEHICLE OBJECT ANIMAL DEPARTURE	15 SPEC FICS OTHER	16 SPECIFICS LNKNOWN
wey ion	D Rear Fed	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(FACH - 32) SPECIFICS OTHER	(FACH - 33) SPEC FICS UNKNC6VN
B Same Direction	E Forward Impact	34 35 36 37 38 39 40 40 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 41 40 40 41 40 40 41 40 40 41 40 40 41 40 40 41 40 40 40 40 40 40 40 40 40 40	(EACH - 42) SPECIFICS OTHER	(EACH - 43) SPIICIE OS UNKNOWN
-	F. Sideswipe Angle		(EACH 48) SPECIFICS OTHER	(EACH 49) SPECIFICS UNKNOWN
, 01	C Head-Ou		(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN
Same Tallioway Opposite Direction	11 Fouward Impact	CONTROL/ CONTRO	(EACH - 62) SPEC FICS OTHER	(EACH - 63) SPECIFICS UNKNOWN
Ħ	l Sideswipo/ Angle	04 LATERAL MOVE	(FACH - 88) SPECIFICS OFHER	(FACH - 67) SI 'ECIFICS UNKNOWN
Change TraFleway Weitch Turring	J. Tom Across Path	10 10 10 10 10 10 10 10 10 10	(FACH - 74) SPECIFICS OTHER	(FACH - 75) SPECIFICS UNKNOWN
2	K Tom Into Palu	TURN INTO SAME DIRECTION TURN INTO OPPOSITE DIRECTIONS	(FACH - 94) SPECIFICS OTHER	(FACH - 85) SPECIFICS UNKNOWN
V. Friersseling Paths (Vohicie Damage)	L Stranghu Patus		(EACH BO) SPECIFICS OTHER	(EACH S1) SPECIFICS UNKNOWN
VI, Miscel- Isneous	M. Ducking E.e.	03 CT IF3 VEHICLE GR OBJECT BACKING VEHICLE	SE OTHER ACC SE UNKNOWN CC NO IMPACT	NDENT TYPE ACCIDENT (YPE)

# Figure 1

Questions to ask before selecting a category

#### <u>General</u>

- · How many in-transport vehicles were involved in the first Harmful Event (A06)?
- · Were the in-transport vehicles on the same trafficway?
- · In what direction were the vehicles headed, relative to each other?
- Was a vehicle backing?

#### Category I: Single Driver

- · Did the vehicle leave the roadway, and on what side?
- Is there insufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

#### Right & Left Roadside Departure

- Was there a control or traction loss?
- · Was there a successful avoidance maneuver?

#### Forward Impact

- · What was the object that was struck?
- · Did the vehicle depart off the end of the roadway?

#### Category II: Same Trafficway, Same Direction

- What was the plane of contact for each vehicle?
- · Did a successful avoidance maneuver take place?
- Is there insufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

#### Rear End

- · What was the plane of contact for each vehicle?
- · Was the struck vehicle stopped, going slower, slowing?
- Which vehicle was the striking vehicle?

#### Forward Impact

- · What was the plane of contact for each vehicle?
- What was the object avoiding?
- · Was there control or traction loss?
- · Which vehicle was the striking vehicle?

#### Sideswipe/Angle

- · Did either vehicle intentionally change lanes, if so which one(s)?
- · What side was each vehicle on, relative to the other vehicle?

#### Category III: Same Trafficway, Opposite Direction

- What was the plane of contact for each vehicle?
- · Did a successful avoidance maneuver take place?
- · Is there insufficient information to choose between configurations? If so, see

remarks under V23, Accident Type (Configuration) - Category VI. Miscellaneous.

#### Head-On

· Which vehicle moved into the other vehicle's lane?

#### Forward Impact

- Was there control or traction loss?
- · What was the object avoiding?
- · Which vehicle made the avoidance maneuver?

#### Sideswipe/Angle

· Which vehicle moved into the other vehicle's lane?

#### Category IV: Changing Trafficway, Vehicle Turning

- $\cdot$  Which way did the vehicle turn, relative to the other vehicle?
- Is there sufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) Category VI. Miscellaneous.

#### Turn Across Path

- · What was each vehicle's direction of travel, relative to the other vehicle?
- In what direction was the turning vehicle turning?
- · Which vehicle was turning?

#### Category V: Intersecting Paths

#### Straight Paths

- · What was the plane of contact for both vehicles?
- Which vehicle was the striking vehicle?

• Is there sufficient information to choose between configurations? If so, see remarks under V23, Accident Type (Configuration) - Category VI. Miscellaneous.

#### Category VI: Miscellaneous

#### Backing/Miscellaneous

Which vehicle, if any, was backing?
Is there sufficient information to choose between categories? If so, see remarks under V23, Accident Type (Configuration) - Category VI. Miscellaneous.

The definitions of each of the six categories are as follows:

**Category I. Single Driver** - The first harmful event involves a collision between an in-transport vehicle and an object or an off roadway rollover. A harmful event involving two in-transport vehicles is excluded from this category. Note, the impact location on the vehicle is not a consideration for crash types in this category.

**Category II. Same Trafficway, Same Direction** - The first harmful event occurred while both vehicles were traveling in the same direction on the same trafficway.

**Category III. Same Trafficway, Opposite Direction** - The first harmful event occurred while both vehicles were traveling in opposite directions on the same trafficway.

**Category IV. Change Trafficway, Vehicle Turning** - The first harmful event occurred when the vehicle is either turning or merging while attempting to change from one trafficway to another trafficway. Trafficway for this variable is loosely defined to include driveways, alleys and parking lots when a vehicle is either entering or exiting a trafficway.

**Category V. Intersecting Paths (Vehicle Damage)** - The first harmful event involves situations where vehicle trajectories intersect. It is important to note the location of damage to each vehicle for crash typing.

**Category VI. Miscellaneous** - The first harmful event involves a crash type which cannot be described in Categories I-V and thus is included in this category. Select this category, if there is insufficient information to choose between categories.

Each category is subdivided into crash configuration(s). The configurations are described under V23, Accident Type (Configuration).

## V23 ACCIDENT TYPE (CONFIGURATION)

Screen Heading:	Vehicle Crash
-----------------	---------------

Screen Name:	Configuration (545-E)

- **Long Name:** What is the crash type configuration?
- SAS Name: none
- Oracle Name: GES.Vehicle.CrashConfigID

#### Element Values:

Screen Oracle SAS

Category I. Single Driver

1	27796	n/a	Configuration A. Right Roadside Departure
2	27797	n/a	Configuration B. Left Roadside Departure
3	27798	n/a	Configuration C. Forward Impact

Category II. Same Trafficway, Same Direction

1	27799	n/a	Configuration D. Rear-End
2	27800	n/a	Configuration E. Forward Impact
3	27801	n/a	Configuration F. Sideswipe/Angle

Category III. Changing Trafficway, Vehicle Turning

1	27802	n/a	Configuration G. Head-On
2	27803	n/a	Configuration H. Forward Impact
3	27804	n/a	Configuration I. Sideswipe/Angle

Category IV. Same Trafficway, Opposite Direction

1	27805	n/a	Configuration J. Turn Across Path
2	27806	n/a	Configuration K. Turn Into Path

Category V. Intersecting Paths (Vehicle Damage)

1 27807 n/a Configuration L. Straight Paths

Category VI. Miscellaneous

1 27808 n/a Configuration M. Backing, Etc.

## Remarks:

### Category I. Single Driver

### Configuration A. Right Roadside Departure

The vehicle departed the right side of the road with the first harmful event occurring off the road.

### Configuration B. Left Roadside Departure

The vehicle departed the left side of the road with the first harmful event occurring off the road.

#### **Configuration C. Forward Impact**

The vehicle struck an object on the road or off the end of a trafficway while moving forward.

#### Category II. Same Trafficway, Same Direction

#### Configuration D. Rear-End

The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV).

#### **Configuration E. Forward Impact**

The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.

#### Configuration F. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

#### Category III. Same Trafficway, Opposite Direction

#### Configuration G. Head-On

The frontal area of one vehicle impacted the frontal area of another.

#### **Configuration H. Forward Impact**

The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

#### Configuration I. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

#### Category IV. Changing Trafficway, Vehicle Turning

### **Configuration J. Turn Across Path**

The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in Category VI. Miscellaneous.

#### Configuration K. Turn Into Path

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle.

Note, the focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

#### Category V. Intersecting Paths (Vehicle Damage)

#### **Configuration L. Straight Paths**

The two vehicles were proceeding (or attempting to proceed) straight ahead.

#### Category VI. Miscellaneous

#### Configuration M. Backing, Etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

Any crash configuration which cannot be described in Category I. through V. is included here.

If there is insufficient information to determine the category or configuration, choose configuration M.

Each configuration is subdivided into crash type(s). The crash types are described under V23, Accident Type (Crash Type).

## V23 ACCIDENT TYPE (CRASH TYPE)

VZS ACCIDENT TTPE (CRASH TTPE)					
Screen H	leading:	Vehicle Crash			
Screen N	lame:	Crash	Туре (547-Е)		
Long Na	me:		is the most adequate description of the crash type for the first ul event?		
SAS Nan	ne:	Vehicle.Acc_Type			
Oracle N	ame:	GES.\	/ehicle.CrashTypeID		
Element	Values:				
Screen	Oracle	SAS			
Category	I. Single D	)river			
	Configur	ation A.	Right Roadside Departure		
1 2 3 4 5	1 2 3 4 5	<ul> <li>Drive Off Road</li> <li>Control/Traction Loss</li> <li>Avoid Collision with Vehicle, Pedestrian, Animal</li> <li>Specifics Other</li> <li>Specifics Unknown</li> </ul>			
Configuration B. Left Roadside Departure					
6 7 8 9 10	6 7 8 9 10	<ul> <li>Drive Off Road</li> <li>Control/Traction Loss</li> <li>Avoid Collision With Vehicle, Pedestrian, Animal</li> <li>Specifics Other</li> <li>Specifics Unknown</li> </ul>			
	Configur	ation C.	Forward Impact		
11 12 13 14 15 16	11 12 13 14 15 16	<ul> <li>Parked Vehicle</li> <li>Stationary Object</li> <li>Pedestrian/Animal</li> <li>End Departure</li> <li>Specifics Other</li> <li>Specifics Unknown</li> </ul>			
Category	II. Same 1	Frafficwa	ay, Same Direction		
	Configur	ation D.	Rear-End		
20	20	20 Stopped			

21	21	21	Stopped, Straight
22	22	22	Stopped, Left
23	23	23	Stopped, Right
24	24	24	Slower
25	25	25	Slower, Going Straight
26	26	26	Slower, Going Left
27	27	27	Slower, Going Right
28	28	28	Decelerating (Slowing)
29	29	29	Decelerating (Slowing), Going Straight
30	30	30	Decelerating (Slowing), Going Left
31	31	31	Decelerating (Slowing), Going Right
32	32	32	Specifics Other
33	33	33	Specifics Unknown
	Configu	ation E	. Forward Impact
34	34	34	This Vehicle's Frontal Area Impacts Another Vehicle
35	35	35	This Vehicle Is Impacted by Frontal Area of Another Vehicle
36	36	36	This Vehicle's Frontal Area Impacts Another Vehicle
37	37	37	This Vehicle Is Impacted by Frontal Area of Another Vehicle
38	38	38	This Vehicle's Frontal Area Impacts Another Vehicle
39	39	39	This Vehicle Is Impacted by Frontal Area of Another Vehicle
40	40	40	This Vehicle's Frontal Area Impacts Another Vehicle
41	41	41	This Vehicle Is Impacted by Frontal Area of Another Vehicle
42	42	42	Specifics Other
43	43	43	Specifics Unknown
10	10	10	
	Configur	ation F.	Sideswipe/Angle
44	44	44	Straight Ahead on Left
45	45	45	Straight Ahead on Left/Right
46	46	46	Changing Lanes to the Right
47	47	47	Changing Lanes to the Left
48	48	48	Specifics Other
49	49	49	Specifics Unknown
	-	-	
Category	III. Same	Trafficw	/ay, Opposite Direction
	Configur	ation G	. Head-On
50	50	50	Lateral Move (Left/Right)
51	51	51	Lateral Move (Going Straight)
52	52	52	Specifics Other
53	53	53	Specifics Unknown
	Configur	ation H	. Forward Impact
54	54	54	This Vehicle's Frontal Area Impacts Another Vehicle
55	55	55	This Vehicle Is Impacted by Frontal Area of Another Vehicle
56	56	56	This Vehicle's Frontal Area Impacts Another Vehicle

57 58 59 60 61 62 63	57 58 59 60 61 62 63	57 58 59 60 61 62 63	This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle This Vehicle's Frontal Area Impacts Another Vehicle This Vehicle Is Impacted by Frontal Area of Another Vehicle Specifics Other Specifics Unknown
	Configur	ation I. S	Sideswipe/Angle
64 65 66 67	64 65 66 67	64 65 66 67	Lateral Move (left/Right) Lateral Move (Going Straight) Specifics Other Specifics Unknown
Category	IV. Chang	ing Traf	ficway, Vehicle Turning
	Configur	ation J.	Turn Across Path
68 69 70 71 72 73 74 75	68 69 70 71 72 73 74 75	68 69 70 71 72 73 74 75	Initial Opposite Directions (Left/Right) Initial Opposite Directions (Going Straight) Initial Same Directions (Turning Right) Initial Same Directions (Going Straight) Initial Same Directions (Turning Left) Initial Same Directions (Going Straight) Specifics Other Specifics Unknown
	Configur	ation K.	Turn Into Path
76 77 78 79 80 81 82 83 83 84 85	76 77 78 79 80 81 82 83 84 85	76 77 78 79 80 81 82 83 84 85	Turn Into Same Direction (Turning Left) Turn Into Same Direction (Going Straight) Turn Into Same Direction (Turning Right) Turn Into Same Directions (Going Straight) Turn Into Opposite Directions (Turning Right) Turn Into Opposite Directions (Going Straight) Turn Into Opposite Directions (Turning Left) Turn Into Opposite Directions (Going Straight) Specifics Other Specifics Unknown
Category	V. Interse	cting Pa	ths (Vehicle Damage)
2 /		Ū.	Straight Paths
86 87 88	86 87 88	86 87 88	Striking from the Right Struck on the Right Striking from the Left

<sup>90 90 90</sup> Specifics Other

91 91 91 Specifics Unknown

Category VI. Miscellaneous

Configuration M. Backing, Etc.

92	92	92	Backing Vehicle
93	93	93	Other Vehicle or Object
98	98	98	Other Crash Type
99	99	99	Unknown Crash Type
00	00	00	No Impact

#### **Remarks:**

This variable specifies the crash types for each category/configuration.

The crash types in Category I. (Single Driver) involve an impact between a vehicle and an object. Categories II. through VI. identify specific collision combinations which must be coded in specified pairs (i.e., the pair code defines the crash type). As an example, the combination "20" (Rear-end, stopped) and "32" (Rear-end, specifics other) or "20" (Rear-end, stopped) and "25" (Slower, straight ahead) are not valid since "20" (Rear-end, stopped) only has meaning when linked to codes "21"-"23" (Stopped, ....).

A crash involving a vehicle impacting a "driverless in-transport vehicle" is coded "..., specifics other" in the appropriate configuration-category. For example, a vehicle which impacts the rear of a driverless in-transport vehicle is encoded "32" (Rear-end, specifics other) and "32".

In crashes involving more than two vehicles or in collision sequences involving a combination of vehicle-to-object- to-vehicle impacts, code the crash type for the vehicle(s) involved in the first harmful event. All other vehicles are coded "98" (Other crash type).

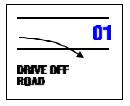
Keep in mind that intended actions play an important role in the coding scheme. For example, crash type "26" (Slower, turning left) is selected over type "25" (Slower, straight ahead) if the subject vehicle was traveling slower with the intention of turning left. Note, the turning action need not have occurred prior to the collision. The driver's intent to turn is the key.

# Category I. Single Driver

## Configuration A. Right Roadside Departure

The vehicle departed the right side of the road with the first harmful event occurring off the road.

## 01 Right Roadside Departure: Drive Off Road



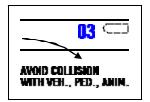
Enter "01" when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.

## 02 Right Roadside Departure: Control/Traction Loss



Enter "02" when there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions). If doubt exists, code "01" (Right Roadside Departure, Drive Off Road).

## 03 Right Roadside Departure: Avoid Collision With Vehicle, Pedestrian, Animal



Enter "03" when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorist's are included here.

## 04 Right Roadside Departure: Specifics Other



Enter "04" if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian or animal. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle.

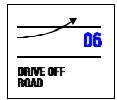
#### 05 Right Roadside Departure: Specifics Unknown



Enter "05" if the vehicle departed the right side of the road for unknown reasons.

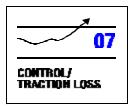
## Configuration B. Left Roadside Departure

### 06 Left Roadside Departure: Drive Off Road



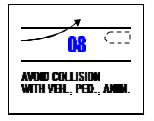
Enter "06" when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.)

## 07 Left Roadside Departure: Control/Traction Loss



Enter "07" if there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions.) If doubt exists, code "06" (Left Roadside Departure, Drive Off Road).

### 08 Left Roadside Departure: Avoid Collision With Vehicle, Pedestrian, Animal



Enter "08" when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and non-motorists are included here.

#### 09 Left Roadside Departure: Specifics Other



Enter "09" if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian or animal. Also, use "specifics Other" for crashes involving a driverless in-transport vehicle.

#### 10 Left Roadside Departure: Specifics Unknown

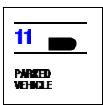


Enter "10" if the vehicle departed the left side of the road for unknown reasons.

## Configuration C. Forward Impact

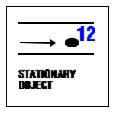
The vehicle struck an object on the road or off the end of a trafficway while moving forward.

#### 11 Forward Impact: Parked Vehicle



Enter "11" if the crash involves impact with a parked vehicle on either side of the road.

## 12 Forward Impact: Stationary Object



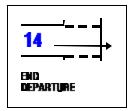
Enter "12" if the crash involves impact with a stationary object on either side of the road.

## 13 Forward Impact: Pedestrian/Animal



Enter "13" if the first harmful event involves impact with a pedestrian or animal on either side of the road. Pedestrians, bicyclists, and other cyclists and non-motorists are included here. Vehicle plane of contact is NOT a consideration.

## 14 Forward Impact: End Departure



Enter "14" when the vehicle ran off the end of the road and crashed into something.

## 15 Forward Impact: Specifics Other



Enter "15" for impacted (striking or struck) trains and nonstationary objects on the road. Also use "Specifics Other" for crashes involving a driverless in-transport vehicle.

Forward Impact: Specifics Unknown

16	
SPECIFICS Unicolowy	

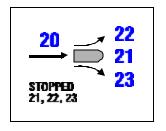
Enter "16" when the PAR indicates a single driver was involved in a forward impact collision, but no further classification is possible.

# Category II. Same Trafficway, Same Direction

## Configuration D. Rear-End

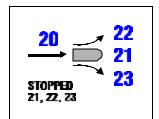
The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV - Change in Trafficway, Vehicle Turning).

## 20 Rear-End: Stopped



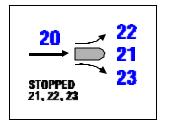
Enter "20" for a vehicle that impacts another vehicle from the rear when the impacted vehicle was stopped in the trafficway.

## 21 Rear-End: Stopped, Straight



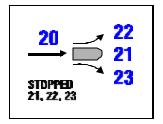
Enter "21" for a rear-impacted vehicle that was stopped in the trafficway, and was intending to proceed straight ahead.

22 Rear-End: Stopped, Left



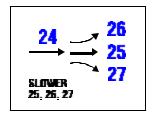
Enter "22" for a rear-impacted vehicle that was stopped in the trafficway, intending to make a left turn.

## 23 Rear-End: Stopped, Right



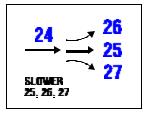
Enter "23" for a rear-impacted vehicle that was stopped in the trafficway, intending to make a right turn.

### 24 Rear-End: Slower



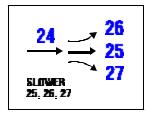
Enter "24" for a vehicle that impacts another vehicle from the rear when the impacted vehicle was going slower than the striking vehicle.

## 25 Rear-End: Slower, Going Straight



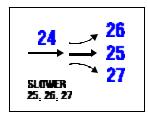
Enter "25" for a rear-impacted vehicle that was going slower than the other vehicle while proceeding straight ahead.

### 26 Rear-End: Slower, Going Left



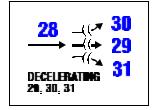
Enter "26" for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn left.

### 27 Rear-End: Slower, Going Right



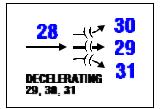
Enter "27" for a rear-impacted vehicle that was going slower than the other vehicle while intending to turn right.

#### 28 Rear-End: Decelerating (Slowing)



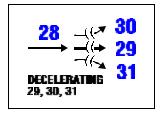
Enter "28" for a vehicle which impacts another vehicle from the rear when the impacted vehicle was slowing down.

#### 29 Rear-End: Decelerating (Slowing), Going Straight



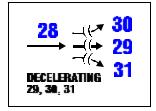
Enter "29" for a rear-impacted vehicle that was slowing down while proceeding straight ahead.

## 30 Rear-End: Decelerating (Slowing), Going Left



Enter "30" for a rear-impacted vehicle that was slowing down while intending to turn left.

## 31 Rear-End: Decelerating (Slowing), Going Right



Enter "31" for a rear-impacted vehicle that was slowing down while intending to turn right.

## 32 Rear-End: Specifics Other



Enter "32" for rear-end collisions which cannot be described in "20"-"31." Enter "Specifics Other" for crashess involving a driverless in-transport vehicle.

## 33 Rear-End: Specifics Unknown

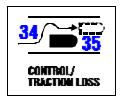


Enter "33" when the PAR indicates a rear-end collision occurred, but no further classification is possible.

## Configuration E. Forward Impact

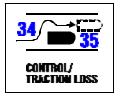
The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.

## 34 Forward Impact: Control/Traction Loss



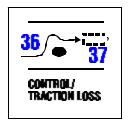
Enter "34" for a vehicle that's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

## 35 Forward Impact: Control/Traction Loss



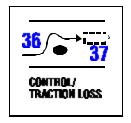
Enter "35" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a non-involved vehicle) while both are traveling on the same trafficway in the same direction.

## 36 Forward Impact: Control/Traction Loss



Enter "36" for a vehicle that's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while both are traveling on the same trafficway in the same direction.

## 37 Forward Impact: Control/Traction Loss



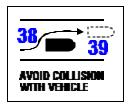
Enter "37" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while both are traveling on the same trafficway in the same direction.

#### 38 Forward Impact: Avoid Collision with Vehicle



Enter "38" for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

#### 39 Forward Impact: Avoid Collision with Vehicle



Enter "39" for a vehicle that was impacted by the frontal area of another vehicle which was maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

## 40 Forward Impact: Avoid Collision with Object



Enter "40" for a vehicle that struck the rear of another vehicle with its front plane while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

### 41 Forward Impact: Avoid Collision with Object



Enter "41" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid a collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

#### 42 Forward Impact: Specifics Other



Enter "42" (for both vehicles) for a forward impact collision which occurred while both vehicles were traveling on the same trafficway, in the same direction, and the striking vehicle was attempting to avoid a vehicle or an object which cannot be described by "34" - "40."

Also, use this code for crashes involving a driverless in-transport vehicle which would otherwise qualify for this configuration.

### 43 Forward Impact: Specifics Unknown



Enter "43" when the PAR indicates that a forward impact collision occurred while both vehicles were traveling on the same trafficway and in the same direction, but no further classification was possible.

## Configuration F. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

The following four codes, "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), "47" (Sideswipe/Angle, changing lanes to the left), identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes). From these four codes, four combinations are permitted. They are:

- 1. "44" and "45"
- 2. "46" and "45"
- 3. "45" and "47"
- 4. "46" and "47".

When used in combination, these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (codes "44" and "45") intended to change its lane;
- 2. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- 3. the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- 4. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

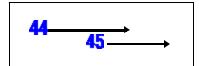
In addition, when:

- 1. the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right or
- 2. the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

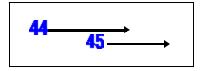
- 1. their positions (i.e., left versus right) and
- 2. the intended lane of travel (straight ahead versus changing lanes) of their drivers.

#### 44 Sideswipe/Angle: Straight Ahead on Left



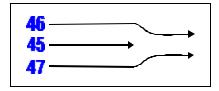
See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

### 45 Sideswipe/Angle: Straight Ahead on Left/Right



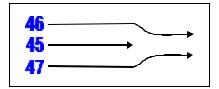
See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

### 46 Sideswipe/Angle: Changing Lanes to the Right



See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

#### 47 Sideswipe/Angle: Changing Lanes to the Left



See discussion under Configuration F. Sideswipe/Angle, above for an explanation of when this attribute applies.

### 48 Sideswipe/Angle: Specifics Other

61.CH: <mark>48</mark>
SPECIFICS DTHER

Enter "48" if one vehicle was behind the other prior to a sideswipe/angle collision occurring while both vehicles were traveling on the same trafficway and in the same direction.

For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code "98" (Other crash type).

Use this code for crashes involving a driverless in-transport vehicle.

### 49 Sideswipe/Angle: Specifics Unknown



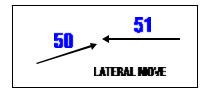
Enter "49" for sideswipe/angle collisions that occur while both vehicles are traveling on the same trafficway and in the same direction, when no further classification is possible.

# Category III. Same Trafficway, Opposite Direction

## Configuration G. Head-On

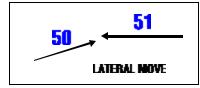
The frontal area of one vehicle impacted the frontal area of another.

## 50 Head-On: Lateral Move (Left/Right)



Enter "50" for a vehicle that LEAVES ITS LANE [moves laterally (sideways)] immediately before colliding head-on with another vehicle, when the vehicles are traveling on the same trafficway in opposite directions.

## 51 Head-On: Lateral Move (Going Straight)



Enter "51 " for a vehicle that collides head-on with another vehicle which has IMMEDIATELY LEFT ITS LANE (moved laterally), when the vehicles are traveling on the same trafficway in opposite directions.

#### 52 Head-On: Specifics Other



Enter "52" for a head-on collision that cannot be described by "50"-"51", when the vehicles are traveling on the same trafficway in opposite directions. Clarification: Enter "52" for both vehicles involved in a head-on collision when one is traveling the wrong way on a one way roadway.

Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

#### 53 Head-On: Specifics Unknown



Enter "53" when the PAR indicates a head-on collision occurred between two vehicles traveling on the same trafficway in opposite directions, when no further classification is possible.

## Configuration H. Forward Impact

The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

### 54 Forward Impact: Control/Traction Loss



Enter "54" for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

#### 55 Forward Impact: Control/Traction Loss



Enter "55" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

#### 56 Forward Impact: Control/Traction Loss



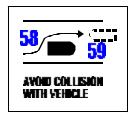
Enter "56" for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

## 57 Forward Impact: Control/Traction Loss



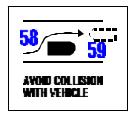
Enter "57" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid a collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

#### 58 Forward Impact: Avoid Collision with Vehicle



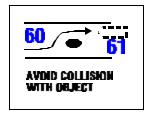
Enter "58" for a vehicle whose frontal area impacts another vehicle while maneuvering to avoid a collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

## 59 Forward Impact: Avoid Collision with Vehicle



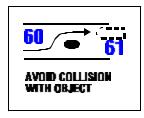
Enter "59" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with a non-involved vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

## 60 Forward Impact: Avoid Collision with Object



Enter "60" for a vehicle that struck the front of another vehicle with the frontal plane while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

### 61 Forward Impact: Avoid Collision with Object



Enter "61 " for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

## 62 Forward Impact: Specifics Other



Enter "62" for forward impact collisions occurring while the vehicles were traveling on the same trafficway in opposite directions which cannot be described by "54"-"61 ". Enter "Specifics Other" for crashes involving a "driverless in-transport vehicle."

#### 63 Forward Impact: Specifics Unknown

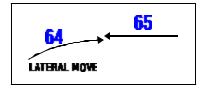


Enter "63" when the PAR indicates a forward impact collision occurred while the vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

## Configuration I. Sideswipe/Angle

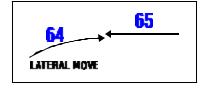
The two vehicles are involved in an impact involving the side of one or both vehicles.

## 64 Sideswipe/Angle: Lateral Move (Left/Right)



Code "64" identifies the vehicle which infringed upon the other vehicle (code "65") in a Category III, Configuration I collision; i.e., enter "64" for the vehicle which left its lane (moved laterally) leading to the collision.

## 65 Sideswipe/Angle: Lateral Move (Going Straight)



Enter "65" for the vehicle which was infringed upon by the other vehicle (code "64") in a Category III, Configuration I collision.

## 66 Sideswipe/Angle: Specifics Other



Enter "66" for sideswipe/angle collisions occurring while both vehicles were traveling on the same trafficway in opposite directions which cannot be described by "64"-"65". Enter "Specifics Other" for crashess involving a "driverless in-transport vehicle."

## 67 Sideswipe/Angle: Specifics Unknown



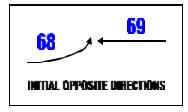
Enter "67" when the PAR indicates a sideswipe/angle collision occurred while both vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

# Category IV. Changing Trafficway, Vehicle Turning

# Configuration J. Turn Across Path

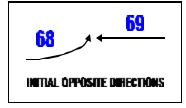
The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in Category VI. Miscellaneous.

## 68 Turn Across Path: Initial Opposite Directions (Left/Right)



Code "68" identifies the vehicle which turned across the path of another vehicle (code) in a Category IV, Configuration J collision, in which the vehicles were initially traveling in opposite directions.

### 69 Turn Across Path: Initial Opposite Directions (Going Straight)



Enter "69" for a vehicle involved in a collision in which another vehicle (code "68" across its Path, and in which the vehicles were initially traveling in opposite directions.

## 70 Turn Across Path: Initial Same Directions (Turning Right)



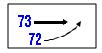
Enter "70" for a vehicle which turned right, across the path of another vehicle (code "71"), when both vehicles were initially traveling in the same direction.

## 71 Turn Across Path: Initial Same Directions (Going Straight)



Enter "71 " for a vehicle whose path was crossed by a vehicle turning right (code "70"), when both vehicles were initially traveling in the same direction.

#### 72 Turn Across Path: Initial Same Directions (Turning Left)



Enter "72" for a vehicle which turned left, across the path of another vehicle (code "73"), when both vehicles were initially traveling in the same direction.

#### 73 Turn Across Path: Initial Same Directions (Going Straight)



Enter "73" for a vehicle whose path was crossed by a vehicle turning left (code "72"), when both vehicles were initially traveling in the same direction.

#### 74 Turn Across Path: Specifics Other



Enter "74" for collisions in which one vehicle turned across another's path, which cannot be described by "68"-"72". Enter "Specifics Other" for crashess involving a driverless in-transport vehicle.

#### 75 Turn Across Path: Specifics Unknown



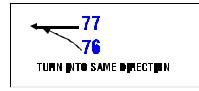
Enter "75" when the PAR indicates one vehicle turned across another's path, causing a collision, but no further classification is possible.

## Configuration K. Turn Into Path

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle.

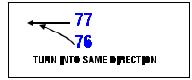
Note, the focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

## 76 Turn Into Same Direction (Turning Left)



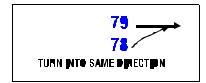
Enter "76" for a vehicle which turned left, into the path of another vehicle (code "77"), so that both vehicles were traveling in the same direction at the time of the collision.

## 77 Turn Into Same Direction (Going Straight)



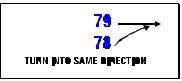
Enter "77" for a vehicle involved in a collision in which another vehicle (code "76") turned left, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

## 78 Turn Into Same Direction (Turning Right)



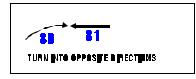
Enter "78" for a vehicle which turned right, into the path of another vehicle (code "79"), so that both vehicles were traveling in the same direction at the time of the collision.

## 79 Turn Into Same Direction (Going Straight)



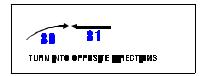
Enter "79" for a vehicle involved in a collision in which another vehicle (code "78") turned right, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

### 80 Turn Into Opposite Directions (Turning Right)



Enter "80" for a vehicle which turned right, into the path of another vehicle (code "81"), so that the vehicles were traveling in opposite directions at the time of the collision.

### 81 Turn Into Opposite Directions (Going Straight)



Enter "81" for a vehicle involved in a collision in which another vehicle (code "80") turned right, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

## 82 Turn Into Opposite Directions (Turning Left)



Enter "82" for a vehicle which turned left, into the path of another vehicle (code "83"), so that the vehicles were traveling in opposite directions at the time of the collision.

Code "82" is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with "Configuration L - Straight Paths." The driver's intended path is the prime concern.

## 83 Turn Into Opposite Directions (Going Straight)



Enter "83" for a vehicle involved in a collision in which another vehicle (code "82") turned left, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

### 84 Turn Into Path: Specifics Other



Enter "84" for collisions in which one vehicle turned across another's path, which cannot be described by "76"-"83". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

#### 85 Turn Into Path: Specifics Unknown



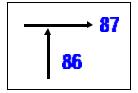
Enter "85" when the PAR indicates one vehicle turned into another's path, causing a collision, but no further classification is possible.

# Category V. Intersecting Paths (Vehicle Damage)

## Configuration L. Straight Paths

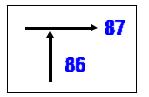
The two vehicles were proceeding (or attempting to proceed) straight ahead.

## 86 Straight Paths: Striking from the Right



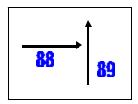
Enter "86" for a vehicle which strikes the right side of another vehicle (code "87") from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

## 87 Straight Paths: Struck on the Right



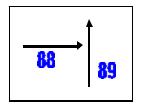
Enter "87" for a vehicle which is struck on the right side by another vehicle (code "86") from the right when both vehicles were going straight at the time of the collision, i.e., right side damage to 87, front damage to 86.

## 88 Straight Paths: Striking from the Left



Enter "88" for a vehicle which strikes another vehicle (code "89") from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

### 89 Straight Paths: Struck on the Left



Enter "89" for a vehicle which is struck on the left side by another vehicle (code "88") from the left when both vehicles were going straight at the time of the collision, i.e., left side damage to 89, front damage to 88.

#### 90 Straight Paths: Specifics Other



Enter "90" for collisions in which two vehicles, both going straight, collide when their paths intersect, which cannot be described by "86"-"89". Enter "Specifics Other" for crashes involving a driverless in-transport vehicle.

#### 91 Straight Paths: Specifics Unknown



Enter "91 " when the PAR indicates two vehicles, both going straight, collided when their paths intersected, but no further classification is possible.

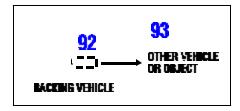
# Category VI. Miscellaneous

## Configuration M. Backing, Etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

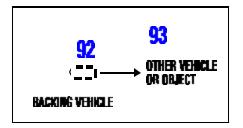
Any crash configuration which cannot be described in Category I. through V. is included here.

## 92 Backing, Etc.: Backing Vehicle



Enter "92" for a backing vehicle which was involved with another vehicle (code 93) or object.

## 93 Backing, Etc.: Other Vehicle or Object



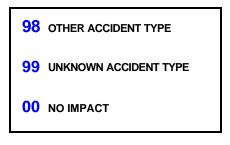
Enter "93" for the vehicle which was involved with the backing vehicle (code 92).

## 98 Backing, Etc.: Other Crash Type

98 OTHER ACCIDENT TYPE	
<b>99</b> UNKNOWN ACCIDENT TYPE	
00 NO IMPACT	

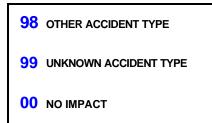
Code "98" is used for those events and collisions which do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road; U-turns; third or subsequent vehicles involved in a crash; or the second involved vehicle, when the first harmful event involves a vehicle-to-object collision or a non-collision.

#### 99 Backing, Etc.: Unknown Crash Type



Code "99" when the crash category or configuration is unknown.

#### 00 Backing, Etc.: No Impact



Code "00" identifies non-collision events (i.e., fire, immersion, gas inhalation, jackknife, non-collision injury, other non-collision or non-collision - no details). Rollovers on the road should be coded "98" (Other Crash Type).

The following crash types require clarification:

Code "00" (**No impact**) identifies non-collision events (i.e., fire, immersion, gas inhalation, jackknife, non-collision injury, other non-collision or non-collision - no details). Rollovers on the road should be coded "98" (**Other crash type**).

Codes "01" (**Right roadside departure, drive off road**) and "06" (**Left roadside departure, drive off road**) are used when the vehicle departed the road under a controlled situation (i.e., the driver was distracted, fell asleep, intentionally departed, etc.).

Codes "02" (**Right roadside departure, control/traction loss**) and "07" (Left roadside departure, control/traction loss) are used if there is some evidence that the vehicle lost traction or in some other manner "got away" from the driver (i.e., the vehicle spun off the road as a result of surface conditions, oversteer phenomena or mechanical malfunctions). If doubt exists, code "01" (Right roadside departure, drive off road) or "06" (Left roadside departure, drive off road) respectively.

Codes "03" (Right roadside departure; avoid collision with vehicle, pedestrian, animal) and "08" (Left roadside departure; avoid collision with vehicle, pedestrian, animal) are used when the vehicle departed the road as a result of avoiding something in the road. "Phantom" situations are included here.

Codes "04" (**Right roadside departure, specifics other**) and "09" (**Left roadside departure, specifics other**) are used for any other stationary or nonstationary objects if the avoidance characteristics of codes "03" or "08" are present.

Codes "11" (Forward impact, parked vehicle), "12" (Forward impact, stationary object), and "13" (Forward impact, pedestrian/animal) involve an impact with an object which can be located on either side of the road.

Code "12" (**Forward impact, stationary object**) includes a hole in the road, an overhead object (e.g., overpass) or an object projecting over the road edge (e.g., support column of elevated railway).

Code "13" (**Forward impact, pedestrian/animal**) is used when a pedestrian, non-motorist or animal is involved with the first harmful event. Vehicle plane of contact is not a consideration.

Code "15" (**Forward impact, specifics other**) is used for impacted (striking or struck) trains and nonstationary objects on the road.

Codes "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), and "47" (Sideswipe/Angle, changing lanes to the left) identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- 1. "44" and "45",
- 2. "46" and "45",
- 3. "45" and "47", and
- 4. "46" and "47".

When used as a combination these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- 1. neither vehicle (codes "44" and "45") intended to change its lane; the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- 2. the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- 3. the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

In addition, when:

- 1. the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right or
- 2. the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left; select the appropriate combination ("44"-"45", "46"-"45", "45"-"47" or "46"-"47") depending upon:
- 3. their positions (i.e., left versus right) and
- 4. the intended lane of travel (straight ahead versus changing lanes) of their drivers.

Code "48" (**Sideswipe/Angle, specifics other**) is used if one vehicle was behind the other prior to their Category II, Configuration F collision. For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code "98" (Other crash type).

Code "64" (**Sideswipe/Angle, lateral move--infringing vehicle**) identifies the vehicle which infringed upon the other (code "65") in a Category III, Configuration I collision.

Codes "68" through "85" (**Turn Across Path and Turn Into Path**) are used in Configurations J and K where the vehicle's action is the controlling factor, and the plane of contact is irrelevant.

Code "82" (Left Turn Into Opposite Direction) is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with Configuration L. Straight Paths. The driver's intended path is the prime concern.

Codes "86" through "89" (**Straight Paths**) must not be confused with crash types in Configuration K. Turn Into Path. For these codes the vehicles are proceeding (or attempting to proceed) straight ahead, usually at a junction.

Code "98" (**Other Crash Type**) is used for those events and collisions which do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road; U-turns; third or subsequent vehicles involved in a crash; or the second involved vehicle when the first harmful event involved a vehicle-to-object collision.

## **Consistency Checks:**

#### <u>Errors</u>

	IF	THEN		
AV020	The combination of ACCIDENT TYPE	(V23) codes is incorrect.		
AV020A	All Vehicles not involved in the FHE r	must be coded "98."		
AV132	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 02, 03, 04, 05, 06, 08 or 09	ACCIDENT TYPE (V23) must equal 00.		
AV133	MANNER OF COLLISION (A07) equals 3	at least one ACCIDENT TYPE (V23) must equal 92 or 98.		
AV215	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01-10	ACCIDENT TYPE (V23) must not equal 20-91.		
AV225	MANNER OF COLLISION (A07) equals 2	ACCIDENT TYPE (V23) must not equal 64-67.		
AV226	MANNER OF COLLISION (A07) equals 4	ACCIDENT TYPE (V23) must not equal 20-43 or 50-53.		
VA015	ACCIDENT TYPE (V23) equals 20-91	NUMBER OF MOTOR VEHICLES (A03) must be greater than 1.		
VA081	ACCIDENT TYPE (V23) equals 13 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 21, 22, 24 or 27.		
VA086	ACCIDENT TYPE (V23) equals 01-16 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must not equal 25.		
VA120	Only ACCIDENT TYPE CODES 01-10 the crash involves a single vehicle.	6, 92, 98, 99 or 00 can be used when		
VA137	ACCIDENT TYPE (V23) equals 00 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 02, 03, 04, 05, 06, 08 or 09.		
VA139	ACCIDENT TYPE (V23) equals 14	RELATION TO JUNCTION (A09) must not equal 01 or 11.		

VA219	ACCIDENT TYPE (V23) equals 20-91and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) must equal 25.
VV051	ACCIDENT TYPE (V23) equals 21, 22 or 23	TRAVEL SPEED (V11) must equal 0.
VV064	VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92	POINT OF IMPACT (V24) must not equal 01.
VV065	ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58 or 60	POINT OF IMPACT (V24) must equal 01.
VV066	ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39 or 41	POINT OF IMPACT (V24) must equal 04.
VV067	ACCIDENT TYPE (V23) equals 86 or 88	VEHICLE ROLE (V22) must not equal 2.
VV068	ACCIDENT TYPE (V23) equals 87 or 89	VEHICLE ROLE (V22) must not equal 1.
VV075	ACCIDENT TYPE (V23) equals 01-12, 14, 20, 24, 28, 34, 36, 38 or 40	VEHICLE ROLE (V22) must not equal 2.
VV079	ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30 or 31	VEHICLE ROLE (V22) must not equal 1.
VV082	ACCIDENT TYPE (V23) equals 00	VEHICLE ROLE (V22) must equal 0.
VV094	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10	ACCIDENT TYPE (V23) must not equal 44-67, 68, 69, 71, 72, 73, 76, 77, 79, 81, 82, 83, 86-91 or 92.
VV095	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11	ACCIDENT TYPE (V23) must not equal 44-67, 69, 70, 71, 73, 77, 78, 79, 80, 81, 83, 86-91 or 92.
VV099A	ACCIDENT TYPE (V23) equals 87 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 3, 4, 5, 6, 12 or 14.
VV100A	ACCIDENT TYPE (V23) equals 89 and EVENT NUMBER (E01) equals 1	POINT OF IMPACT (V24) must not equal 0, 1, 2, 4, 5, 6, 11 or 13.

VV106	ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99	VEHICLE ROLE (V22) must equal 1 or 3.
VV122	ACCIDENT TYPE (V23) equals 03, 08, 38, 40, 58 or 60	CORRECTIVE ACTION ATTEMPTED (V27) must not equal 00 or 1.
VV182	CRITICAL EVENT (V26) equals 14 and CORRECTIVE ACTION ATTEMPTED (V27) equals 1	ACCIDENT TYPE (V23) must equal 14.
VV191	DRIVER PRESENCE (D01) equals 0	ACCIDENT TYPE (V23) must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 92, 93 or 98.
VV195	ACCIDENT TYPE (V23) equals 34, 36, 38, 40, 54, 56, 58 or 60	DRIVER MANEUVERED TO AVOID (D06) must not equal 00.
VV226	ROLLOVER TYPE (V30) equals 10 and the first HARMFUL EVENT (A06) equals 1	ACCIDENT TYPE (V23) must equal 1-10, 14, 15 or 98.
VV243A	ACCIDENT TYPE (V23) equals 46 or 47 and CORRECTIVE ACTION ATTEMPTED (V27) equals 01 or 99	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01.
VV245	ACCIDENT TYPE (V23) equals 01 or 06	PRECRASH CONTROL (V28) must not equal 02, 03, 04 or 07.
nas		

# <u>Warnings</u>

	IF	THEN
AV070	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 26	ACCIDENT TYPE (V23) should equal 01-11, 92, 98 or 99.
AV071	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 24 and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13	ACCIDENT TYPE (V23) should equal 13.
AV072	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 28 or 58 and RELATION TO ROADWAY (A10) equals 1	ACCIDENT TYPE (V23) should equal 12 or 15.

AV097	RELATION TO ROADWAY (A10) equals 4 and NUMBER OF MOTOR VEHICLES (A03) equals 01	ACCIDENT TYPE (V23) should equal 06-10, 98 or 99.
AV203	MANNER OF COLLISION (A07) equals 5	ACCIDENT TYPE (V23) should not equal 20-33.
AV204	MANNER OF COLLISION (A07) equals 5	ACCIDENT TYPE (V23) should equal 44-49, 98 or 99.
AV205	MANNER OF COLLISION (A07) equals 6	ACCIDENT TYPE (V23) should not equal 50-53.
AV206	MANNER OF COLLISION (A07) equals 6	ACCIDENT TYPE (V23) should equal 64-67, 98 or 99.
AV223	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 01	ACCIDENT TYPE (V23) should equal 01-10, 98 or 99.
AV243	MANNER OF COLLISION (A07) equals 1	ACCIDENT TYPE (V23) should not equal 44-49.
VA014	ACCIDENT TYPE (V23) equals 01-16	NUMBER OF MOTOR VEHICLES (A03) should equal 1.
VA082	ACCIDENT TYPE (V23) equals 68-91	RELATION TO JUNCTION (A09) should not equal 00.
VA087	ACCIDENT TYPE (V23) equals 99 and EVENT NUMBER (E01) equals 1	HARMFUL EVENT (A06) should equal 99.
VA094	ACCIDENT TYPE (V23) equals 01-11 or 14	RELATION TO ROADWAY (A10) should not equal 1.
VA138	ACCIDENT TYPE (V23) equals 06-10 and TRAFFICWAY FLOW (A11) equals 2	RELATION TO ROADWAY (A10) should equal 3.
VA140	ACCIDENT TYPE (V23) equals 14	RELATION TO JUNCTION (A09) should equal 00, 02, 10 or 12.
VA243	ACCIDENT TYPE (V23) equals 12	RELATION TO ROADWAY (A10) should equal 1.
VV053	ACCIDENT TYPE (V23) equals 68, 72, 76 or 82	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 11 or 97.
VV054	ACCIDENT TYPE (V23) equals 70, 78 or 80	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10 or 97.
VV055	ACCIDENT TYPE (V23) equals 29, 30 or 31	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 02.

VV063	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 12	ACCIDENT TYPE (V23) should equal 98.
VV070	ACCIDENT TYPE (V23) equals 46 or 47	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 05, 16 or 17.
VV071	ACCIDENT TYPE (V23) equals 92	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 07, 08, 13, 98 or 99.
VV072	ACCIDENT TYPE (V23) equals 50, 51, 52 or 53	VEHICLE ROLE (V22) should equal 1.
VV078	ACCIDENT TYPE (V23) equals 25, 26, 27, 29, 30 or 31	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 04 or 06.
VV096	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13	ACCIDENT TYPE (V23) should equal 92 or 98.
VV097	ACCIDENT TYPE (V23) equals 87	POINT OF IMPACT (V24) should equal 02.
VV098	ACCIDENT TYPE (V23) equals 89	POINT OF IMPACT (V24) should equal 03.
VV104	ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2	POINT OF IMPACT (V24) should not equal 03.
VV175	ACCIDENT TYPE (V23) equals 20- 49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should not equal 12-14, 54, 66-68, 71-73 or 80- 85.
VV176	ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92.
VV237	CRITICAL EVENT (V26) equals 91 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	ACCIDENT TYPE (V23) should equal 15.
VV238	CRITICAL EVENT (V26) equals 90, CORRECTIVE ACTION ATTEMPTED (V27) equals 00 and the vehicle is involved in the first harmful event	ACCIDENT TYPE (V23) should equal 12 or 15.
VV239	CRITICAL EVENT (V26) equals 98	ACCIDENT TYPE (V23) should equal 00.
VV240	ACCIDENT TYPE (V23) equals 00	CRITICAL EVENT (V26) should equal 98.

VV242	PRECRASH CONTROL (V28) equals 01	ACCIDENT TYPE (V23) should not equal 02, 07, 34, 36, 54 or 56.
VV243	ACCIDENT TYPE (V23) equals 46 or 47	MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 01.
VV247	ROLLOVER TYPE (V30) equals 10	ACCIDENT TYPE (V23) should equal 01-10, 14, 98 or 99.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (PEDESTRIAN, ETC. VERSUS PEDALCYCLIST)

Screen H	leading:	"Ped./E	"Ped./Bike" Crash Typing			
Screen N	lame:	Qualify	ing Non-Motorist Type (290-N)			
Long Nar	ne:	What Is the first qualifying non-motorist type involved in the crash?				
SAS Nam	ie:	Accide	nt.Ped_Acc			
Oracle N	Oracle Name: GES.CrashData.PedBikeID					
Element Values:						
Screen	Oracle	SAS				
<b>n/a</b> 1 2 3	27475 <b>n/a</b> <b>n/a</b> 10333	0000 n/a n/a 9999	Not Applicable Pedestrian or Qualifying Other Non-Motorist Pedalcyclist First Qualifying Non-Motorist is an Unknown Person Type			

#### **Remarks:**

"Ped./BikeTyping" is completed only for qualifying non-motorists.

Qualifying non-motorists are either pedestrians, qualifying <u>other</u> non-motorists or pedalcyclists. See the discussion below under attribute **Pedestrian or Qualifying Other Non-Motorist** for the definition of qualifying <u>other</u> non-motorist.

If there are multiple qualifying non-motorists in the crash, code the first one involved.

Persons in motorized wheelchairs are motorists and do not qualify for "ped./bike typing."

Not Applicable applies if there are no qualifying non-motorists involved in the crash.

Select **Pedestrian or Qualifying Other Non-Motorist** if the first qualifying non-motorist in the crash is a pedestrian or qualifying other non-motorist.

A pedestrian is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance (A06, Harmful Event, equals Pedestrian). This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.



## Not Displayed on Summary Tab

<u>Qualifying other non-motorists</u> are defined as persons who are in or on the following nonmotorist conveyances: ice skates, roller skates, roller blades, scooters, skateboards, nonmotorized wheelchairs or play vehicles (e.g., wagons and sleds) or persons who are not on a trafficway or sidewalk or path contiguous with a trafficway; but are in a parking lot, driveway, private road, gas station, alley, yard, garage, ball field, etc.

Select **Pedalcyclist** if the first qualifying non-motorist is a pedalcyclist.

Pedalcyclists are bicyclists or other cyclists.

A bicyclist refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion.



Other cyclist refers to all other pedalcyclists (tricyclist, unicyclist, etc.). This includes those pedalcyclists who hold onto a motor vehicle in motion. A "Big Wheel" should be treated as a tricycle.

Select **First Qualifying Non-Motorist Involved is an Unknown Person Type** if P03, Person Type, for the first qualifying non-motorist is Unknown.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (WHEELCHAIR)

Screen H	leading:	"Ped./E	"Ped./Bike" Crash Typing		
Screen Name:		Wheel	Chair (292-E)		
Long Na	me:	Is the person in a non-motorized wheelchair?			
SAS Nan	ne:	None			
Oracle N	le Name: GES.CrashData.Wheelchair				
Element Values:					
Screen	Oracle	SAS			
1 2 <b>n/a</b>	0 1 -1	n/a n/a n/a	No Yes Not Pedestrian or Qualifying Other Non-Motorist		

## Remarks:

Enter **No** if the person is <u>not</u> in a non-motorized wheelchair.

Enter **Yes** if the person is in a non-motorized wheelchair.

**Not Pedestrian or Qualifying Other Non-Motorist** applies if the person is a not a pedestrian or qualifying other non-motorist (i.e. the person is a pedalcyclist).

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 1)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 1 (294-E)

Long Name: Does the motorist strike a pedestrian or qualifying other non-motorist going to/from or crossing near: a bus or bus stop, ice cream vendor, residential mail/newspaper box or exiting/entering a stopped or parked vehicle?

SAS Name: Accident.Ped\_Acc

Oracle Name: GES.CrashData.PedBikeID

#### Element Values:

Screen	Oracle	$SAS^*$	
1	27539	0110	Commercial Bus-Related
2	27540	0120	School Bus-Related
3	27602	0130	Vendor/Ice Cream Truck
4	27603	0140	Mail Box-Related
5	27604	0150	Exiting/Entering
6	47545	n/a	None of the Above Scenarios Apply

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while crossing in front of a commercial bus stopped at a marked bus stop, is in a wheelchair; the SAS value 1110 is assigned; 0110, otherwise.

#### Remarks:

In Category 1, the motorist strikes a pedestrian or qualifying other non-motorist going to/from or crossing near a bus or bus stop; ice cream vendor; rural residential mailbox; exiting/entering a stopped or parked vehicle.

Enter **Commercial Bus-Related** if the person is struck while crossing in front of a commercial bus which is stopped at a marked bus stop.

C Includes only buses that stop periodically at marked or unmarked bus stops. Does not include church, YMCA or other buses not stopping at marked stops.

Enter School Bus-Related if the person is struck going to/from a school bus or school bus stop

- C This type includes the crash in which the person is struck by a school bus.
- C The bus does not have to be present if the person was noted to have been crossing to, from or was at a school bus stop.

C Includes the person being at or near a school bus or school bus stop.

Select **Vendor/Ice Cream Truck** if the person is struck while going to/from an ice cream vendor and striking vehicle was on same street as vendor

C A truck (not a pushcart or trailer) vending from curb or roadside.

Enter **Mail Box-Related** if the person is struck while going to/from a private residence mail/newspaper box

- C Includes the pedestrian being at the box.
- <sup>c</sup> "Private residence mailbox" does not include a US mail box in which letters are dropped to be mailed.

Enter **Exiting/Entering** if the person is in the process of exiting/entering a parked or stopped vehicle, and is struck in the traffic lane next to stopped/parked vehicle.

The following 3 conditions must apply.

- C A pedestrian is only in the process of exiting/entering while in contact with vehicle or within 2-3 steps of the door.
- C Pedestrian was struck in the roadway (e.g., not on sidewalk, in parking lot, etc.).
- C The pedestrian was struck when entering or exiting the parked or stopped vehicle on the side of the vehicle that was adjacent to traffic.

## A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 2)

**Screen Heading:** Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 2 (295-E)

**Long Name:** Is the striking motor vehicle: driverless, backing, in pursuit, being pursued or a responding emergency vehicle?

SAS Name: Accident.Ped\_Acc

Oracle Name: GES.CrashData.PedBikeID

#### Element Values:

Screen	Oracle	SAS <sup>*</sup>	
1 2 3	27538 27605 27606	0210 0220 0230	Driverless Vehicle Backing Vehicle Hot Pursuit
4	47547	n/a	None of the Above Scenarios Apply

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck by a vehicle that is backing up, is in a wheelchair; the SAS value 1220 is assigned; 0220, otherwise.

#### Remarks:

In Category 2, the vehicle which impacts the pedestrian or qualifying other non-motorist is: driverless; backing; in pursuit; being pursued; or an emergency vehicle.

**Driverless Vehicle** applies if the person is struck by a vehicle that is moving without a driver at the controls or is set into motion by the actions of a child.

C Does not include vehicles set in motion as a result of a vehicle-vehicle collision.

Backing Vehicle applies if the person is struck by a vehicle that was backing up.

**Hot Pursuit** applies if the person is struck by a vehicle on an emergency/police mission or by a vehicle being pursued.

- C Police or fire department car, ambulance or aid car or fire truck (but not a tow truck) that is responding to an emergency, official business or a disabled vehicle.
- C Does not include a pedestrian who is pursuing or being pursued.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 3)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 3 (296-E)

Long Name: Is the pedestrian or qualifying other non-motorist struck by a motorist while walking to/from or while near/next to: a disabled vehicle, an active police/emergency vehicle?

- SAS Name: Accident.Ped\_Acc
- Oracle Name: GES.CrashData.PedBikeID

### Element Values:

Screen	Oracle	$SAS^*$	
1	27608	0310	Walking To or From Disabled Vehicle
2	27609	0320	Disabled Vehicle-Related
3	27610	0330	Emergency/Police Vehicle-Related
4	47548	n/a	None of the Above Scenarios Apply

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while walking to or from a disabled vehicle (e.g., to get help, gas, etc.), is in a wheelchair; the SAS value 1310 is assigned; 0310, otherwise.

#### Remarks:

In Category 3, the pedestrian or qualifying other non-motorist is struck by a motorist while walking to/from or while near/next to: a disabled vehicle, an active police/emergency vehicle.

Use **Walking To or From Disabled Vehicle** if the person is struck while walking to or from a disabled vehicle (e.g., to get help, gas, etc.)

C The pedestrian is not in immediate proximity of the disabled vehicle.

Select **Disabled Vehicle-Related** if the person is struck while working on or standing near a disabled vehicle in or along the roadway. (No emergency vehicle present.)

- C In this type, "pedestrian or qualifying other non-motorist" does not include on-duty police or emergency personnel, but does include tow truck operators.
- C A disabled vehicle is any vehicle stopped with a problem preventing normal driving. It doesn't necessarily have to be "broken down" but could have been in a crash.

Select **Emergency/Police Vehicle Related** if the person is struck while near an active emergency or police vehicle.

C Police or fire department car, ambulance or aid car or fire truck (but not a tow truck) that is responding to an emergency, official business or a disabled vehicle.

## A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 4)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 4 (297-E)

Long Name: Is the pedestrian or qualifying other non-motorist struck while working or playing in the roadway (prior to motorist's appearance) or on a play vehicle?

- SAS Name: Accident.Ped\_Acc
- Oracle Name: GES.CrashData.PedBikeID

#### **Element Values**:

Screen	Oracle	$SAS^*$	
1	27611	0410	Working on Roadway
2	27612	0420	Play Vehicle-Related
3	27613	0430	Playing in Roadway
4	47551	n/a	None of the Above Scenarios Apply

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while working on, in, over or under the roadway, is in a wheelchair; the SAS value 1410 is assigned; 0410, otherwise.

#### Remarks:

In Category 4, the pedestrian or qualifying other non-motorist is struck while working or playing in the roadway or on a play vehicle.

Enter **Working on Roadway** if the person (e.g., police/emergency personnel, flagman, traffic guard or member of a roadway/construction maintenance crew) is struck while working on, in, over or under the roadway.

- C Person was present in the roadway because of the requirements of his or her job. Includes garbage collectors, construction crews, etc., but not people who are in the street voluntarily (e.g., a civilian directing traffic at the scene of a crash).
- C That part of the road including through lanes, turn lanes, and parking lanes, but not including the shoulder.
- C Alleys and driveways which are controlled by a traffic signal, are considered roadways.

Use **Play Vehicle-Related** if the person is struck while riding a play vehicle (e.g., wagon, sled, skateboard; NOT bicycle, "Big Wheel" type vehicle or tricycle).

- C A play toy which may be ridden but is not a normal mode of transportation (such as wagons, sleds, scooters, roller skates, roller blades, and skateboards). Skateboards, while used by some people as a form of transportation, are to be considered play vehicles. Tricycles, "Big Wheel" type vehicles, and bicycles are not included as play vehicles for the purposes of pedestrian crash typing.
- C The person does not need to be in the trafficway on the play vehicle for this type to apply, e.g., crashes occurring on the sidewalk, driveway or playground may be included.

Select **Playing in Roadway** if the person is struck while playing on foot in roadway. Pedestrian is playing in roadway prior to vehicle's appearance.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 5)

Pedestrian or Qualifying Other Non-Motorist Crashes Screen Heading:

Screen Name: Category 5 (298-E)

Is the pedestrian or qualifying other non-motorist struck while: hitchhiking; Long Name: crossing limited access expressway: walking or running along a road without sidewalks?

SAS Name: Accident.Ped Acc

GES.CrashData.PedBikeID Oracle Name:

~ ^ ~ \*

#### Element Values:

Screen	Oracle	SAS*	
1	27614	0510	Hitchhiking
2	27615	0520	Expressway Crossing
3	27616	0531	Walking Along Road - With Traffic
4	27617	0532	Walking Along Road - Against Traffic
5	27618	0539	Walking Along Road - Can't Specify
6	47553	n/a	None of the Above Scenarios Apply

\* The SAS values apply to persons who are not in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while hitchhiking, is in a wheelchair; the SAS value 1510 is assigned; 0510, otherwise.

#### Remarks:

In Category 5, the pedestrian or qualifying other non-motorist is struck while: hitchhiking; crossing limited access expressway; walking or running along a road without sidewalks.

Select **Hitchhiking** if the person is was struck while hitchhiking.

Enter **Expressway Crossing** if the person is struck while attempting to cross a limited access expressway.

С A major thoroughfare without intersecting cross streets, having specific entrance and exit ramps. Includes superhighways, interstates, freeways, turnpikes, and parkways. Entrance and exit ramps are considered part of an expressway.

Enter Walking Along Road - With Traffic if the person is walking or running along a road in the same direction as traffic.

С The person is not on the sidewalk but could have been walking on the shoulder or in the roadway.

Enter **Walking Along Road - Against Traffic** if the person is walking or running along a road facing traffic (i.e., against traffic).

C The person is not on the sidewalk but could have been walking on the shoulder or in the roadway.

Enter **Walking Along Road - Can't Specify** if the person is walking or running along a road--direction with respect to traffic not specified.

C The person is not on the sidewalk but could have been walking on the shoulder or in the roadway.

## A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 6)

Screen Heading	Pedestrian or Qualifying Other Non-Motorist Crashes			
Screen Name:	Category 6 (299-E)			
Long Name:	Is the pedestrian or qualifying other non-motorist struck: on/near curb or roadway edge; on sidewalk; or on other nonroadway location?			
SAS Name:	Accident.Ped_Acc			
Oracle Name:	GES.CrashData.PedBikeID			
Element Values:				
Screen Oracle	SAS			

1	27619	0610	Pedestrian Waiting to Cross At/Near Curb
2	27620	0620	Pedestrian Not In Roadway
3	47555	n/a	None of the Above Scenarios Apply

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, struck while WAITING to cross a roadway or standing at or near a curb, is in a wheelchair; the SAS value 1610 is assigned; 0610, otherwise.

#### **Remarks:**

In Category 6, the pedestrian or qualifying other non-motorist is struck: on/near a curb or roadway edge; on sidewalk; or on other nonroadway location.

Enter **Pedestrian Waiting to Cross At/Near Curb** if the person is struck while WAITING to cross roadway, standing at or near curb.

Enter **Pedestrian Not In Roadway** if the person is struck when not in/near a roadway (e.g., in parking lot, driveway, private road, gas station, alley, sidewalk, yard, garage, ball field).

C Includes standing off the roadway, but near the edge of the roadway, as well as on the curb. For instance, standing on the shoulder or on the curb waiting to cross the roadway.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 7 VERSUS CATEGORY 8)

Screen Heading:		Pedestrian or Qualifying Other Non-Motorist Crashes			
Screen N	lame:	Catego	Category 7 Versus Category 8 (300-E)		
Long Name:		Does the crash occur at or within 50 feet of an intersection?			
SAS Name:		None			
Oracle Name:		None			
Element Values:					
Screen	Oracle	SAS			
1 2 3	n/a n/a n/a	n/a n/a n/a	No Yes Unknown or Categories 7 and 8 Do Not Apply		

## Remarks:

Select **No** if the crash does not occur at or within 50 feet of an intersection.

Select **YES** if the crash occurs at or within 50 feet of an intersection.

Select **Unknown or Categories 7 and 8 Do Not Apply** if there is insufficient information to determine if the crash occurs at or within 50 feet of an intersection or the crash types for categories 7 and 8 do not apply.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 7)

Screen Heading:	Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name:	Category 7 (302-E)
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**Long Name:** Select the applicable category 7 crash type.

SAS Name: Accident.Ped\_Acc

Oracle Name: GES.CrashData.PedBikeID

### Element Values:

Screen	Oracle	SAS*	
1	27621	0710	Multiple Threat - At Intersection
2	27622	0720	Vehicle Turn/Merge
3	27623	0730	Intersection Dash
4	27624	0740	Trapped
5	27625	0750	Pedestrian Walks Into Vehicle - At Intersection
6	27626	0760	Intersection - Driver Violation
7	27627	0790	Intersection - Other

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, entering the roadway in front of standing/stopped traffic and struck by a vehicle heading in the same direction as stopped traffic, is in a wheelchair; the SAS value 1710 is assigned; 0710, otherwise.

#### Remarks:

In Category 7, the crash occurs at or within 50 feet of an intersection.

Enter **Multiple Threat - At Intersection** if the person enters the roadway in front of standing/stopped traffic, and is struck by a vehicle heading in the same direction as stopped traffic.

- C A stopped vehicle has the engine running and a driver at the controls; it is not an empty parked vehicle.
- C This type covers a crash in which the person enters the roadway in front of a vehicle that is stopped to allow the person to cross.
- C The person crosses in front of the stopped vehicle, and then is struck by another vehicle traveling in the same direction as the stopped vehicle. The second vehicle is not aware that the person is crossing in front of the stopped vehicle.
- C This type does not cover a person entering the roadway in front of stalled traffic or a disabled vehicle (see type under SAS value 0320).

C If the traffic light changes while the person is crossing, continue down to the "Trapped" type (SAS code 0740).

Enter **Vehicle Turn/Merge** if the person and vehicle collided while the vehicle is in the process of turning/merging, is preparing to turn/merge or just completes a turning/merging maneuver.

Enter **Intersection Dash** if the motorist's view of the person is blocked until an instant before impact and/or the person is running.

- C The driver's view of the person is blocked by some obstruction until immediately before impact. The obstruction is documented in some part of the report as having impaired the driver's vision.
- C Assume walking if the only indication of the person's speed is "crossing" or "staggering." Take the narrative literally (i.e., assume that the person is running if the report has a statement such as "The person ran in front of me.")

Enter **Trapped** if, at a signalized intersection, a person in the process of crossing is struck when the light changes and traffic starts moving.

Enter **Pedestrian Walks Into Vehicle - At Intersection** if the person walks into (i.e., struck) the vehicle.

C Person is walking, not running, and strikes the vehicle.

Enter **Intersection - Driver Violation** if the person is struck by a driver who is proceeding straight ahead and the report indicates that the driver committed one or more of the following violations: careless driving, failed to yield right-of-way, signal/sign violation, speeding/too fast for conditions, DWI/DUI.

Report Indicates

- C Must be reported by policeman
  - 1. in narrative or
  - 2. in boxes or
  - 3. in charges, citations or arrests.

Careless Driving

C Is the same as "without due regard."

Enter **Intersection - Other** if the crash occurs at an intersection but is not covered by any of the above or there is insufficient information to code any of the above.

C The roadway up to and including 50 feet from the corner. Alleys and driveways are only considered intersections when they are controlled by a traffic signal. Assume intersection if no information is given other than an intersection drawn in the report.

## A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 8)

<b>O</b> • • • • • • • • • • • • • • • • • • •	Dedectrice of Qualifying Other New Meteriat Creakes
Screen Heading:	Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name:	Category 8 (304-E)
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**Long Name:** Select the applicable category 8 crash type.

SAS Name: Accident.Ped\_Acc

Oracle Name: GES.CrashData.PedBikeID

#### Element Values:

Screen	Oracle	SAS*	
1	27628	0810	Multiple Threat - At Midblock
2	27629	0821	Dart-Out - First Half
3	27630	0822	Dart-Out - Second Half
4	27631	0829	Dart-Out - Can't Specify
5	27632	0830	Midblock Dash
6	27633	0840	Pedestrian Walks Into Vehicle - Midblock
7	27634	0890	Midblock - Other

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if a person, entering the roadway in front of standing/stopped traffic and struck by a vehicle heading in the same direction as standing traffic (driver's vision is blocked by standing traffic), is in a wheelchair; the SAS value 1810 is assigned; 0810, otherwise.

#### Remarks:

In Category 8, the crash occurs midblock (i.e., more than 50 feet from an intersection). Use the following codes for the corresponding situations.

Enter **Multiple Threat - At Midblock** if the person enters the roadway in front of standing/stopped traffic, and is struck by a vehicle heading in same direction as standing traffic; driver's vision is blocked by standing traffic.

- C A stopped vehicle has the engine running and driver at the controls; it is not an empty parked vehicle.
- C This type covers a crash in which the person enters the roadway in front of a vehicle that is stopped to allow the person to cross. The person crosses in front of the stopped vehicle, and then is struck by another vehicle traveling in the same direction as the stopped vehicle. The second vehicle is not aware that the person is crossing in front of the stopped vehicle.
- C This type does not cover a person entering the roadway in front of stalled traffic or a disabled vehicle.

Enter **Dart-Out - First Half** if the person is struck before crossing half of the roadway (in first half of roadway) and the motorist's view of the person is blocked until an instant before impact.

- C Person is struck before reaching the center-line of the roadway.
- C A dart-out (SAS codes 0821, 0822 or 0829) can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle or building, is present (for example: "She came out from between two parked cars."), assume this object is an obstruction, unless the driver specifically mentions that the person is visible heading towards the roadway before the crash.
- C Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- C Do not assume that, for instance, rain or darkness always constitutes an obstruction. They would only be an obstruction if the driver or officer mentions that the driver's view is impaired because of these factors.

Enter **Dart-out - Second Half** if the person is struck after crossing over half of the roadway (in second half of roadway) and the motorist's view of the person is blocked until an instant before impact.

- C The person crosses one-half of the roadway and is struck at the centerline or after having crossed the centerline.
- C A dart-out can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle or building, was present (for example: "She came out from between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the person is visible heading towards the roadway before the crash.
- C Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- C Do not assume that, for instance, rain or darkness always constitutes an obstruction. They would only be an obstruction if the driver or officer mentioned that the driver's view was impaired because of these factors.

Enter **Dart-out - Can't Specify** if the person is struck after entering the roadway and the motorist's view of the person is blocked until an instant before impact (first or second half of roadway not specified).

C A dart-out can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle or building, was present (for example: "She came out from between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the person had been visible heading towards the roadway before the crash.

- C Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- C Do not assume that, for instance, rain or darkness always constitutes an obstruction. They would only be an obstruction if the driver or officer mentioned that the driver's view was impaired because of these factors.

Enter **Midblock Dash** if the person is running and the motorist's view of the person is not obstructed.

- C Assume walking if the only indication of the person's speed is "crossing" or "staggering." Take the narrative literally (i.e., assume that the person is running if the report has a statement such as "The person ran in front of me").
- C No obstructions indicated in the report or driver indicates that there is no obstruction.

Enter **Pedestrian Walks Into Vehicle - Midblock** if the person walks into (i.e., struck) the vehicle.

C Person is walking, not running, and struck the vehicle.

Enter **Midblock - Other** if the crash occurs midblock but is not covered by any of the above or insufficient information is given to code any of the above.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CATEGORY 9)

Screen Heading: Pedestrian or Qualifying Other Non-Motorist Crashes

Screen Name: Category 9 (306-E)

**Long Name:** Select the applicable category 9 crash type.

SAS Name: Accident.Ped\_Acc

Oracle Name: GES.CrashData.PedBikeID

#### Element Values:

Screen	Oracle	SAS*	
1	27635	0910	Other - Weird
2	27636	0920	Inadequate Information

\* The SAS values apply to persons who are <u>not</u> in wheelchairs. If the person is in a wheelchair, the first digit of the four digit SAS value is set to "1." Example: if insufficient information is available to specify the crash type and the person is in a wheelchair; the SAS value 1920 is assigned; 0920, otherwise.

#### Remarks:

In Category 9, the crash is other type or has inadequate information. Use the following codes for the corresponding situations.

Enter **Other - Weird** if the crash situation is not covered by any of the types listed in categories 1-8.

Enter **Inadequate Information** if insufficient information is available to specify the crash type.

## A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - WEIRD)

Screen H	eading:	Pedalo	cyclist Crashes		
Screen N	ame:	Specifi	Specific Circumstances - Weird (310-E)		
Long Nar	ne:	The cra	ash is weird because:		
SAS Nam	e:	Accide	nt.Ped_Acc		
Oracle Name:		GES.C	crashData.PedBikeID		
Element	Values:				
Screen	Oracle	SAS			
<b>n/a</b> 1 2 3 4 5	n/a 27471 27582 27583 27584 47629	0036 0036 0036 0036 0036 <b>n/a</b>	Weird The Motorist or Cyclist Intentionally Causes the Crash The Officer Indicates No Crash Actually Occurs The Crash Does Not Involve a Cyclist The Cyclist Is Struck by Falling Cargo None of These Crash Descriptions Apply		

#### Remarks:

#### Overall Procedure for Classifying Pedalcycle Crashes

Use the procedures described below when the first qualifying non-motorist involved in the crash is a Pedalcyclist [P03, Person Type equals Non-occupant / Cyclist (Pedalcyclist)].

Code each police report as follows:

- 1. Read the police report carefully and completely:
  - First, read the narrative. In case of conflicting stories, give first priority to officer's conclusion, then the witness statement, and finally the pedalcyclist or driver statement.
  - Next, review the information in the specific information categories (i.e., the "check off" boxes), such as time, day, violations, weather, pedalcyclist's age, driver's age and roadway information.
  - Finally, examine the diagram. Remember that diagrams are seldom drawn to scale. Although a diagram might appear to show a crash occurs at an intersection, for example, check the report form for the actual measurement of the point of impact from the nearest intersection.

- 2. Read each of the four Specific Circumstances crash types in order. The four Specific Circumstances are:
  - The crash is weird because:
  - The cyclist is riding a child's vehicle, such as a "Big Wheel" type tricycle, other tricycle or a bicycle with training wheels. (But not an adult tricycle.)
  - The crash involves a motor vehicle which is backing.
  - The crash occurs in: a parking lot, etc.
- 3. If none of the Special Circumstances apply, determine whether the initial approach paths of the motorist and pedalcyclist are parallel or crossing.
- 4. Review each parallel or crossing path type in order and select the first one that applies.
- 5. Within the first parallel or crossing path type which applies, review each crash type description <u>in order</u> and select the <u>first</u> one that applies.
- 6. If no crash type description applies, continue with the next parallel or crossing path heading and repeat steps 4 and 5.
- 7. If you reach the Insufficient Information heading without finding a type that applies, enter Parallel Paths Unknown or Crossing Paths Unknown (SAS codes 0098 or 0099). Before using an Insufficient Information code, review the report to assure that you have not missed any information that would lead you to select another crash type.

As you code, refer to the diagram and label accompanying each crash for additional information. Remember that the diagrams are examples only, and do not represent all possible situations to which the type can be applied.

If more than one pedalcyclist is involved in a crash, the first pedalcyclist struck defines the crash. Consider only the circumstances surrounding the collision with the first pedalcyclist in determining the type.

## Procedures for This Question, the First of Four Specific Circumstances

Read each crash description below. If none apply, select **None of These Crash Descriptions Apply**.

The crash is weird because:

- The Motorist or Cyclist Intentionally Causes the Crash.
- The Officer Indicates No Crash Actually Occurred.
- The Crash Does Not Involve a Cyclist.
- The Cyclist Is Struck by Falling Cargo.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - CHILDREN'S VEHICLE)

Screen Heading:		Pedal	cyclist Crashes			
Screen N	lame:	Speci	Specific Circumstances - Vehicle (312-E)			
Long Name:		Is the	Is the pedalcyclist riding a children's vehicle?			
SAS Name:		Accident.Ped_Acc				
Oracle Name:		GES.	CrashData.PedBikeID			
Element	Values					
Screen	Oracle	SAS				
1 2	<b>n/a</b> 27472	<b>n/a</b> 0040	No Yes			

## Remarks:

Enter **Yes** if the cyclist is riding a child's vehicle, such as a "Big Wheel" type tricycle, other tricycle or a bicycle with training wheels (but not an adult tricycle); **No**, otherwise.

## A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES -BACKING MOTOR VEHICLE)

Screen Heading:		Pedalcyclist Crashes			
Screen Name:		Specit	Specific Circumstances - Backing (314-E)		
Long Name:		Does the crash involve a motor vehicle which is backing?			
SAS Name:		Accident.Ped_Acc			
Oracle Name:		GES.0	CrashData.PedBikeID		
Element	Values:				
Screen	Oracle	SAS			
1	n/a	n/a	No		
2	27473	0011	Yes		
<u> </u>					

# Remarks:

Enter **Yes** if the crash involves a motor vehicle which is backing; **No**, otherwise.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (SPECIFIC CIRCUMSTANCES - NOT ON A ROADWAY)

Screen Heading: Pedalcyclist Crashes		yclist Crashes			
Screen N	ame:	Specifi	Specific Circumstances - Non-Roadway (316-E)		
Long Name:		Does the crash occur in?			
SAS Name:		Accident.Ped_Acc			
Oracle Name:		GES.CrashData.PedBikeID			
Element	Values:				
Screen	Oracle	SAS			
<b>n/a</b> 1 2 3	<b>n/a</b> 27474 27585 47630	0029 0029 0029 n/a	Parking Lot, Open Area or Another Non-Roadway Location A Parking Lot or Open Area Another Non-Roadway Location, Such as a Gas Station None of These Items Describe the Crash Events		

## Remarks:

Enter **Yes** if the crash occurs in a parking lot or open area or another non-roadway location, such as a gas station, alley, lot, etc.; **No**, otherwise.

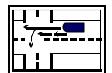
# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (APPROACH PATHS--PARALLEL VERSUS CROSSING)

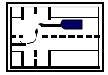
Screen Heading:		Pedalcyclist Crashes				
Screen N	ame:	Initial A	Initial Approach Paths (318-E)			
Long Name:		What a	What are the initial approach paths of the motorist and cyclist?			
SAS Name:		Accident.Ped_Acc				
Oracle Name:		GES.CrashData.PedBikeID				
Element	Values:					
Screen	Oracle	SAS				
1 2 3	<b>n/a</b> n/a 10332	<b>n/a</b> n/a 0097	Parallel Crossing Unknown			

## **Remarks:**

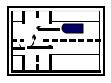
Specify the initial approach paths (i.e., before any turns which cause the crash or turns to avoid it).

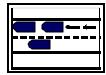
Enter **Parallel** if the cyclist and motor vehicle are approaching each other on parallel paths, heading either in the same direction or in opposing directions.



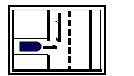


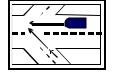
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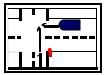


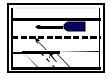


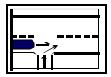
Enter Crossing if the cyclist and motor vehicle are on intersecting paths











Enter **Unknown** if there is no way of knowing whether the vehicles' initial approach paths are parallel or crossing.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (PARALLEL PATH CATEGORY)

Screen Heading: Pe		Pedalo	Pedalcyclist Crashes		
Screen I	Name:	Paralle	l Paths (320-E)		
Long Name:		Choos	e the first parallel path which applies.		
SAS Name:		Accide	nt.Ped_Acc		
Oracle Name:		GES.C	rashData.PedBikeID		
Element	Values:				
Screen	Oracle	SAS			
1	n/a	n/a	Parallel Path 1 (Motorist Turns or Merges into the Path of the		
2	n/a	n/a	Cyclist) Parallel Path 2 (Cyclist Turns or Merges into the Path of the Motorist)		
3	n/a	n/a	Parallel Path 3 (Operator Is on the Wrong Side of the Street)		
4	n/a	n/a	Parallel Path 4 (Motorist Is Overtaking the Cyclist)		
5	n/a	n/a	Parallel Path 5 (Cyclist Is Overtaking a Motor Vehicle)		
6	n/a	n/a	Parallel Path 6 (Operator Loses Control and Inadvertently Swerves		
7	27554	0098	into the Path of the Other Vehicle Because of:) Parallel Path 7 (There Is No Way of Knowing Which of the above Is True)		

#### Remarks:

Choose the first parallel path that applies.

Select **Parallel Path 1** if the motorist turns or merges into the path of the cyclist.

Select Parallel Path 2 If the cyclist turns or merges into the path of the motorist.

Select Parallel Path 3 If the operator (motorist or cyclist) is on the wrong side of the street.

Select **Parallel Path 4** if the motorist is overtaking the cyclist.

Select **Parallel Path 5** f the cyclist is overtaking a motor vehicle.

Select **Parallel Path 6** If the operator (motorist or cyclist) loses control and inadvertently swerves into the path of the other vehicle because of:

- mechanical failure, such as brakes, steering, tires or other vehicle problems
- road conditions, such as ice, potholes, mud, sand or other surface conditions.
- prior collision with moving or stationary object(s).
- operator impairment due to drugs or alcohol.

• operator error due to oversteering or improper braking.

Select **Parallel Path 7** If there is no way of knowing which of the above scenarios is true.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (CROSSING PATH CATEGORY)

Screen Heading:		Pedalcyclist Crashes			
Screen I	Name:	Crossi	ng Paths (322-E)		
Long Name:		Choos	e the first crossing path which applies.		
SAS Nan	ne:	Accide	Accident.Ped_Acc		
Oracle Name:		GES.C	CrashData.PedBikeID		
Element	Values:				
Screen	Oracle	SAS			
1	n/a	n/a	Crossing Path 1 (Cyclist Does Not Clear Intersection Before Light		
2	n/a	n/a	Turns Green for Cross Traffic) Crossing Path 2 (Motorist Fails to Yield to the Cyclist)		
3	n/a	n/a	Crossing Path 3 (Cyclist Fails to Yield to the Motorist, Midblock)		
4	n/a	n/a	Crossing Path 4 (Cyclist Fails to Yield to the Motorist at an Intersection)		
5	n/a	n/a	Crossing Path 5 (Motorist Is Turning)		
6	n/a	n/a	Crossing Path 6 (Cyclist Is Turning)		
7	n/a	n/a	Crossing Path 7 (Crash Occurs at an Intersection)		
8	27601	0099	Crossing Path 8 (There Is No Way of Knowing Which of the above Is True)		

#### Remarks:

Choose the first crossing path that applies.

Select **Crossing Path 1** if the cyclist does not clear intersection before light turns green for cross traffic.

Select **Crossing Path 2** if the motorist fails to yield to the cyclist.

Select **Crossing Path 3** if the cyclist fails to yield to the motorist, midblock.

Select **Crossing Path 4** if the cyclist fails to yield to the motorist at an intersection.

Select Crossing Path 5 if the motorist is turning.

Select **Crossing Path 6** if the cyclist is turning.

Select **Crossing Path 7** if the crash occurs at an intersection.

Select Crossing Path 8 If there is no way of knowing which of the "Crossing Paths" is true.

# A24 PEDESTRIAN/BIKE ACCIDENT TYPE (PARALLEL/CROSSING PATH CATEGORY CRASH TYPE)

Screen Heading:	Pedalcyclist Crashes
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- Screen Name: Parallel Paths (330-E)
- **Long Name:** Choose the first crash type which applies.
- SAS Name: Accident.Ped\_Acc
- Oracle Name: GES.CrashData.PedBikeID

### Element Values:

\*

Screen Oracle SAS

Parallel Path 1 (Motorist Turns or Merges into the Path of the Cyclist)

27476	0035	Drive out - on Street Parking
27477	0022	Motorist Left Turn in Front of Cyclist
27534	0023	Motorist Left Turn Facing Cyclist
27535	0024	Motorist Right Turn in Front of Cyclist

Parallel Path 2 (Cyclist Turns or Merges into the Path of the Motorist)

27536	0003	Ride-out from Sidewalk
27537	0018	Cyclist Left Turn, in Front of Traffic
27541	0019	Cyclist Left Turn, Facing Traffic
27542	0021	Cyclist Right Turn, from Wrong Side of Street

Parallel Path 3 (Operator Is on the Wrong Side of the Street)

27543	0030	Head-on, Counteractive Evasive Actions
27544	0028	Wrong Way Motorist
27545	0026	Wrong Way Cyclist

Parallel Path 4 (Motorist Is Overtaking the Cyclist)

27546	0013	Motorist Overtakes Undetected Cyclist
27547	0015	Motorist Overtaking, Counteractive Evasive Actions
27548	0016	Motorist Overtaking, Misjudges Passing Space
27549	0017	Motorist Overtaking Cyclist, Path Obstructed
27550	0039	Motorist Overtaking

Parallel Path 5 (Cyclist Is Overtaking a Motor Vehicle)

27551	0027	Cyclist Overtaking
27552	0041	Cyclist Strikes Parked Vehicle

Parallel Path 6 (Operator Loses Control and Inadvertently Swerves into the Path of the Other Vehicle Because of:)

27553	0014	Motorist Lost Control
10349	0020	Cyclist Lost Control

Crossing Path 1 (Cyclist Does Not Clear Intersection Before Light Turns Green for Cross Traffic)

27555	0006	Trapped
27556	0007	Multiple Threat

Crossing Path 2 (Motorist Fails to Yield to the Cyclist)

27557	8000	Drive Out, Driveway/Alley
27586	0012	Drive Through
27587	0009	Drive Out, Stop Sign
27588	0010	Right on Red
27589	0048	Drive Out, Intersection

Crossing Path 3 (Cyclist Fails to Yield to the Motorist, Midblock)

27590	0001	Ride Out, Residential Driveway
27591	0002	Ride Out, Commercial Driveway
27592	0004	Ride Out, Midblock

Crossing Path 4 (Cyclist Fails to Yield to the Motorist at an Intersection)

27593	0005	Ride Out, Stop Sign
27594	0049	Ride Out, Intersection

Crossing Path 5 (Motorist Is Turning)

27595	0033	Motorist Cuts Corner
27596	0034	Motorist Swings Wide

Crossing Path 6 (Cyclist Is Turning)

27597	0031	Cyclist Cuts Corner
27598	0032	Cyclist Swings Wide

Crossing Path 7 (Crash Occurs at an Intersection)

27599	0055	Controlled Intersection, Other
27600	0025	Uncontrolled Intersection, Other

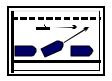
\* Diagrams with labels describing the crash type are shown on the data entry screen.

Remarks:

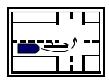
# Parallel Path 1

# The motorist turns or merges into the path of the cyclist.

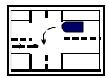
Select **Drive out - on Street Parking** if the motorist is exiting or entering on-street parking.



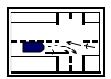
Select **Motorist Left Turn in Front of Cyclist** if the motorist is turning left and going in the same direction as cyclist.



Select **Motorist Left Turn Facing Cyclist** if the motorist is turning left and the motorist and cyclist are facing each other as they approach.



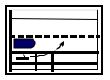
Select **Motorist Right Turn in Front of Cyclist** if the motorist is turning right and the motorist and cyclist are going in either the same direction or opposite directions.



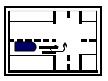
# Parallel Path 2

# The cyclist turns or merges into the path of the motorist.

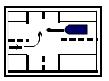
Select **Ride-out from Sidewalk** if the cyclist turns or merges onto the street from a residential driveway or alley. Cyclist coming from sidewalk.



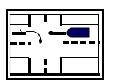
Select **Cyclist Left Turn, in Front of Traffic Left** if the cyclist turns or merges onto the street and is going the same direction as the motorist.



Select **Cyclist Left Turn, Facing Traffic Left** if the cyclist turns or merges onto the street and the cyclist and motorist are facing each other as they approach.



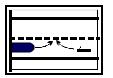
Select **Cyclist Right Turn, from Wrong Side of Street Right** if the cyclist turns or merges onto the street and the cyclist is riding on the wrong side of the street.



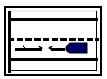
# Parallel Path 3

The operator is on the wrong side of the street.

Select **Head-on, Counteractive Evasive Actions** if either the cyclist or motorist are going the wrong way, the approach is head-on, and the evasive actions are counteractive.



Select Wrong Way Motorist if the motorist is going the wrong way.



Select Wrong Way Cyclist if the cyclist is going the wrong way.

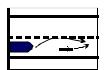
Parallel Path 4

The motorist is overtaking the cyclist.

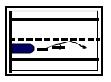
Select **Motorist Overtakes Undetected Cyclist** if the motorist fails to detect the cyclist.



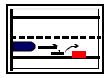
Select **Motorist Overtaking, Counteractive Evasive Actions** if the evasive actions are counteractive.



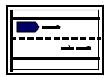
Select **Motorist Overtaking, Misjudges Passing Space** if the motorist misjudges the space, length or width required to pass the cyclist.



Select **Motorist Overtaking Cyclist, Path Obstructed** if the cyclist's path is obstructed. Cyclist strikes obstruction or overtaking motorist.



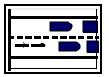
Select Motorist Overtaking for other situations involving a motorist overtaking a cyclist.



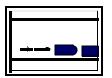
Parallel Path 5

The cyclist is overtaking a motor vehicle.

Select Cyclist Overtaking if the cyclist strikes a slow or stopped vehicle in a traffic lane.



Select Cyclist Strikes Parked Vehicle if the cyclist strikes a vehicle in parking lane.

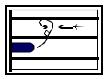


# Parallel Path 6

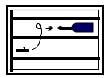
The operator loses control and inadvertently swerves into the path of the other vehicle because of any of the following reasons:

- mechanical failure, such as brakes, steering, tires or other vehicle problems
- road conditions, such as ice, potholes, mud, sand or other surface conditions
- prior collision with moving or stationary objects
- operator impairment due to drugs or alcohol
- operator error due to oversteering or improper braking

Select Motorist Lost Control if the motorist loses control.



Select Cyclist Lost Control if the cyclist loses control.



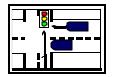
# **Crossing Path 1**

The cyclist does not clear intersection before light turns green for cross traffic.

Select **Trapped** if the cyclist does not clear the intersection before the light turns green for cross traffic and the motorist's view of the cyclist is not obstructed.

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Select **Multiple Threat** if the cyclist does not clear the intersection before the light turns green for cross traffic and the motorist's view of the cyclist is obstructed by standing traffic.

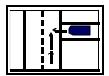


### Crash

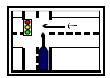
# **Crossing Path 2**

# The motorist fails to yield to the cyclist.

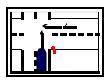
Select **Drive Out**, **Driveway/Alley** if the motorist fails to yield to the cyclist at a driveway, alley or other midblock location.



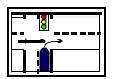
Select **Drive Through** if the crash occurs at a controlled intersection and the motorist runs a sign or signal.



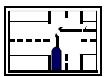
Select **Drive Out, Stop Sign** if, at an intersection controlled by a stop sign or flashing light, the motorist obeys the sign but fails to yield to the cyclist.



Select **Right on Red** if, at an intersection controlled by a signal, the motorist obeys the signal but fails to yield to the cyclist when making a right turn when the signal is red.



Select **Drive Out, Intersection** if the crash occurs at an intersection and the situation is not covered above.

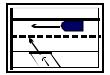


# Crash

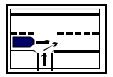
# Crossing Path 3

The cyclist fails to yield to the motorist, midblock.

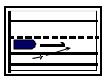
Select **Ride Out, Residential Driveway** if the cyclist fails to yield to the motorist at a residential driveway or alley.



Select **Ride Out, Commercial Driveway** if the cyclist fails to yield to the motorist at a commercial driveway.



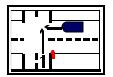
Select **Ride Out, Midblock** if the cyclist fails to yield to the motorist at a shoulder or curb -- midblock location. (Cyclist not using driveway.)



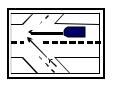
**Crossing Path 4** 

The cyclist fails to yield to the motorist at an intersection.

Select **Ride Out**, **Stop Sign** if the cyclist fails to yield to the motorist at an intersection controlled by a stop sign or flashing red signal.



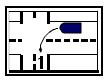
Select **Ride Out, Intersection** if the cyclist fails to yield to the motorist at an intersection and the situation is not covered above.



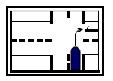
# **Crossing Path 5**

The motorist is turning.

Select Motorist Cuts Corner if the motorist is turning left and cuts the corner.



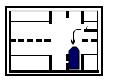
Select **Motorist Swings Wide** if the motorist is turning right and swings out too wide.



Crossing Path 6

The cyclist is turning.

Select Cyclist Cuts Corner if the cyclist is turning left and cuts the corner.



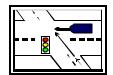
Select **Cyclist Swings Wide** if the cyclist is turning right and swings out too wide.

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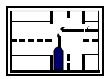
# Crossing Path 7

# The crash occurs at an intersection.

Select **Controlled Intersection, Other** if the intersection is controlled by stop signs or signals.



Select **Uncontrolled Intersection**, **Other** if the intersection has no signs or signals.



# **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AA037	HARMFUL EVENT (A06) equals 21 or 22	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.
AA038	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0810, 0821, 0822, 0829, 0830, 0840 or 0890	RELATION TO JUNCTION (A09) must not equal 01 or 11.
AA039	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430; EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO ROADWAY (A10) must equal 1.
AA040	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740	TRAFFIC CONTROL DEVICE (A16) must not equal 00.
AA042	the HARMFUL EVENT (A06) involving a non-motorist equals 22	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 001-0099.
AA043	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002 or 0008	RELATION TO JUNCTION (A09) must equal 03 or 13.

AA044	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0010, 0012, 0025, 0048, 0049 or 0055	RELATION TO JUNCTION (A09) must equal 01, 02, 04, 08, 11, 12, 14 or 18.
AA045	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0009, 0010, 0012 or 0055	TRAFFIC CONTROL DEVICE (A16) must not equal 00.
AA046	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006, 0007 or 0010	TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08 or 09.
AA047	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005	TRAFFIC CONTROL DEVICE (A16) must equal 04 or 21.
AA048	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0012 or 0055	TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, 09, 21, 22, 28 or 29.
AA051	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0610, 0620, EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21	RELATION TO ROADWAY (A10) must not equal 1.
AA070	NUMBER OF NON-MOTORISTS (A04) equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0000.
AA090	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0009	RELATION TO JUNCTION (A09) must not equal 00.
AP021	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0000	PERSON TYPE (P03) must not equal 5, 6 or 8.
AP061	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P03) equals 5	NON-MOTORIST'S ACTION (P19) must equal 21 or 22.
AP062	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002, 0004, 0005 or 0049	at least one NON-MOTORIST'S ACTION (P19) must equal 07.
AP129	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0750 or 0840	NON-MOTORIST'S ACTION (P19) must not equal 21.
AV022	HARMFUL EVENT (A06) equals 21, EVENT NUMBER (E01) = 1 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 8, 9, 13 or 97.
PA064	NON-MOTORIST'S ACTION (P19) equals 29	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0610 or 0620.

PA083	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4	the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.
PA096	PERSON TYPE (P03) equals 5 or 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.
RANGE	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0 or null	PEDESTRIAN/BIKE ACCIDENT TYPE - WHEELCHAIR (A24) must equal -1.

### <u>Warnings</u>

	IF	THEN
AA041	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740	TRAFFIC CONTROL DEVICE (A16) should equal 01, 04, 08, 09 or 99.
AA049	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0025	TRAFFIC CONTROL DEVICE (A16) should equal 00.
AA050	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019, 0021, 0022, 0023 or 0024	RELATION TO JUNCTION (A09) should not equal 00 or 10.
AA091	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0009, 0010, 0012, 0025, 0049 or 0055	RELATION TO JUNCTION (A09) should not equal 01, 02, 11 or 12.
AP024	SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120.
AP027	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5	SCHOOL BUS RELATED (A21) should equal 1.
AP063	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0830	at least one NON-MOTORIST'S ACTION (P19) should equal 21.
PA051	PERSON TYPE (P03) equals 5 and NON-MOTORIST LOCATION (P13) equals 08, 18 or 98	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620.
PA053	NON-MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
PA065	HARMFUL EVENT (A06) equals 22, NUMBER OF NON- MOTORISTS (A04) equals 01, and NON-MOTORIST'S ACTION (P19) equals 07	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0001, 0002, 0003, 0004, 0005, 0018, 0019, 0021, 0026, 0040, 0049, 0097, 0098 or 0099.

PA168	NON-MOTORIST'S ACTION (P19) equals 27	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531.
PA169	NON-MOTORIST'S ACTION (P19) equals 28	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0532.
PA170	NON-MOTORIST'S ACTION (P19) equals 25	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531, 0532 or 0539.

### Post Entry

	IF	THEN
AD026	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0210	at least one DRIVER PRESENCE (D01) must equal 0.
AD034	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0007	at least one DRIVER'S VISION OBSCURED BY (D04) must equal 07 or 11.
AD043	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0760	at least one VIOLATIONS CHARGED (D02) should not equal 00.
AD088	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0821, 0822 or 0829	at least one DRIVER'S VISION OBSCURED BY (D04) must not equal 00.
AD154	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006	at least one DRIVER'S VISION OBSCURED BY (D04) must equal 00.
AP023	RELATION TO JUNCTION (A09) equals 01 or 11 and at least one PERSON TYPE (P03) equals 5 for the first non-motorist	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890.
AP039	RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12, and at least one PERSON TYPE (P03) equals 5 for the first non-motorist	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
AP040	RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920.
AP054	TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0006, 0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055.
AP077	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0420	at least one PERSON TYPE (P03) must equal 4.

AP155	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 9999	at least one PERSON TYPE (P03) must equal 8.
AP156	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430	at least one NON-MOTORIST'S ACTION (P19) must equal 29.
AP157	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0531	at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 27.
AP158	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0532	at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 28.
AP235	First character of PED/BIKE ACCIDENT TYPE (A24) equals 1	at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 04.
AV030	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0011	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 07, 08, 13 or 98.
AV031	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0035	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 08 or 09.
AV032	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0022, 0023 or 0033	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 11 or 17.
AV033	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0010, 0024 or 0034	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 10 or 17.
AV041	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0230	at least one EMERGENCY USE (V09) should equal 1.
AV042	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0720	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, 12, 16, 97 or 99.
AV055	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0003, 0018, 0019 or 0021	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 01.
AV089	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0840	at least one VEHICLE ROLE (V22) must equal 2.
PA049	at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110- 0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920.
PA058	at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099.

VA218	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00; at least one PERSON TYPE (P03) equals 5 and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.
VP045	at least one # OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP045A	at least one # OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP046	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.
VP047	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720.
VP056	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049.
VP057	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011.
VP136	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024 or 0034, 0048 or 0049.

# A16 TRAFFIC CONTROL DEVICE

Screen Heading:	Regarding Vehicle #
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- Screen Name: Traffic Control Devices (245-E)
- **Long Name:** What traffic control devices are applicable to this vehicle?
- SAS Name: Accident.Traffic\_Con
- Oracle Name: GES.TrafficDevices.DeviceID, GES.BiketrafficDevice.DeviceID

#### Element Values:

- Screen Oracle SAS
  - n/a 26623 00 No Controls

#### NOT AT RAILROAD GRADE CROSSING

#### TRAFFICWAY TRAFFIC SIGNALS

- 1 26624 01 Traffic Control Signal (on colors)
- 2 26625 04 Flashing Traffic Control Signal or Flashing Beacon
- 3 26626 08 Other Traffic Signal
- 4 26627 09 Unknown Traffic Signal

#### REGULATORY, SCHOOL ZONE SIGNS

1	26628	21	Stop Sign
2	26629	22	Yield Sign
3	26630	23	School Zone Related Sign
4	26631	28	Other Sign
5	26632	29	Unknown Sign

#### WARNING SIGNS

1	26633	40	Advisory Speed Sign
2	26634	41	Warning Sign for Road Conditions (Hill, Steep Grade, etc.)
3	26635	42	Warning Sign for Road Construction
4	26636	43	Warning Sign for Environment/Traffic (Fog ahead, Wind, Crash ahead)
5	26637	49	Unknown Type Warning Sign
	MISCELLA	NEOU	S NOT AT RAILROAD CROSSING
1	26638	51	Officer, Crossing Guard, Flagman, etc.

#### AT RAILROAD GRADE CROSSING

1	26639	61	Active Device at RR Crossing (e.g., Gates, Flashing Lights, Traffic Signal)
2	26640	62	Passive Device at RR Crossing (e.g., Stop Sign, Cross Bucks)
<u>OTHER</u>			
1 2	26641 26642	97 98	Traffic Control Present - No Details Other Traffic Control (Whether or not at RR Grade Crossing)
3	26643	99	Unknown

#### Remarks:

This variable measures controls which regulate vehicular traffic. Excluded are any controls which solely regulate pedestrians (e.g., Walk/Wait signals).

Pavement markings are used to supplement the regulations or warnings of other devices such as traffic signs or signals. In other instances, they are used alone and produce results that can not be obtained by the use of any other device. Pavements markings can convey warnings or information to the driver without diverting his attention from the roadway. However, pavement markings are not considered as traffic control devices for the purposes of this variable and are not entered.

Guide signs do not constitute traffic controls.

Code the attribute indicated on the PAR if it directly matches.

Code **No Controls** is used if at the time of the crash there was no intent to control (regulate or warn) vehicle traffic. Use this attribute if statutory controls apply (e.g., state law requires that when two vehicles meet at an uncontrolled intersection, the one on the right has the right-of-way).

**Traffic Control Signal (on Colors)** is used if the PAR indicates a signal which processes through the green, amber, and red cycles. The source of actuation is of no concern.

Flashing Traffic Control Signal or Flashing Beacon is used if (1) the signal has green, amber, and red cycle capability but is being used to flash amber/red only or (2) the device is capable of only flashing amber/red signals.

**School Zone Related Sign** is used when the first harmful event occurred during the time the sign was in effect. If the sign was in effect, it does not matter whether or not children were present.

**Other Sign** includes speed limit signs, movement signs (e.g., NO TURN, LEFT TURN ONLY, DO NOT PASS, PASS WITH CARE, KEEP RIGHT, DO NOT ENTER, WRONG WAY, ONE WAY), parking signs (e.g., NO PARKING, EMERGENCY PARKING ONLY), and other miscellaneous signs (e.g., STOP HERE ON RED, NO TURN ON RED, ROAD CLOSED TO THRU TRAFFIC, WEIGHT LIMIT..., TRUCK ROUTE). There must be specific mention of the sign on the PAR.

**Warning Signs** include any black on orange diamond shaped sign or any black on yellow diamond shaped sign. Some black on yellow horizontal rectangular or vertical rectangular signs are also included.

At Railroad Grade Crossing should only be used when the first harmful event occurs in the area of a roadway and a railroad bed (i.e., Relation to Junction equals Railroad Grade Crossing). Attributes referring to Trafficway Traffic Signals, Regulatory School Zone Signs, and Warning Signs should be used when the first harmful event occurs anywhere else.

Active Device at RR Crossing (e.g., Gates, Flashing Lights, Traffic Control Signal) is used when the PAR reports that the railroad crossing was guarded by a gate, a flashing light, a traffic control signal, a bell or any combination thereof.

**Passive Device at RR Crossing (e.g., Stop Sign, Cross Bucks, etc.)** is used when the PAR indicates that no train activated devices were present. Cross bucks are a large "X", with the words RAILROAD CROSSING spelled out on the "X". A railroad advance warning sign is a circle with a black "X" on a yellow background.

**Other Traffic Control (Whether or Not At RR Grade Crossing)** includes: (1) a school bus with flashers activated where vehicles are required to stop or (2) any other device which (a) functions as a traffic control device which is not listed as an attribute of this variable and (b) is not excluded by the manual and (c) is related to the crash. Some examples are: barricades, cones, drums, and object markers.

When a traffic control is deactivated (e.g., traffic signal that emits no signals) during certain times of the day and was deactivated at the time of the crash, code **No Controls**. A traffic control that has just been installed and not yet activated is also coded **No Controls**. However, a traffic control that is out (e.g., due to a power failure) and was reported as such on the PAR is coded, unless a temporary control (e.g., stop sign, police officer, etc.) has been inserted, in which case the temporary control should be coded.

**Unknown** is used if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other attributes.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AA011	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) for this vehicle equals 23	TRAFFIC CONTROL DEVICE (A16) must not equal 01-51or 98.
AA015	RELATION TO JUNCTION (A09) equals 00 or 10	TRAFFIC CONTROL DEVICE (A16) must not equal 01.
AA040	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740	TRAFFIC CONTROL DEVICE (A16) must not equal 00.

AA045	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005, 0006, 0007, 0009, 0010, 0012 or 0055	TRAFFIC CONTROL DEVICE (A16) must not equal 00.
AA046	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0006, 0007 or 0010	TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08 or 09.
AA047	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0005	TRAFFIC CONTROL DEVICE (A16) must equal 04 or 21.
AA048	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0012 or 0055	TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, 09, 21, 22, 28 or 29.
AA085	TRAFFIC CONTROL DEVICE (A16) equals 01	RELATION TO JUNCTION (A09) must not equal 00 or 10.
AA097A	TRAFFIC CONTROL DEVICES (A16) equals 00 or 99	there must be only one traffic control device coded.
RANGE	TRAFFIC CONTROL DEVICES (A16) 23, 28, 29, 40, 41, 42, 43, 49, 51, 61,	• • • • • • •

#### <u>Warnings</u>

	IF	THEN
AA021	INTERSTATE HIGHWAY (A08) equals 1	TRAFFIC CONTROL DEVICE (A16) should not equal 01, 21, 23 or 61-97.
AA026	RELATION TO JUNCTION (A09) equals 05	TRAFFIC CONTROL DEVICE (A16) should equal 61 or 62.
AA041	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0740	TRAFFIC CONTROL DEVICE (A16) should equal 01, 04, 08, 09 or 99.
AA049	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0025	TRAFFIC CONTROL DEVICE (A16) should equal 00.
AA085	TRAFFIC CONTROL DEVICE (A16) equals 21 or 22	RELATION TO JUNCTION (A09) should not equal 00 or 10.
AA096	If TRAFFIC CONTROL DEVICE (A16) equals 61 or 62	RELATION TO JUNCTION (A09) should equal 05.
AA097	WORK ZONE (A25) equals 1	TRAFFIC CONTROL DEVICE (A16) should equal 01-42, 51 or 98.
AA098	TRAFFIC CONTROL DEVICE (A16) equals 42	WORK ZONE (A25) should equal 1.

VA005	HARMFUL EVENT (A06) equals 23	TRAFFIC CONTROL DEVICE (A16) should not equal 01-51.
Post Entry		
	IF	THEN
DA123	VIOLATIONS CHARGED (D02) equals 07	at least one TRAFFIC CONTROL DEVICE (A16) must equal 1-9, 21, 97, 98 or 99.
AP054	TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29, and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005-0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055.

# **V12 VEHICLE CONTRIBUTING FACTORS**

Screen I	Heading:	Regarding Vehicle #		
Screen I	Name:	Vehicle Contributing Factors (450-E)		
Long Na	me:	Enter all contributing factors for this vehicle.		
SAS Nar	ne: Vehicle.Factor		e.Factor	
Oracle N	lame:	GES.C	Contributors.ContributorID	
Element	Values:			
Screen	Oracle	SAS		
1	26802	00	None	
2	26803	01	Tires	
3	26804	02	Brake System	
4	26805	03	Steering System - Tie Rod, Kingpin, Ball Joint, etc.	
5	26806	04	Suspension - Springs, Shock Absorbers, MachPherson Struts,	
			Control Arms, etc.	
6	26807	05	Power Train - Universal Joint, Drive Shaft, Transmission, etc.	
7	26808	06	Exhaust System	
8	26809	07	Headlights	
9	26810	08	Signal Lights	
10	26811	09	Other Lights	
11	26812	10	Wipers	
12	26813	11	Wheels	
13	26814	12	Mirrors	
14	26815	13	Driver Seating & Control	
15	26816	14	Body, Doors	
16	26817	15	Trailer Hitch	
17	26818	50	Hit-and-Run Vehicle	
18	26819	97	Vehicle Contributing Factors - No Details	
19	26820	98	Other Vehicle Contributing Factors	
20	26821	99	Unknown if Contributing Factors	

#### Remarks:

Vehicle Contributing Factors are mechanical flaws that may have contributed to the cause of a crash. These factors can appear anywhere on the PAR - in the narrative section, in the space for violations, in a column entitled "Contributing Factors" or "Vehicle Defects", etc. It is not necessary that the PAR indicate this "factor" as a cause of the crash.

If more than one factor is indicated on the PAR, select all the responses which apply.

Code **None** is used if no vehicle defect or factor was indicated by the investigating officer.

Code **Tires** includes any defect of a tire. If the contributing factor is of the wheel (e.g., a lug nut comes off), then use code "**Wheels**."

Code Brake System includes parking brakes.

Code **Power Train (Universal Joint, Drive Shaft, Transmission, etc.)** includes engine and differential. Stuck throttle is coded here.

Code **Exhaust System** includes exhaust manifold(s), headers, muffler, catalytic converter, tailpipe, etc.

Code Wheels includes loss of lug nuts.

Code **Body**, **Doors** includes trunk, hood, tailgate, rear doors of cargo vans, etc.

Code **Trailer Hitch** applies to a defective trailer hitch or an improper trailer hitch. If the PAR cites this attribute, then code it.

Code **Hit-and-Run Vehicle** is used for a hit-and-run vehicle unless the PAR indicates the presence of a "defect."

Code **Vehicle Contributing Factors - No Details** is used if a vehicle "factor" or "defect" is indicated on the PAR but no information is given concerning the nature of the "factor."

Code Other Vehicle Contributing Factors is used if a defect is cited but is not listed above.

Code **Unknown If Contributing Factors** is used only if the PAR specifically indicates an "unknown defect" or "unknown contributing factor."

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN		
VV073	VEHICLE CONTRIBUTING FACTORS (V12) equals 50	HIT-AND-RUN (V02) must equal 1.		
VV083	HIT-AND-RUN (V02) equals 1	VEHICLE CONTRIBUTING FACTORS (V12) must not equal 99.		
VV124	CRITICAL EVENT (V26) equals 1, 2, 3 or 4	VEHICLE CONTRIBUTING FACTORS (V12) must not equal 00.		
MULTIPLE RESPONSE	VEHICLE CONTRIBUTING FACTORS (V12) equals 00	no other vehicle contributing factor must be coded for this driver		
MULTIPLE RESPONSE	VEHICLE CONTRIBUTING FACTORS (V12) equals 97	no other vehicle contributing factor must be coded for this driver		

MULTIPLE RESPONSE	VEHICLE CONTRIBUTING FACTORS (V12) equals 99	no other vehicle contributing factor must be coded for this driver			
MULTIPLE RESPONSE	each VEHICLE CONTRIBUTING FACTORS (V12) element value must coded only once per driver.				
RANGE	VEHICLE CONTRIBUTING FACTOR	S (V12) must not equal null.			

### **V25 DAMAGE AREAS**

Screen H	leading:	Regarding Vehicle #					
Screen N	Name:	Dama	Damage Areas (560-E)				
Long Na	me:	What s	What specific areas of this vehicle are damaged?				
SAS Nan	ne:	Vehicl	Vehicle.Dam_Area				
Oracle Name:		GES.D	GES.DamageArea.AreaID				
Element	Values:						
Screen	Oracle	SAS					
1	26822	0	No Damage				
2	26823	1	Front				
3	26824	2	Right Side				
4	26825	3	Left Side				
5	26826	4	Back				
6	26827	5	Тор				
7	26828	6	Undercarriage				
8	26829	7	All Areas Damaged				
0	00000	0					

#### 9 26830 9 Damage Areas Unknown

### Remarks:

This variable reports this vehicle's specific areas damaged due to impact. The totality of the damage is used when determining the specific areas.

"Vehicle" as used in this variable includes the power unit plus all trailers connected by means of a fixed linkage at the time of impact. The six planes (front, right side, left side, back, top, and undercarriage) are measured with respect to the entire vehicle (capsule). In contrast, any trailer disconnected prior to impact is treated as an object.

Enter all areas of the vehicle which are damaged.

Example: A single vehicle crash involving a head-on impact with a brick wall results in damage to the vehicle's left side, front and right side. The correct coding for this is **Front**, **Left**, and **Right**. If this same impact had resulted in damage to the front and left side only, the correct coding would be **Front** and **Left**.

**No Damage** is used when the vehicle sustains no impact but is part of the crash due to a noncollision event such as: fire or explosion, immersion, gas inhalation, an occupant's fall from the vehicle, an injured occupant without an external impact or other non-impacts except most jackknife situations. Front, Right Side, Left Side, Back, Top or Undercarriage are used whenever the PAR indicates that one or more (but not all) planes are damage in the crash.

**All Damaged Areas** is used whenever the PAR indicates that all planes received damage in the crash. This includes both the top and undercarriage planes. In order for **All Damage Areas** to be involved, the vehicle will usually have to have rolled over or sustained numerous impacts.

**Damage Areas Unknown** is used whenever the PAR does not indicate which area or areas received damage or when the information on the PAR is confusing or inadequate for the purposes of this determination. When some or all of the damage areas are unknown apply the following guidelines:

- a. Code **Damage Areas Unknown** when the vehicle is damaged but no specific area is known.
- b. When some damaged areas are known but uncertainty exists regarding possible damage to other areas, code all known damage areas in addition to entering **Damage Areas Unknown**.

Summary of Steps to Determine Code:

- First Identify all known damaged areas.
- Second Determine if any other areas may have been damaged but are not known with certainty because the PAR information is incomplete, contradictory, etc.

Third Code all known areas.

- Fourth If no unknown areas exist do not enter **Damage Areas Unknown**. If one or more other areas are unknown, enter **Damage Areas Unknown**.
- Fifth If all areas are unknown, enter **Damage Areas Unknown**.

#### **Consistency Checks:**

#### <u>Errors</u>

	IF	THEN
VV057	POINT OF IMPACT (V24) equals 11, 12, 13 or 14	DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0.
AV057A	all HARMFUL EVENTs (A06) for a vehicle equal 2, 3, 4 or 6	DAMAGE AREAS (V25) must equal 0.
VV058A	all areas of the vehicle are damaged	DAMAGE AREAS (V25) must be coded 7, not the combination 1, 2, 3, 4, 5 and 6.
VV058B	DAMAGE AREAS (V25) equals 7	no other DAMAGE AREAS (V25) must be coded for this vehicle.

	VV058C	No DAMAGE AREAS (V25) response	ust be selected more than once.		
	VV058D	DAMAGE AREAS (V25) equals 0	no other DAMAGE AREAS (V25) must be coded for this vehicle.		
	VV088	DAMAGE SEVERITY (V18) equals 0	DAMAGE AREAS (V25) must equal 00000.		
	RANGE	DAMAGE SEVERITY (V18) must eq	ual 0-7 or 9.		
<u>Warnings</u>					
		IF	THEN		
	VV058	DAMAGE AREAS (V25) equals 7	MANNER OF LEAVING SCENE (V19) should equal 2 or 3.		
	VV073A	HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1	VEHICLE CONTRIBUTING FACTORS (V12) should not equal 0.		
	VV074	MANNER OF LEAVING SCENE (V19) equals 2	DAMAGE AREAS (V25) should be greater than 00000.		
	VV080	DAMAGE AREAS (V25) equals 00000 and MOST HARMFUL EVENT (V20) does not equal 1-6 or 8-10	MANNER OF LEAVING SCENE (V19) should not equal 2.		
	VV081	HARMFUL EVENT (A06) equals 01	DAMAGE AREAS (V25) should not equal 0.		
	VV138	ROLLOVER TYPE (V30) is not equal to 00	DAMAGE AREAS (V25) should have more than one value other than 0.		
	VV178	POINT OF IMPACT (V24) equals 11	DAMAGE AREAS (V25) should include values 1 and 2.		
	VV179	POINT OF IMPACT (V24) equals 12	DAMAGE AREAS (V25) should include values 1 and 3.		
	VV180	POINT OF IMPACT (V24) equals 13	DAMAGE AREAS (V25) should include values 2 and 4.		
	VV181	POINT OF IMPACT (V24) equals 14	DAMAGE AREAS (V25) should include values 3 and 4.		
	VV222	DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0	DAMAGE SEVERITY (V18) must equal 0.		

Coding of the precrash variables is completed for **<u>each</u>** in-transport motor vehicle in the crash. This means that the entire crash is first coded from the perspective of one vehicle, then coded from the perspective of the second vehicle, if any, and so forth. The precrash variables are:

- D07, Driver Distracted By
- V21, Movement Prior to Critical Event–Precrash 1
- V26, Critical Event Precrash 2 (Category)
- V26, Critical Event Precrash 2 (Event)
- V27, Corrective Action Attempted Precrash 3
- V28, Vehicle Control Precrash 4
- V29, Precrash Location Precrash 5

The precrash variables are designed to identify the following :

- C what was this vehicle/driver doing just prior to the critical event,
- C what made this vehicle's situation critical,
- C what was the corrective action attempted, if any, to this critical situation, and
- C what was the movement of the vehicle just prior to impact?

The most important determination that must be made for each in-transport motor vehicle is: what was this vehicle's Critical Event, (i.e., what action by this vehicle, another vehicle, person, animal or non-fixed object was critical to this vehicle's crash?). Once this determination is made, then determine the driver's corrective action to the event which made this vehicle's involvement critical.

Corrective Action Attempted, is defined as avoidance maneuver(s) taken by the driver, within a **critical crash envelope**, in response to a Critical Event.

Do not consider culpability as a factor for determining precrash data. Many crash scenarios will suggest fault, but this is considered coincidental rather than by design.

#### Critical Crash Envelope

The critical crash envelope begins at the point where:

(1) the driver recognizes an impending danger (e.g.,.deer runs into the roadway) or

(2) the vehicle is in an imminent path of collision with another vehicle, pedestrian, pedalcyclist, other nonmotorist, object or animal.

The critical crash envelope ends when:

- (a) the driver has made a successful avoidance maneuver
   (b) has full steering control, and
   (c) the vehicle is tracking; or
- (2) the driver's vehicle impacts another vehicle, pedestrian, pedalcyclist, other non-motorist, object or animal.

#### Simple Single Critical Crash Envelope

Most crashes involve only a single critical crash envelope in which the object contacted is captured under the Critical Event. An example: A vehicle traveling on a roadway strikes a deer that runs into the roadway. This crash type and similar ones are very straightforward and will not present many coding problems.

#### **Complex Single Critical Crash Envelope**

However, some single critical crash envelopes are more complex.

**Example A**: A driver avoids one obstacle and **immediately** impacts another vehicle, person, object or animal. Because **immediate** is defined as not having an opportunity or sufficient time to take any additional avoidance actions, the Critical Event is coded to the vehicle, person, object or animal which the driver successfully avoided instead of the vehicle's first harmful event (i.e., its first impact).

**Example B**: The driver avoids an obstacle only to (a) lose steering control and/or (b) have the vehicle stop tracking, and the vehicle subsequently impacts another vehicle, person, object or animal. Regardless of whether the driver attempted to regain steering control, caused the vehicle to resume a tracking posture or attempted to avoided the impacted vehicle, person, object or animal; the Critical Event is similarly coded to the vehicle, person, object or animal which the driver successfully avoided because the driver's critical crash envelope was never stabilized.

In both examples above, the Corrective Action Attempted records the successful action taken to avoid the Critical Event.

The coding order for a single critical crash envelope is illustrated below.

#### Typical Order of a Single Critical Crash Envelope

D07	V21	V26	V27	V28	V29	A06
Driver	Movement	Critical	Corrective	Precrash	Precrash	First
Distracted	Prior To	Event	Action	Vehicle	Location	Harmful
Ву	Critical		Attempted	Control		Event
	Event					

#### **Multiple Critical Crash Envelopes**

Multiple critical crash envelopes are defined as events (i.e., at least two) which occur prior to impact where the driver has successfully avoided the impending danger, regained control of the vehicle, and subsequently encountered another impending danger. When a crash scenario involves multiple critical crash envelopes, code only the final critical crash envelope. The previous successfully avoided critical crash envelopes are captured under the variable Pre-event Movement where the attribute "successfully avoidance maneuver to a previous critical event " should be selected. The final critical crash envelope which resulted in this vehicle's first harmful event (i.e., its impact) should be coded under the appropriate variables as shown in the following illustration.

### **Typical Order of Multiple Critical Crash Envelopes**

Prior Critical Crash Envelope				Final Critical Crash Envelope								
D07	V21	V26	V27	V28	V29	D07	V21	V26	V27 V	28	V29 /	A06
Driver Distrac- ted By	Move- ment Prior To Critical Event	Critical Event	Corrective Action Attempted	Vehicle	r Pre- Crash Loca- tion	Driver Distrac ted By	Move- - ment Prior To Critica Event	Event	Corrective Action Attempted	Pre- Crash Vehicle Contro		

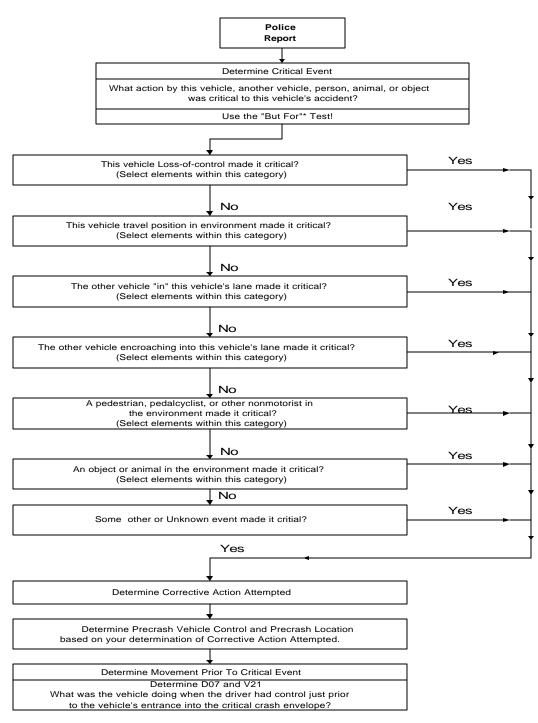
#### DO NOT CODE

CODE

When there is doubt as to whether this vehicle had experienced multiple critical crash envelopes (i.e. unknown if the driver successfully avoided and regained control of the vehicle), default to a complex single critical crash envelope when coding the Critical Event.

The pages which follow contain a flowchart, method protocol, precrash general rules, and seven examples to aid in explaining the proper method for coding precrash data.

Selection Method Flowchart



#### \* FOR EXAMPLE:

<u>"But for"</u> Vehicle # going left-of-center, this vehicle would not have been involved in this accident. <u>"But for"</u> having entered into the intersection, this vehicle would not have been involved in this accident.

#### **Method Protocol**

Review the entire Police Report for pre-impact information (e.g., written statements, encoded data, scene diagrams, etc) as inputs to your precrash decision making process.

1. Determine Critical Event - Precrash 2 (Event)

What reported action by this vehicle, another vehicle, person, animal or object was critical to this driver becoming involved in the crash (i.e., use the "BUT FOR" test)?

Ask yourself questions (a) through (f) below. Proceed through each question that applies to the crash you are researching. When the answer to the question is "Yes"- Stop,. This is the Critical Event - Precrash 2 (Category). Now you must determine the appropriate attribute within the category.

- (a) But for this vehicle's loss-of-control, would the crash have occurred?
- (b) But for this vehicle's travel position in the environment would the crash have occurred?
- (c) But for another vehicle in this vehicle's lane, would the crash have occurred?
- (d) But for another vehicle <u>encroaching</u> into this vehicle's lane, would the crash have occurred?
- (e) But for a pedestrian, pedalcyclist or other non-motorist in or approaching this vehicle's path, would the crash have occurred?
- (f) But for an animal in or approaching this vehicle's path or an object in this vehicle's path, would the crash have occurred?
- 2. Determine Corrective Action Attempted Precrash 3.

What does the PAR indicate the driver tried to do to avoid the crash?

3. Determine Vehicle Control - Precrash 4

What does the PAR indicate the vehicle was doing just prior to impact?

4. Determine the Precrash Location - Precrash 5

Where does the PAR indicate the vehicle was located just prior to impact? 5. Determine "Driver Distracted By."

Does the PAR indicate the driver was distracted or inattentive?

6. Determine Movement Prior to Critical Event–Precrash 1

What does the PAR indicate this vehicle was doing just prior to impact?

#### **Precrash General Rules**

- 1. Corrective Action Attempted Precrash 3 assesses what the vehicle did rather than what the PAR stated the driver tried to do.
- 2. A traffic control signal/sign can never make the situation critical when coding Critical Event Precrash 2 (Event).
- 3. When you know what sub-group of the "Critical Event Precrash 2 (Event)" applies but are unable to select a specific element within that group, default to "other" or "unknown " in that sub-group rather than using "Other Critical Precrash event" or "Unknown".
- 4. If control loss is due to driver illness such as heart attacks, diabetic comas, etc., then the Critical Event Precrash 2 (Event) category and element value are: "This Vehicle Loss of Control" Due to "Other cause of control loss".
- 5. In coding Critical Event Precrash 2 (Event), loss of control must have occurred prior to the driver attempting any avoidance maneuver. If the driver attempts a maneuver (i.e., brakes, steers, etc) as a result of the driver's perception of a vehicle, object, pedestrian or non-motorist, then code the vehicle, object, pedestrian or non-motorist as what made it critical. If the vehicle is in a yaw prior to the driver taking an avoidance action, then loss-of-control is what made it critical (e.g., critical; curve scuff, hydroplaning, etc.).
- 6. When it cannot be determined from the PAR which driver had the right-of-way at a controlled or uncontrolled intersection, then use the following guidelines for coding Critical Event Precrash 2 (Event):
  - a. If the junction is controlled by a 3-way/4-way stop sign or is uncontrolled, then use the common rule that the vehicle on the right has the right-of-way for determining encroachment.
  - b. If the junction is controlled by an on-colors traffic control device, and both drivers claim green light, then code both vehicles as being in an environmentally dangerous position, Critical Event Precrash 2 (Category/Event) category/event element value is:" This Vehicle Traveling/ Crossing Over (Passing Through) Intersection".
- 7. For vehicles executing a left turn with the right-of-way, use **From opposite direction**over left lane line or **From opposite direction-over right lane line**.
- 8. "Fixed" objects can not be in the roadway.
- 9. If a motor vehicle is stopped in a travel lane and is impacted by another motor vehicle ricocheting off a vehicle, then Critical Precrash Event for the vehicle struck by the ricocheting vehicle is **Other motor vehicle in lane** or **Other motor vehicle encroaching into lane**.

10. If there are no skid marks present at the scene and the PAR doesn't indicate skidding and the vehicle did not rotate 30 degrees or more (either clockwise or counterclockwise), then Pre-Impact Stability should equal **Tracking**.

### Example 1

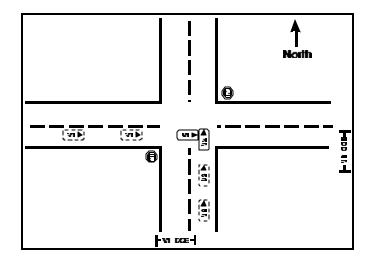
Vehicle 2 is northbound and passing through an intersection on a roadway without traffic control. The driver of vehicle 1 is dialing on a cellular phone. Vehicle 1 is eastbound on a crossing roadway with a stop sign but did not stop or slow down. Vehicle 1 crashes into the side of vehicle 2. The driver of vehicle 2 was attentive, but did not see vehicle 1 approaching. Vehicle 1 braked (leaving skid marks) just prior to impact, without any steering.

Vehicle 1	Vehicle 2
D07 (06) <sup>*</sup> (Distracted) while dialing cellular phone	(02) Looked but did not see
V21 (01) Going straight	(01) Going straight
V26 (17) Crossing Over (passing through) intersection	(66) From crossing street across path
V27 (03) Braking (lockup)	(01) No avoidance maneuver
V28 (2) Skidding longitudinally - rotation less than 30 degrees	(1) Tracking
V29 (1) Stayed in original travel lane	(1) Stayed in original travel lane

\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has one **critical crash envelope** ( $V_1CCE$ ), which begins at the point where driver 1 recognizes that vehicle 1 is in an imminent collision path with vehicle 2. Vehicle 1's critical crash envelope ends at the point of impact with vehicle 2.

Vehicle 2 has one **critical crash envelope** ( $V_2CCE$ ). Although the driver of vehicle 2 did not recognize the danger, vehicle 2's critical crash envelope begins at the point where vehicle 2 is in an imminent path of collision with vehicle 1. Vehicle 2's critical crash envelope ends at the point of impact with vehicle 1.



### Example 2

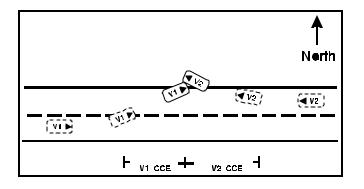
Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 falls asleep and crosses over the center line into the travel lane of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by steering right onto the shoulder and accelerating. Vehicle 1 impacted vehicle 2 in the side.

Vehicle 1	Vehicle 2
D07 $(10)^{*}$ Sleepy or fell asleep	(01) Attentive or not distracted
V21 (01) Going straight	(01) Going straight
V26 (10) Over the lane line on left side of travel lane	(62) From opposite direction over left lane line
V27 (01) No avoidance maneuver	(12) Accelerating and steering right
V28 (1) Tracking	(1) Tracking
V29 (2) Stayed on roadway, but left original travel lane	(4) Departed roadway

\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has one **critical crash envelope** ( $V_1$ CCE) which begins at the point where vehicle 1 crosses over the lane line and ends at the point of impact with vehicle 2.

Vehicle 2 has one **critical crash envelope** ( $V_2CCE$ ) which begins at the point where driver 2 recognizes vehicle 1 encroaching into his/her travel lane. Vehicle 2's critical crash envelope ends at the point of impact with vehicle 1.



### Example 3

Vehicle 1 is eastbound and passing through an intersection on a roadway without traffic control. The noncontact vehicle (NCV) is northbound and stopped at the intersection on a crossing roadway with a stop sign. The noncontact vehicle turns right into the travel path of Vehicle 1. Vehicle 1 braked (without lockup) and steered left to avoid the noncontact vehicle. The driver of vehicle 1 successfully avoided the noncontact vehicle, maintained full control of vehicle 1, but consequently put vehicle 1 in the travel path of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by steering right and braking (with lockup). Vehicle 1 attempted to avoid vehicle 2 by steering right and braking (with lockup). Vehicle 2 crashed front left corner to front left corner.

Vehicle 1	Vehicle 2
D07 (01) <sup>*</sup> Attentive or not distracted	(01) Attentive or not distracted
V21 (17) Successful avoidance maneuver to a previous critical event	(01) Going straight
V26 (10) Over the lane line on left side of travel lane	(54) Traveling in opposite direction
V27 (09) Braking and steering right	(09) Braking and steering right
V28 (2) Skidding longitudinally - rotation less than 30 degrees	(2) Skidding longitudinally - rotation less than 30 degrees
V29 (1) Stayed in original travel lane	(1) Stayed in original travel lane

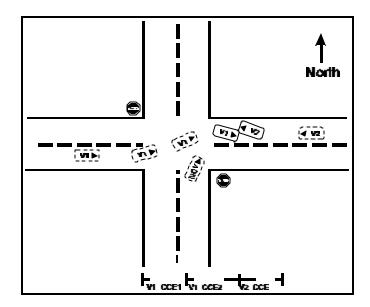
\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has two critical crash envelopes ( $V_1CCE_1$  and  $V_1CCE_2$ ). Vehicle 1's first **critical crash envelope** ( $V_1CCE_1$ ) ends at the point where the driver of vehicle 1 made a successful corrective action and maintained full control of the vehicle. Vehicle 1's second **critical crash envelope** ( $V_1CCE_2$ ) begins immediately following the successful corrective action and ends at the point of impact with vehicle 2. Code the critical crash envelope which resulted in vehicle 1's first impact ( $V_1CCE_2$ ).

Vehicle 2 has one **critical crash envelope** ( $V_2CCE$ ) which begins at the point where driver 2 recognizes vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.

The noncontact vehicle was not involved in an impact with a another vehicle, person, animal or object in the sequence of accident events and is therefore not included in the General Estimates System.

See diagram, below.



### Example 4

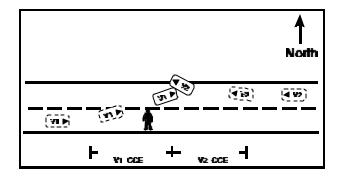
Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 brakes (without lockup) and steers left to avoid a pedestrian who darted into his/her travel lane. Vehicle 1 crosses over the center line into the travel path of vehicle 2. The driver of vehicle 2 was talking with a passenger and not paying close attention to driving and at the last second attempted to avoid vehicle 1 by braking and steering right onto the shoulder. Vehicle 2 skids and rotates clockwise about 45 degrees before it is impacted in the side by vehicle 1.

Vehicle 1	Vehicle 2
D07 (01) <sup>*</sup> Attentive or not distracted	(03) (Distracted) by other occupant
V21 (01) Going straight	(01) Going straight
V26 (80) Pedestrian in roadway	(62) From opposite direction over left lane line
V27 (08) Braking and steering left	(09) Braking and steering right
V28 (1) Tracking	(3) Skidding laterally - clockwise rotation
V29 (2) Stayed on roadway, but left original travel lane	(1) Stayed in original travel lane

\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has one critical crash envelope ( $V_1CCE$ ). Vehicle 1's critical crash envelope involved a successful avoidance of a pedestrian [i.e., V26 (Critical Event) equals 2001 SAS value "80"] which resulted in an **immediate** impact to vehicle 2. Therefore, the pedestrian is coded as the critical precrash event for vehicle 1. Vehicle 1's corrective action is coded as the action taken to avoid the pedestrian.

Vehicle 2 has one critical crash envelope ( $V_2CCE$ ) which begins at the point where driver 2 recognized and reacted to vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.



### Example 5

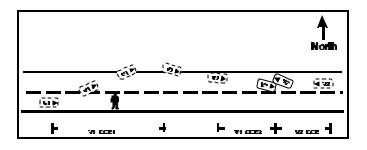
Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 steers left to avoid a pedestrian who darted into his/her travel lane. Vehicle 1 crosses over the center line and the adjacent travel lane, departing the roadway. Then driver 1 re-enters the roadway, in full control of the vehicle but traveling in the lane of opposing traffic. Vehicle 2 attempted to avoid vehicle 1 by steering right and braking (with skidding and clockwise rotation greater than 30 degrees). Vehicle 1 attempted to avoid vehicle 2 by steering right without braking. Vehicle 1 impacted vehicle 2 in the side.

Vehicle 1	Vehicle 2
D07 (01) <sup>*</sup> Attentive or not distracted	(01) Attentive or not distracted
V21 (17) Successful avoidance maneuver to a previous critical event	(01) Going straight
V26 (10) Over lane line on left side of travel lane	(54) Traveling in opposite direction
V27 (07) Steering right	(09) Braking and steering right
V28 (1) Tracking	(3) Skidding laterally - clockwise rotation
V29 (1) Stayed in original travel lane	(1) Stayed in original travel lane

\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has two critical crash envelopes ( $V_1CCE_1$  and  $V_1CCE_2$ ). Vehicle 1's first **critical crash envelope** ( $V_1CCE_1$ ) begins at the point where driver 1 recognizes the pedestrian coming into his/her travel path and ends at the point where the driver of vehicle 1, having made a successful corrective action, regains full control of the vehicle. Vehicle 1's second **critical crash envelope** ( $V_1CCE_2$ ) begins when driver 1, in full control of vehicle 1, re-enters the roadway in the travel lane of opposing traffic and ends at the point of impact with vehicle 2. Code the critical crash envelope which resulted in vehicle 1's first impact ( $V_1CCE_2$ ).

Vehicle 2 has one critical crash envelope ( $V_2CCE$ ) which begins at the point where driver 2 recognized and reacted to vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.



### Example 6

Vehicle 1 and vehicle 2 are traveling in the same direction in adjacent lanes on a divided highway (with a painted median). While the driver of vehicle 1 was using a razor, the vehicle has a blow out, driver 1 loses control, crosses the left lane line and impacts the right rear of vehicle 2. Vehicle 2 is redirected across the painted median, skidding and rotating clockwise, and subsequently impacts vehicle 3. Vehicle 3 attempted to avoid vehicle 2 by steering right and accelerating.

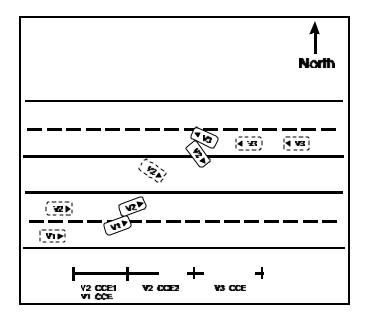
Vehicle 1	Vehicle 2	
D07 (09) <sup>*</sup> (Distracted) while using other device/object in vehicle	(01) Attentive or not distracted	
V21 (01) Going straight	(01) Going straight	
V26 (01) Blow out or flat tire	(61) [Other motor vehicle] From adjacent lane (same direction) - over right lane line	
V27 (01) No avoidance maneuver	(01) No avoidance maneuver	
V28 (1) Tracking	(1) Tracking	
V29 (2) Stayed on roadway, but left original travel lane	(1) Stayed in original travel lane	
Vehicle 3		
D07 (01) Attentive or not distracted		
V21 (01) Going Straight		
V26 (62) From opposite direction - over left lane line		
V27 (12) Accelerating and steering right		
V28 (1) Tracking		
V29 (1) Stayed in original travel lane		

\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has one critical crash envelope ( $V_1CCE$ ) which begins with control loss due to the blow out and ends at the point of impact with vehicle 2. The blow out is coded as the critical event (V26 equals 2001 SAS value 01).

Vehicle 2 has 2 critical crash envelopes ( $V_2CCE_1$  and  $V_2CCE_2$ ). Vehicle 2's first critical crash envelope ( $V_2CCE_1$ ) begins when vehicle 1 enters vehicle 2's travel lane and ends at the point of impact with vehicle 1. Vehicle 2's second critical crash envelope ( $V_2CCE_2$ ) begins immediately after the first impact and ends at the point of impact with vehicle 3. Code only the critical crash envelope which resulted in vehicle 2's first impact ( $V_2CCE_1$ ), because the GES is only interested in coding the critical crash envelope which leads to a vehicle's first harmful event. Discussion continued on next page.

Vehicle 3 has one critical crash envelope ( $V_3CCE$ ) which begins when driver 3 recognizes and reacts to vehicle 2 which is in an imminent path of collision with vehicle 3 and ends at the point of impact with vehicle 2.



### Example 7

Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. A noncontact vehicle is parked in front of a noncontact truck-tractor (with a trailer) on the road shoulder and suddenly enters the roadway into vehicle 1's travel lane. The driver of vehicle 1 instantly brakes (with lockup) and steers left (with counterclockwise rotation) to avoid the noncontact vehicle. Vehicle 1 crosses over the center line and immediately impacts vehicle 2. Vehicle 2 had no corrective actions.

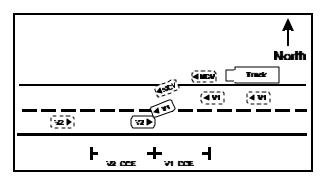
Vehicle 1	Vehicle 2
D07 (01) <sup>*</sup> Attentive or not distracted	(01) Attentive or not distracted
V21 (01) Going Straight	(01) Going straight
V26 (64) From parking lane	(62) From opposite direction over left lane line
V27 (08) Braking and steering left	(01) No avoidance actions
V28 (4) Skidding laterally - counterclockwise rotation	(1) Tracking
V29 (2) Stayed on roadway, but left original travel lane	(1) Stayed in original travel lane

\* Element Values are 2001 SAS codes.

In this example, vehicle 1 has one critical crash envelope ( $V_1CCE$ ). Vehicle 1's critical crash envelope involved a successful avoidance of a noncontact vehicle and resulted in an **immediate** impact to vehicle 2. Vehicle 1's critical crash envelope was initiated by the noncontact vehicle, afterwards there was no opportunity for subsequent avoidance actions. Therefore, the encroachment of the noncontact vehicle into vehicle 1's travel lane is coded as the critical precrash event for vehicle 1. Vehicle 1's corrective action is coded as the action taken to avoid the noncontact vehicle.

Vehicle 2 has one **critical crash envelope** ( $V_2CCE$ ) which begins at the point where vehicle 1 is in an imminent path of collision with vehicle 2 and ends at the point of impact with vehicle 1.

The noncontact vehicle and the noncontact truck were not involved in an impact in the sequence of accident events and are therefore not coded in the General Estimates System.



Screen H	leading:	Precrash Events			
Screen Name:		Critica	Critical Category (570-E)		
Long Name: What is the critical event category for this vehicle's first im		s the critical event category for this vehicle's first impact?			
SAS Name: none					
Oracle Name: GES.Precrash.CrashCatEventID		Precrash.CrashCatEventID			
Element Values:					
Screen	Oracle	SAS			
1	1	n/a	This Vehicle Loss of Control Due To		
2	2	n/a	This Vehicle Traveling		
3	3	n/a	Other Motor Vehicle in Lane		
4	4	n/a	Other Motor Vehicle Encroaching into Lane		
5	5	n/a	Pedestrian, Pedalcyclist or Other Non-motorist		
6	6	n/a	Object or Animal		
7	7	n/a	Other		
8	8	n/a	Unknown		

#### Remarks:

See Precrash Data Overview and remarks under variable V26, Critical Event - Precrash 2 (Event), for coding procedures.

# V26 CRITICAL EVENT - PRECRASH 2 (EVENT)

Screen Heading: Precrash Events

Screen Name: Critical Event (575-E)

**Long Name:** Enter the critical event for this vehicle's first impact.

**SAS Name:** Vehicle.P\_Crash2

Oracle Name: GES.Precrash.CriticalEventID

#### Element Values:

Screen Oracle SAS

#### THIS VEHICLE LOSS OF CONTROL DUE TO:

1	10390	1	Blow out or flat tire
2	10391	2	Stalled Engine
3	10392	3	Disabling vehicle failure (e.g., wheel fell off)
4	10393	4	Non-disabling vehicle problem (e.g., hood flew up)
5	10394	5	Poor road conditions (puddle, pothole, ice, etc.)
6	10395	6	Traveling too fast for conditions
7	10396	8	Other cause of control loss
8	17547	9	Unknown cause of control loss

#### THIS VEHICLE TRAVELING

1 2	10397 10398	10 11	Over the lane line on left side of travel lane Over the lane line on right side of travel lane
3	10399	12	Off the edge of the road on the left side
4	10400	13	Off the edge of the road on the right side
5	10425	14	End departure
6	10426	15	Turning left at intersection
7	10427	16	Turning right at intersection
8	10428	17	Crossing over (passing through) intersection
9	10429	18	This vehicle decelerating
10	10430	19	Unknown travel direction

### OTHER MOTOR VEHICLE IN LANE

1	10401	50	Other vehicle stopped
2	10402	51	Traveling in same direction with lower steady speed
3	10403	52	Traveling in same direction while decelerating
4	10404	53	Traveling in same direction with higher speed
5	10405	54	Traveling in opposite direction
6	10406	55	In crossover

Vehicles			PreCrash/Critical Event
7 8	10422 10423	56 59	Backing Unknown travel direction of the other motor vehicle in lane
OTHER	MOTOR VEH	IICLE ENC	ROACHING INTO LANE
1	10407	60	From adjacent lane (same direction) over left lane line
2	10408	61	From adjacent lane (same direction) over right lane line
3	10409	62	From opposite direction over left lane line
4	10410	63	From opposite direction over right lane line
5	10411	64	From parking lane
6	10412	65	From crossing street, turning into same direction
7	10413	66	From crossing street, across path
8	10414	67	From crossing street, turning into opposite direction
9	10415	68	From crossing street, intended path not known
10	10416	70	From driveway, turning into same direction
11	10417	71	From driveway, across path
12	10418	72	From driveway, turning into opposite direction
13	10419	73	From driveway, intended path not known
14	10420	74	From entrance to limited access highway
	40404	70	

15 10421 78 Encroachment by other vehicle details unknown

### PEDESTRIAN, PEDALCYCLIST OR OTHER NON-MOTORIST

1 2	10447 10448	80 81	Pedestrian in roadway Pedestrian approaching roadway
3	10438	82	Pedestrian unknown location
4	10449	83	Pedalcyclist or other non-motorist in roadway
5	10450	84	Pedalcyclist or other non-motorist approaching roadway
6	10451	85	Pedalcyclist or other non-motorist unknown location

### **OBJECT OR ANIMAL**

1	10452	87	Animal in roadway
2	10453	88	Animal approaching roadway
3	10454	89	Animal unknown location
4	10455	90	Object in roadway
5	10456	91	Object approaching roadway
6	10457	92	Object unknown location

### <u>OTHER</u>

7 10445/58 98 Other critical event/No collision

### <u>UNKNOWN</u>

8 10446 99 Unknown critical event

#### Remarks:

This variable identifies the critical event which made the crash imminent (i.e., something occurred which made the collision possible). Responsive actions to this situation, if any, are coded under Attempted Avoidance Maneuver.

A precrash event is coded for each vehicle and identifies the circumstances leading to this vehicle's first impact in the accident.

Responses are grouped into six major categories and are prioritized as follows:

- L This Vehicle Loss of Control Due to
- L This Vehicle Traveling
- L Other Motor Vehicle In Lane
- L Other Motor Vehicle Encroaching Into Lane
- L Pedestrian or Pedalcyclist or Other Non-motorist
- L Object or Animal

Do not refer to culpability when determining the critical crash event. Many accident scenarios will suggest fault, but this should be coincidental rather than by design. As an example, Vehicle A was traveling too fast for conditions when Vehicle B crossed Vehicle A's path from a driveway. The event which made the situation critical was Vehicle B's movement across Vehicle A's path and not Vehicle A's speed. In this scenario, the proper code would be (Other motor vehicle encroaching into lane - from driveway across path).

#### This Vehicle Loss of Control Due To:

These attributes identify situations where the critical factor leading to the collision involved control loss of this vehicle. Control loss can be related to either mechanical failure or environmentally induced vehicle instability. When more than one condition applies and it cannot be determined which one had a greater effect, choose the attribute mentioned first in the list below (i.e., **Blow Out or Flat Tire** takes priority over **Stalled Engine**).

<u>Use the But for Test: - But for</u> this vehicle's loss of control, the Critical Precrash Event would not have occurred.

Enter **Blow Out or Flat Tire** when a vehicle in motion loses control as the result of a tire "air out".

Enter **Stalled Engine** when a vehicle in motion loses engine power. A stalled engine situation must precipitate a collision to be coded in this variable. Do not use this code if a vehicle is stopped as the result of an engine malfunction (review codes under "Other Vehicle in Lane" and "Other Vehicle Encroaching in Lane").

Enter **Disabling Vehicle Failure (e.g., Wheel Fell Off)** when a mechanical malfunction, such as a component of the vehicle suspension or steering system leads to the critical reason for the collision.

Enter **Non-disabling Vehicle Problem (e.g., Hood Flew Up)** when some mechanical abnormality occurred to this vehicle which leads to the critical reason for the collision. The abnormality must not be disabling damage.

Enter **Poor Road Conditions (Puddle, Pot Hole, Ice, Etc.)** when control loss was due to environmental conditions of the roadway. These conditions must have initiated the precrash event which resulted in the collision. Additionally, this code identifies conditions which were suddenly encountered by the driver and were not on-going prior to the critical precrash event. These conditions would include; a puddle; a defect in the roadway surface (pothole); a patch of ice (especially "black" ice or ice covered bridges); etc.

Conditions which were on-going prior to the critical precrash event such as a snow/ice covered roadway, wet roadway surface or a roadway under construction and were attributed to the cause of the precrash event should be encoded under Code 6 "Traveling too fast for conditions".

Enter **Traveling Too Fast For Conditions** when this vehicles subsequent loss of control relative to its surroundings lead to the collision. An example is a roadway departure on a curve where the driver failed to negotiate and departed the roadway resulting in an impact. If the driver merely steered straight while in a curve and departed the roadway, then "This Vehicle Traveling" category codes "1" - "3" may apply.

On-going precrash weather conditions which contributed to the critical precrash event should be coded here. As an example, a vehicle which loses control on a snow covered roadway should be coded as "Traveling too fast for conditions".

Enter **Unknown Cause of Control Loss** when it is known control loss made the situation critical, but it is not known whether the vehicle or the environment caused the control loss.

Enter **Other Cause of Control Loss** when it was determined that this vehicle's loss of control was the primary reason which made the event critical and codes "1" - "6" do not adequately identify the control loss condition.

#### This Vehicle Traveling

These attributes identify situations where the critical factor leading to the collision involved the travel path of this vehicle.

<u>Use the But for Test:</u> - <u>But for</u> this vehicle's traveling path in the environment, the Critical Event would not have occurred.

Enter **Over the Lane Line on Left Side of Travel Lane** when this vehicle departs its lane to the left and is entering or had entered the adjoining lane or shoulder.

To use this code, change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's left and is struck by a vehicle traveling within its travel lane in the opposite direction. The correct code for this vehicle would be "1" (Over the lane line on left side of travel lane).

By modifying the scenario slightly, however, the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the left of the lead vehicle. If an animal runs into the roadway and is struck by this vehicle, then the correct choice would be "Object or Animal category" (Animal in roadway - code "1").

Enter **Over the Lane Line on Right Side of Travel Lane** is used when this vehicle departs its lane to the right and is entering or had entered the adjoining lane or shoulder.

To use this code, change of travel path by this vehicle must precipitate the critical event for the collision. As an example, this vehicle attempts to pass another vehicle on the other vehicle's right and is struck in the rear by a vehicle traveling in the adjacent travel lane.

Over the Lane Line on Right Side of Travel Lane would be the correct code for this situation.

By modifying the scenario slightly, however the lane change may not always be the factor leading to the precrash event. Consider the same situation where this vehicle is passing to the right of the lead vehicle. An animal runs into the roadway and is struck by this vehicle, the correct choice would be "Object or Animal" category (Animal in roadway).

Enter **Off the Edge of the Road on the Left Side** for situations where the initial precrash event occurred beyond the left side shoulder area. This also includes departure into a median.

Enter **Off the Edge of the Road on the Right Side** for situations where the initial precrash event occurred beyond the right side shoulder area.

Enter End Departure when the vehicle departs the end of the roadway (e.g., "T" intersection).

Enter **Turning Left at Intersection** when this vehicle attempts a left turn from its roadway to another roadway, driveway or ramp.

Enter **Turning Right at Intersection** when this vehicle attempts a right turn from its roadway to another roadway, driveway or ramp.

Enter **Crossing Over (Passing Through) Intersection** when this vehicle is proceeding through an intersection without any planned turning.

Enter **This Vehicle Decelerating** when the vehicle is decelerating or has just stopped and was immediately struck.

Enter **Unknown Travel Direction** for those occasions where this vehicle's travel made the situation critical, but it is unknown which travel direction this vehicle was moving.

#### Other Motor Vehicle In Lane

These attributes identify situations where the critical factor leading to the collision involved the travel of the other vehicle in the same lane as this vehicle.

<u>Use the But for Test:</u> - <u>But for</u> the other motor vehicle in this vehicle's lane the Critical Event would not have occurred.

Enter **Other Vehicle Stopped** when the other vehicle is not in motion (i.e., stopped, parked, disabled) and in this vehicle's travel lane. Do not use this code if the other vehicle just stopped and was immediately struck. See "This Vehicle Traveling" Category - Code 9 and examples on page .

Enter **Traveling in Same Direction with Lower Steady Speed** when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was traveling slower than this vehicle.

Enter **Traveling in Same Direction While Decelerating** when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was decelerating.

Enter **Traveling in Same Direction With Higher Speed** when the speed of the other vehicle was higher than this vehicle or accelerating. The other vehicle must be overtaking this vehicle.

Enter **Traveling in Opposite Direction** when the other vehicle was in this vehicle's travel lane and traveling head-on in the opposite direction of this vehicle.

Enter **In Crossover** when the other vehicle enters a crossover already occupied by this vehicle. A crossover is defined as a designated opening within a median used primarily for "U-turns".

Enter **Backing** when the other vehicle was in the process of backing up while in this vehicle's travel lane.

Enter **Unknown travel direction of other motor vehicle in lane** for situations where the other vehicle's activity (while in the same lane as this vehicle) precipitated the precrash event, but the travel direction and/or speed could not be determined.

#### Other Motor Vehicle Encroaching Into Lane

These attributes identify situations where the critical factor leading to the collision involves the other vehicle's movement into or across this vehicle's travel lane from another lane, intersection, driveway or ramp.

<u>Use the But for Test:</u> - <u>But for</u> the other motor vehicle encroaching into this vehicle's lane the Critical Event would not have occurred.

Enter **From Adjacent Lane (Same Direction) \$\$** Over Left Lane Line when the other vehicle was traveling in the same direction as this vehicle and crossed the left lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its right lane line).

Enter **From Adjacent Lane (Same Direction) SS Over Right Lane Line** when the other vehicle was traveling in the same direction as this vehicle and crosses the right lane line with respect to this vehicle's travel lane (i.e., other vehicle crosses its left lane line).

Enter **From Opposite Direction SS Over Left Lane Line** when the other vehicle crosses the left lane line while traveling in the opposite direction from this vehicle.

Enter **From Opposite Direction \$\$** Over Right Lane Line when the other vehicle crosses the right lane line while traveling in the opposite direction from this vehicle.

Enter **From Parking Lane** when the other vehicle was departing a parking lane and entering the travel lane of this vehicle.

Enter **From Crossing Street, Turning Into Same Direction** when the other vehicle was turning from another roadway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle. Use this code for entrance ramps leading onto limited access highways.

Enter **From Crossing Street, Across Path** when the other vehicle was continuing straight through the intersection and attempted to cross over this vehicle's roadway.

Enter **From Crossing Street, Turning Into Opposite Direction** when the other vehicle was entering an intersection from another roadway and was turning or attempting to turn onto this vehicle's roadway in the opposite travel direction of this vehicle.

Enter **From Crossing Street, Intended Path Not Known** when the other vehicle's entrance into the intersection was the critical factor which led to the collision, however, the other vehicle's travel direction could not be determined.

Enter **From Driveway, Turning Into Same Direction** when the other vehicle was turning from a driveway onto this vehicle's roadway and attempted to travel in the same direction as this vehicle.

Enter **From Driveway, Across Path** when the other vehicle was entering this vehicle's roadway form a driveway and was continuing straight across to another driveway or roadway.

Enter **From Driveway, Turning Into Opposite Direction** when the other vehicle was entering this vehicle's roadway from a driveway and was attempting to turn into the opposite travel direction of this vehicle.

Enter **From Driveway, Intended Path Not Known** to identify driveway related precrash events where details surrounding the other vehicle's intended path are not known.

Enter **From Entrance to Limited Access Highway** for entrance ramp situations where the other vehicle was attempting to enter (merge) onto the limited access highway which was being traveled by this vehicle.

Enter **Encroachment by Other Vehicle SS Details Unknown** for situations where the other vehicle initiated the critical event, but circumstances surrounding the other vehicle's encroachment are not known.

#### Pedestrian or Pedalcyclist or Non-motorist

These attributes identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist or other non-motorist. A pedalcyclist is defined as a person

riding a pedal power conveyance (e.g., bicycle, tricycle, etc.). A non-motorist is defined as person riding on or in a conveyance which is not motorized or propelled by pedaling (e.g., baby carriage, skateboard, roller blades, etc.).

<u>Use the But for Test:</u> - <u>But for</u> a pedestrian, pedalcyclist or other non-motorist in the environment the Critical Event would not have occurred.

Enter **Pedestrian in Roadway** when a pedestrian was present (e.g., sitting, standing, walking or running, etc.) in the roadway.

Enter **Pedestrian Approaching Roadway** for situations where a pedestrian was within the trafficway and moving toward the roadway or attempting to enter the roadway, but was not on the roadway.

Enter **Pedestrian SS Unknown Location** when it was determined the presence or action of a pedestrian was the critical factor which lead to this vehicle's collision, but the location or action of the pedestrian was not known.

Enter **Pedalcyclist or Other Non-motorist in Roadway** when a pedalcyclist or other nonmotorist was present in the roadway (irrespective of relative motion).

Enter **Pedalcyclist or Other Non-motorist Approaching Roadway** for situations where the pedalcyclist was within the trafficway and moving toward the roadway or attempting to enter the roadway, but was not on the roadway.

Enter **Pedalcyclist or Other Non-motorist SS Unknown Location** when it was determined the presence or action of a pedalcyclist or other non-motorist was the critical factor which led to this vehicle's collision, but the action of the pedalcyclist or other non-motorist was not known.

#### Object or Animal

These attributes identify situations where the critical factor leading to the collision for this vehicle involved an object or animal.

<u>Use the But for Test:</u> - <u>But for</u> an object or animal in the environment the Critical Precrash Event would not have occurred.

Enter **Animal in Roadway** when an animal was present (i.e., stationary or moving) in the roadway.

Enter **Animal Approaching Roadway** for situations where an animal was within the trafficway and moving toward the roadway or attempting to enter the roadway, but not on the roadway.

Enter **Animal - Unknown Location** when it was determined the presence or action of an animal was the critical factor which led to this vehicle's collision, but the action of the animal was not known.

Enter **Object in Roadway** when an object was present in the roadway. An object is defined as being either fixed or nonfixed.

Enter **Object Approaching Roadway** for situations where an object was within the trafficway and moving toward the roadway, but not on the roadway.

Enter **Object SS Unknown Location** when it was determined the presence or movement of an object was the critical factor which led to this vehicle's collision, but details surrounding the location of the object were not known.

#### <u>Other</u>

Enter **Other critical event/No collision** when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the crash are not considered as other critical precrash events.

Use this code if the critical event developed from this vehicle's departure from a driveway.

This code is also used if the only events involved for this vehicle are fire/explosion or gas inhalation.

#### <u>Unknown</u>

Enter **Unknown Critical Event** when the critical event which resulted in the collision is not known.

### CODING MOVEMENT PRIOR TO CRITICAL EVENT AND CRITICAL EVENT FOR DIFFERENT REAR END COLLISION SITUATIONS

### **Two Vehicle Collisions**

		Trailing Vehicle	Leading Vehicle
1)	Both vehicles in motion. Leading vehicle traveling at	V21 Movement Prior to Critical Event	Movement Prior to Critical Event
	steady speed is struck from behind by trailing vehicle.	(Going Straight-01)	(Going straight)
	benind by training vehicle.	V26 Critical Event	Critical Event
		(Other Motor Vehicle in Lane - Other vehicle same direction with lower steady speed-51)	(Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53)
2)	Both vehicles traveling at same speed. Lead vehicle	Movement Prior to Critical Event	Movement Prior to Critical Event
	decelerates and trailing vehicle continues at initial	(Going Straight)	(Going straight)
	speed. Trailing vehicle eventually applies brakes	Critical Event	Critical Event
	before striking the lead vehicle	(Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52)	(This Vehicle Traveling - This vehicle decelerating-18)
3)	Both vehicles traveling at	Movement Prior to Critical Event	Movement Prior to Critical Event
	same speed. Lead vehicle stops and is immediately	(Going Straight)	(Going straight)
	struck by trailing vehicle.	Critical Event	Critical Event
		(Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52)	(Other vehicle same direction with higher speed-53)
4)	Lead vehicle is stopped on	Movement Prior to Critical Event	Movement Prior to Critical Event
	roadway and is struck by a trailing vehicle.	(Going Straight)	(Stopped in traffic-05)
		Critical Event	Critical Event
		(Other Motor Vehicle in Lane - Other vehicle is stopped in lane-50)	(Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53)

# Vehicles

5)	Lead and trailing vehicle stopped on roadway. Lead	Movement Prior to Critical Event	Movement Prior to Critical Event
	vehicle backs into trailing vehicle.	(Stopped in traffic lane-05)	(Stopped in traffic lane-05)
		Critical Event	Critical Event
		(Other Motor Vehicle in Lane - Other vehicle in lane backing-56)	(Other Motor Vehicle in Lane - Other vehicle stopped-50)

#### CODING MOVEMENT PRIOR TO CRITICAL EVENT AND CRITICAL EVENT FOR DIFFERENT REAR END COLLISION SITUATIONS (Cont'd.)

#### **Three Vehicle Collisions**

		Trailing Vehicle	Middle Vehicle	Leading Vehicle
6)	Two vehicles stopped in traffic, struck by	Movement Prior to Critical Event	Movement Prior to Critical Event	Movement Prior to Critical Event
	decelerating trailing vehicle.	(Decelerating-02)	(Stopped in traffic-05)	(Stopped in traffic-05)
	training verticie.	Critical Event	Critical Event	Critical Event
		(Other Motor Vehicle in Lane - Other vehicle stopped in lane- 50)	(Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53)	(Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53}
7)	Lead vehicle stopped in traffic, middle vehicle	Movement Prior to Critical Event	Movement Prior to Critical Event	Movement Prior to Critical Event
	decelerating, trailing vehicle	(Going Straight)	(Decelerating-02)	(Stopped in traffic-05)
	strikes middle vehicle which	Critical Event	Critical Event	<u>Critical Event</u>
	strikes lead vehicle.	(Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52)	(Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53}	(Other Motor Vehicle in Lane - Other vehicle same direction with higher speed-53}
8)	Lead vehicle suddenly stops behind a line of	Movement Prior to Critical Event	<u>Movement Prior to Critical</u> <u>Event</u>	Movement Prior to Critical Event
	traffic, middle	(Going Straight)	(Going Straight)	(Going Straight)
	decelerates, trailing vehicle	<u>Critical Event</u>	Critical Event	Critical Event
	strikes middle vehicle which strikes lead vehicle.	(Other Motor Vehicle in Lane - Other vehicle same direction while decelerating-52)	(This Vehicle Traveling - This vehicle decelerating-18)	(This Vehicle Traveling - This vehicle decelerating-18)

### **Consistency Checks:**

Errors

	IF	THEN
VA191	HARMFUL EVENT (A06) equals 02 or 04 for all events involving this vehicle	CRITICAL EVENT (V26) must equal 98.
VV124	CRITICAL EVENT (V26) equals 1, 2, 3 or 4	VEHICLE CONTRIBUTING FACTORS (V12) must not equal 00.

VV182	CRITICAL EVENT (V26) equals 14 and CORRECTIVE ACTION ATTEMPTED (V27) equals 1	ACCIDENT TYPE (V23) must equal 14.
VV227	CRITICAL EVENT (V26) equals 53	VEHICLE ROLE (V22) must not equal 1.
RANGE	CRITICAL EVENT (V26) must equal of 50-56, 59-68, 70-74, 78, 80-85, 87-92 must not equal null.	
<u>Warnings</u>		
	IF	THEN
AV184	NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12, 13 or 14.
VA189	CRITICAL EVENT (V26) equals 65- 68 or 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	RELATION TO JUNCTION (A09) Should not equal 00 or 10.
VA190	CRITICAL EVENT (V26) equals 70- 73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	RELATION TO JUNCTION (A09) should equal 03 or 13.
VV175	ACCIDENT TYPE (V23) equals 20-49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should not equal 12-14, 54, 66-68, 71-73 or 80- 85.
VV176	ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92.
VV211	DRIVER MANEUVERED TO AVOID (D06) equals 03	CRITICAL EVENT (V26) should equal 87-89.
VV212	DRIVER MANEUVERED TO AVOID (D06) equals 05	CRITICAL EVENT (V26) should equal 80-85.
VV214	DRIVER MANEUVERED TO AVOID (D06) equals 04	CRITICAL EVENT (V26) should equal 50-56, 59-68, 70-74 or 78.
VV215	DRIVER MANEUVERED TO AVOID (D06) equals 01	CRITICAL EVENT (V26) should equal 90-92.
VV224	CRITICAL EVENT (V26) equals 53	POINT OF IMPACT (V24) should not equal 01.
VV225	CRITICAL EVENT (V26) equals 51 OR 52	POINT OF IMPACT (V24) should not equal 04.

VV228	CRITICAL EVENT (V26) equals 51 or 52	VEHICLE ROLE (V22) should not equal 2.
VV237	CRITICAL EVENT (V26) equals 91 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	ACCIDENT TYPE (V23) should equal 15.
VV238	CRITICAL EVENT (V26) equals 90, CORRECTIVE ACTION ATTEMPTED (V27) equals 00 and the vehicle is involved in the first harmful event	ACCIDENT TYPE (V23) should equal 12 or 15.
VV239	CRITICAL EVENT (V26) equals 98	ACCIDENT TYPE (V23) should equal 00.
VV240	ACCIDENT TYPE (V23) equals 00	CRITICAL EVENT (V26) should equal 98.
VV251	CRITICAL EVENT (V26) equals 6	SPEED RELATED (D09) should equal 1.

### V27 CORRECTIVE ACTION ATTEMPTED - PRECRASH 3

#### **Element Values:**

Screen	Oracle	SAS	
1	17132	00	No driver present
2	26375	01	No avoidance maneuver
3	26376	02	Braking (no lockup)
4	26383	03	Braking (lockup)
5	17127	04	Braking (lockup unknown)
6	17128	05	Releasing brakes
7	26380	06	Steering left
8	26381	07	Steering right
9	26406	08	Braking and steering left
10	26620	09	Braking and steering right
11	26382	10	Accelerating
12	17130	11	Accelerating and steering left
13	17131	12	Accelerating and steering right
14	26621	98	Other actions
15	26622	99	Unknown if driver attempted avoidance maneuver

### Remarks:

Corrective actions attempted are movements/actions taken by the driver, within a critical crash envelope, in response to a Critical Event. Corrective actions attempted occur after the driver has realization of an impending danger but before the impact.

This variable assesses what the vehicle's action(s) were in response to the driver's realization.

Code the element which best describes the actions taken by the driver's vehicle in response to the Critical Event, within the Critical crash envelope that occurred just prior to this vehicle's impact. When there was a known action (e.g., braking), but you cannot determine whether there was more than one action (e.g., braking and steering left), default to the known action (e.g., braking).

Enter **No driver present** when no driver was in the vehicle when the accident occurred.

Enter **No avoidance maneuver** whenever the driver did not attempt any evasive (pre-impact) maneuvers. Use this code if the narrative states the driver did not have time to avoid the crash or never saw the other vehicle or object.

Enter **Unknown if driver attempted avoidance maneuver** when it can not be determined from any section of the PAR if the driver attempted an avoidance maneuver.

### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
VV106	ACCIDENT TYPE (V23) equals 50, 51, 52 or 53, MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 1, 2, 3, 4, 6, 14, 15 or 16 and CORRECTIVE ACTION ATTEMPTED (V27) equals 0, 1, 5, 6, 7, 10, 11, 12, 98 or 99	VEHICLE ROLE (V22) must equal 1 or 3.
VV122	ACCIDENT TYPE (V23) equals 03, 08, 38, 40, 58 or 60	CORRECTIVE ACTION ATTEMPTED (V27) must not equal 00 or 1.
VV134	PRECRASH LOCATION (V29) equals 00	CORRECTIVE ACTION ATTEMPTED (V27) must equal 00.
VV134A	CORRECTIVE ACTION ATTEMPTED (V27) equals 00	PRECRASH LOCATION (V29) must equal 00.
VV182	CRITICAL EVENT (V26) equals 14 and CORRECTIVE ACTION ATTEMPTED (V27) equals 1	ACCIDENT TYPE (V23) must equal 14.
VV232	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	CORRECTIVE ACTION ATTEMPTED (V27) must equal 00.
VV232A	CORRECTIVE ACTION ATTEMPTED (V27) equals 00.	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.
VV243A	ACCIDENT TYPE (V23) equals 46 or 47 and CORRECTIVE ACTION ATTEMPTED (V27) equals 01 or 99	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01.
RANGE	CORRECTIVE ACTION ATTEMPTED code 26407 or null.	0 (V27) must not equal 94 (Oracle
MULTIPLE RESPONSE	No more than one response per vehic ACTION ATTEMPTED (V27)	cle must be coded for CORRECTIVE

# <u>Warnings</u>

	IF	THEN
AV184	NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2, 4, 6, 7 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should equal 1-6, 8, 9, 12-14 or 19.
VA189	CRITICAL EVENT (V26) equals 65- 68 or 70-73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	RELATION TO JUNCTION (A09) should not equal 00 or 10.
VA190	CRITICAL EVENT (V26) equals 70- 73 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	RELATION TO JUNCTION (A09) should equal 03 or 13.
VV175	ACCIDENT TYPE (V23) equals 20-49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should not equal 12-14, 54, 66-68, 71-73 or 80- 85.
VV176	ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	CRITICAL EVENT (V26) should not equal 12-14, 51-53, 60, 61, 65, 66, 70, 71, 80-85 or 87-92.
VV218	CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	DRIVER MANEUVERED TO AVOID (D06) should equal 00, 50 or 95.
VV237	CRITICAL EVENT (V26) equals 91 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	ACCIDENT TYPE (V23) should equal 15.
VV238	CRITICAL EVENT (V26) equals 90, CORRECTIVE ACTION ATTEMPTED (V27) equals 00 and the vehicle is involved in the first harmful event	ACCIDENT TYPE (V23) should equal 12 or 15.

### **V28 VEHICLE CONTROL - PRECRASH 4**

Screen H	leading:	Regarding Vehicle #		
Screen N	lame:	Vehicle	Control (590-E)	
Long Nar	me:	What is the pre-impact stability of this vehicle?		
SAS Nam	ne:	Vehicle.PCrash4		
Oracle Name: GES.VehicleControl.ControlID		ehicleControl.ControlID		
Element	Values:			
Screen	Oracle	SAS		
1	10207	00	No Driver Present	
2	10208	01	Tracking	
3	10209	02	Skidding longitudinally — rotation less than 30 degrees	
4	10210	03	Skidding laterally — clockwise rotation	
5	10211	04	Skidding laterally — counterclockwise rotation	
6	10215	07	Other vehicle loss-of-control (specify)	

#### Remarks:

7

10216

09

The purpose of this variable is to assess the stability of the vehicle just prior to impact. Thus, this variable focuses upon this vehicle's dynamics just prior to impact.

Precrash stability unknown

Enter **No driver present** when no driver was present in the vehicle at the time it was involved in the accident.

Enter **Tracking** whenever vehicle continued along its intended path without rotation. Stopped, slowing, turning, constant speed, and backing are examples of tracking.

Enter **Skidding longitudinally – rotation less than 30 degrees** whenever the vehicle rotates less than 30 degrees clockwise or counterclockwise just prior to impact. If there is information about vehicle rotation but degree of rotation is unknown, then use this code.

Enter **Skidding laterally – clockwise rotation** whenever the vehicle rotates clockwise 30 degrees or more just prior to impact.

Enter **Skidding laterally – counterclockwise rotation** whenever the vehicle rotates counterclockwise 30 degrees or more just prior to impact.

Code **Other vehicle loss-of-control** is rarely used. Consult GES Supervisor before using this code. This code is used when the driver loses control of a vehicle prior to the critical event.

Enter **Precrash stability unknown** whenever the stability of the vehicle cannot be determined.

# Consistency Checks:

# <u>Errors</u>

	IF	THEN
VV170	PRECRASH VEHICLE CONTROL (V28) equals 00	PRECRASH LOCATION (V29) must equal 00.
VV172	PRECRASH VEHICLE CONTROL (V28) is not equal to 00	PRECRASH LOCATION (V29) must not equal 00.
VV233	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	PRECRASH VEHICLE CONTROL (V28) must equal 00.
VV233A	PRECRASH VEHICLE CONTROL (V28) equals 00	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00
VV245	ACCIDENT TYPE (V23) equals 01 or 06	PRECRASH CONTROL (V28) must not equal 02, 03, 04 or 07.
RANGE	PRECRASH CONTROL (V28) must CONTROL (V28) must not equal null	•
MULTIPLE RESPONSE	multiple responses must not be selec (V28).	ted for PRECRASH CONTROL

# <u>Warnings</u>

	IF	THEN
VV135	PRECRASH LOCATION (V29) equals 01	PRECRASH VEHICLE CONTROL (V28) should equal 01 or 02.
VV242	PRECRASH CONTROL (V28) equals 01	ACCIDENT TYPE (V23) should not equal 02, 07, 34, 36, 54 or 56.

### **V29 PRECRASH LOCATION - PRECRASH 5**

Screen H	leading:	Regarding Vehicle #		
Screen Name: Vehicle Location (600-E)		e Location (600-E)		
Long Nar	ne:	What is the pre-impact location of this vehicle?		
SAS Nam	ie:	Vehicle.PCrash5		
Oracle Name:		GES.P	reCrash.LocationID	
Element	Values:			
Screen	Oracle	SAS		
1 2 3 4	1 2 3 4	0 1 2 3	No driver present Stayed in original travel lane Stayed on roadway, but left original travel lane Stayed on roadway, not known if left original travel lane	
_	_			

- 5 5 4 Departed roadway
- 6 6 5 Remained off roadway
- 776Returned to roadway887Entered roadway
- 9 9 99 Unknown

#### Remarks:

This variable reports the location of the vehicle just prior to impact.

Enter **No driver present** when no driver was present in the vehicle at the time it was involved in the accident.

Enter **Stayed in original travel lane** whenever the vehicle remained within the boundaries of its initial lane. The perimeter of the vehicle is to be considered when determining the vehicle's status within its travel lane.

Enter **Stayed on roadway but left original travel lane** whenever the "majority" of the vehicle departed its initial travel lane; however, the "majority" of the vehicle remained within the boundaries of the roadway (travel lanes). The perimeter of the vehicle is to be considered when determining the vehicle's status within the roadway.

Enter **Stayed on roadway, not known if left original travel lane** whenever it cannot be ascertained whether the "majority" of the vehicle remained within its initial travel lane. To use this code, the "majority" of the vehicle must have remained within the boundaries of the roadway.

Enter **Departed roadway** whenever the "majority" of the vehicle departed the roadway just prior to impact.

Enter **Remained off roadway** whenever the pre-impact motion of the vehicle occurred outside the boundaries of the roadway and remained outside the boundaries at impact. This includes traveling on the shoulders, within the median, on the roadside or off the trafficway.

Enter **Returned to roadway** whenever the "majority" of the vehicle was initially within the boundary of the roadway and then returned to the roadway prior to impact.

Select **Entered roadway** whenever the vehicle was not previously on the roadway and then the majority of the vehicle enters the roadway during precrash motion.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
VV134	PRECRASH LOCATION (V29) equals 00	CORRECTIVE ACTION ATTEMPTED (V27) must equal 00.
VV134A	CORRECTIVE ACTION ATTEMPTED (V27) equals 00	PRECRASH LOCATION (V29) must equal 00.
VV170	PRECRASH VEHICLE CONTROL (V28) equals 00	PRECRASH LOCATION (V29) must equal 00.
VV172	PRECRASH VEHICLE CONTROL (V28) is not equal to 00	PRECRASH LOCATION (V29) must not equal 00.
VV235	PRECRASH LOCATION (V29) equals 00	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.
VV235A	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	PRECRASH LOCATION (V29) must equal 00.
RANGE	PRECRASH LOCATION (V29) must	equal 0, 1, 2, 3, 4, 5, 6, 7 or 99.
MULTIPLE RESPONSE	multiple responses must not be select (V29).	ted for PRECRASH LOCATION
/arnings		

### Warnings

	IF	THEN
AV186	RELATION TO ROADWAY (A10) equals 4, 5, 6 or 8	PRECRASH LOCATION (V29) of the vehicle(s) involved in the first harmful event should equal 00, 04, 05 or 99.
VA181	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 04	RELATION TO ROADWAY (A10) should not equal 1.

VA182	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 01, 02 or 03	RELATION TO ROADWAY (A10) should equal 1.
VA183	PRECRASH LOCATION (V29) equals 02	NUMBER OF TRAVEL LANES (A12) should not equal 1.
VA216	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 05	RELATION TO ROADWAY (A10) should not equal 1.
VA217	PRECRASH LOCATION (V29) of a vehicle involved in the first harmful event equals 06	RELATION TO ROADWAY (A10) should equal 1.
VV135	PRECRASH LOCATION (V29) equals 01	PRECRASH VEHICLE CONTROL (V28) should equal 01 or 02.

# V30 ROLLOVER TYPE

Screen Heading:		Regarding Vehicle # 1			
Screen Name:		Rollov	Rollover (610-R)		
Long Name:		What is the rollover type for this vehicle?			
SAS Name:		Vehicle.Rollover			
Oracle Name:		GES.\	/ehicle.RolloverTypeID		
Element	Values:				
Screen	Oracle	SAS			
1	26850	00 10	No Rollover		

2	26851	10	Untripped Rollover
3	26852	20	Tripped Rollover - By Curb
4	26853	21	Tripped Rollover - By Guardrail
5	26854	22	Tripped Rollover - By Ditch
6	26855	23	Tripped Rollover - By Soft Soil
7	26856	28	Tripped Rollover - Other
8	26857	29	Tripped Rollover - Unknown Mechanism
9	26858	99	Rollover, Unknown Whether Untripped Or Tripped

#### Remarks:

Enter **No Rollover** if uncertainty exists concerning whether or not this vehicle rolled over. In addition, use this code if a trailer attached to the vehicle rolled over but the vehicle itself did not. Further, this element includes vehicles whose Body Type (V5) is Motored Cycle independent of their accident configuration. When these vehicles rotate sufficiently to contact the ground it is considered an "overturn" rather than a rollover.

Enter **Untripped Rollover** when a rollover occurs but it is not the result of a collision but rather vehicle instability (e.g., centrifugal force).

Rollovers primarily about the lateral axis (end-over-end) should be coded using **Tripped Rollover - Other**. The tripped rollover categories are used when the rollover is primarily about the longitudinal axis.

Enter **Tripped Rollover - By Ditch** when there is contact with a ditch prior to the rollover or the PAR states that a vehicle entered a ditch prior to the rollover. Also, use this code whenever "ditch" is referenced in relation to the rollover and no further information is available.

Enter **Tripped Rollover - Other** when the rollover is a tripped rollover and the tripping mechanism is not curb, guardrail, ditch or soft soil. Use this response when an impact with another vehicle causes the rollover. The rollover must be the immediate result of the impact between the vehicles (e.g., intersection crashes where a vehicle is struck in the side and the

momentum of the struck vehicle results in the rollover, or offset end-to-end type crashes when one vehicle vaults over the tapered end of another vehicle resulting in a rollover).

Enter **Tripped Rollover - Unknown Mechanism** when the rollover is initiated by a tripping mechanism but the specific mechanism is unknown.

Enter **Rollover**, **Unknown Whether Tripped or Untripped** when it is known that the vehicle rolled over but it is not known whether it was a tripped or untripped rollover.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
AV149	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) not equal to 80-89	ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29 or 99.
AV149A	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) equals 80- 89	ROLLOVER TYPE (V30) must equal 00.
VV111	BODY TYPE (V05) equals 80-89	ROLLOVER TYPE (V30) must equal 00.
VV116	HARMFUL EVENT (A06) equals 01 and BODY TYPE (V05) does not equal 80-89	ROLLOVER TYPE (V30) must not equal 00.
VV226	ROLLOVER TYPE (V30) equals 10 and the first HARMFUL EVENT (A06) equals 1	ACCIDENT TYPE (V23) must equal 1-10, 14, 15 or 98.
Warnings		
	IF	THEN

AV214	HARMFUL EVENT (A06) equals 38	ROLLOVER TYPE (V30) should equal 00 or 22.
VA211	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 1 and ROLLOVER TYPE (V30) for the vehicle involved in the first harmful event equals 10	RELATION TO ROADWAY (A10) should equal 1.
VV138	ROLLOVER TYPE (V30) is not equal to 00	DAMAGE AREAS (V25) should have more than one value other than 0.
VV247	ROLLOVER TYPE (V30) equals 10	ACCIDENT TYPE (V23) should equal 01-10, 14, 98 or 99.

### Post Entry

#### IF

VV116A

ROLLOVER TYPE (V30) equals 10-99 and BODY TYPE (V05) does not equal 80-89 THEN

at least one HARMFUL EVENT (A06) must equal 01.

### **V31 CARRIER'S IDENTIFICATION NUMBER**

Screen Heading:	NGA Crash Data
Screen Name:	Carrier ID (620-E)
Long Name:	What is the carrier's identification number for this vehicle?
SAS Name:	Vehicle.C_ID_No
Oracle Name:	GES.NGA_Type.CarrierNumber (Character)
Element Values:	

Screen	Oracle	SAS	
000000 1-999998 1 *	-999998	-	Not applicable US DOT or ICC MC Number Unknown
	333333	333333	UTIKHUWH

### Remarks:

#### National Governors Association (NGA) Accident Data

In 1987 the nation's Governors adopted a comprehensive motor carrier safety policy which stated that a necessary first step toward improved motor carrier safety would be the uniform collection of information on truck and bus accidents. The NGA surveyed fifty states to assemble the latest police accident reports, and conducted case study field visits to four states to get a better understanding of data collection and reporting. After reviewing state truck and bus accident data collection efforts, the NGA drafted a set of uniform data elements. These data elements were pilot tested in several states and finalized.

The final recommended data elements can be divided into two groups. The first group contains elements which pertain specifically to accidents involving trucks and buses. These elements provide essential information required to analyze motor carrier crashes, only.

The next six variables include that portion of the NGA data elements which pertain specifically to accidents involving trucks and busses.

The NGA variables are only applicable when the vehicle body type is a medium/heavy truck or bus.

The Carrier's ID is the unique number assigned to the Carrier by the United States Department of Commerce Commission or the State.

The number will be found only on vehicles of interstate for-hire or private carriers in the transportation business. The number can be either a US DOT number (on interstate private

carriers) or an ICC MC number (interstate for-hire carriers). If both US DOT and ICC MC numbers are listed on the PAR, code the US DOT number.

Code **Not Applicable** is used when the vehicle is not a medium/heavy truck or a bus. This code should also be used when the vehicle is a medium/heavy truck or a bus but the vehicle is not an interstate for-hire or private carrier.

Code **Unknown** is used when the vehicle is a medium/heavy truck or a bus but the Carrier ID is not known. Also, this code is used when the body type of the vehicle is unknown.

### **Consistency Checks:**

	IF	THEN
VV110	BODY TYPE (V05) is not equal to 50-64, 66-79 or 99	CARRIER'S IDENTIFICATION NUMBER (V31) must equal 000000.
VV140	CARRIER'S IDENTIFICATION NUMBER (V31) is not equal to 000000	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.
VV167	BODY TYPE (V05) equals 99	CARRIER'S IDENTIFICATION NUMBER (V31) must equal 9999999.
VV223	CARRIER'S IDENTIFICATION NUMBER (V31) does not equal 000000 or 999999	BODY TYPE (V05) must equal 50-64, 66-79 or 99.
RANGE	CARRIER'S IDENTIFICATION NUMB	ER (V31) must not contain letters.
<u>Warnings</u>		

	IF	THEN
VV109	BODY TYPE (V05) equals 50-64 or 66-79	CARRIER'S IDENTIFICATION NUMBER (V31) should not equal 000000.

### **V32 NUMBER OF AXLES ON VEHICLE, INCLUDING TRAILERS**

Screen He	eading:	NGA C	NGA Crash Data		
Screen Na	ame:	Numbe	er of Axles (630-E)		
Long Nan	ne:	How m have?	How many axles, including power unit and trailer(s), does this vehicle have?		
SAS Name	e:	Vehicle	Vehicle.Axles		
Oracle Na	ime:	GES.NGA_Type.Axles			
Element \	/alues:				
Screen	Oracle	SAS			
00 *	00 02-20 99	00 02-20 99	Not Applicable Actual Number Of Axles Unknown Number Of Axles		

#### **Remarks:**

Refer to Truck and/or Bus supplement or Truck/Bus section on the PAR to obtain axle data.

Not Applicable will be pre-coded if this vehicle is not a medium/heavy truck or bus.

Enter **Unknown Number of Axles** when this vehicle is a medium/heavy truck or bus and there is no truck or bus supplement or the data was not recorded in the Truck/Bus section of the PAR.

States with known Truck/Bus supplements or Truck/Bus section on PAR.

Alabama Colorado Florida Illinois Indiana Massachusetts Michigan Nebraska New Mexico New York Pennsylvania Tennessee Texas Wisconsin

# Consistency Checks:

# <u>Errors</u>

	IF	THEN
VV115	VEHICLE TRAILING (V13) equals 5 or 6 and BODY TYPE (V05) equals 50, 59-64 or 66-79	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.
VV140	CARRIER'S IDENTIFICATION NUMBER (V31) is not equal to 000000	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.
VV141	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) equals 00	CARGO BODY TYPE (V33) must equal 00.
VV142	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) is not equal to 00	CARGO BODY TYPE (V33) must not equal 00.
VV165	BODY TYPE (V05) is not equal to 50-64, 66-79 or 99	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must equal 00.
VV166	BODY TYPE (V05) equals 99	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must equal 99.
VV219	BODY TYPE (V05) equals 50, 59-64, 66-79 or 99	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.
RANGE	NUMBER OF AXLES ON VEHICLE, 20, 99.	INCL TRAILERS (V32) must equal 00-

# <u>Warnings</u>

	IF	THEN
VV244	BODY TYPE (V05) equals 66 or 78 and VEHICLE TRAILING (V13) equals 1	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) should equal 02, 03 or 99.

# V33 CARGO BODY TYPE

Screen Heading:	NGA Crash Data
Screen Name:	Cargo Body Type (640-E)
Long Name:	What is the cargo body type for this vehicle?
SAS Name:	Vehicle.Carg_Typ
Oracle Name:	GES.NGA_Type.CargoBodyTypeID

### Element Values:

Screen	Oracle	SAS	
1	10217	00	Not Applicable (NA)
2	10218	01	Bus
3	10219	02	Van/Enclosed Box
4	10220	03	Cargo Tank
5	10221	04	Flatbed
6	10222	05	Dump
7	10223	06	Concrete Mixer
8	10224	07	Auto Transporter
9	10225	08	Garbage/Refuse
10	10226	98	Other
*	10227	99	Unknown

### Remarks:

Code Not Applicable (NA) will be precoded when the body type is not a medium/heavy truck.

Code **Bus** will be precoded when the vehicle data identifies the vehicle as a bus.

Enter **Van/Enclosed Box** when the cargo body is fully enclosed or designed with high closed sides and ends with an open top.

Enter **Cargo Tank** when the cargo body is designed for the transport of bulk liquids or dry commodities such as petroleum, oil or grain.

Enter **Flatbed** when the cargo body has a floor without sides or a roof with or without removable stakes.

Enter **Dump** when the cargo body is a low side open box designed primarily to transport bulk dry commodities which can be tilted or otherwise manipulated to discharge its load by gravity.

Enter **Concrete Mixer** when the cargo body is designed and equipped to mix or agitate concrete.

Enter **Auto Transporter** when the cargo body is designed for the transportation of other transport vehicles.

Enter **Garbage/Refuse** when the cargo body is designed to primarily for the collection of garbage and refuse.

Enter **Other** when the cargo body type is known but is one other than those described. Also, use this code when the medium/heavy truck is a bobtail (i.e. Chassis/truck, tractor only with no trailer attached).

Enter **Unknown** when the vehicle is a medium/heavy truck but the specific cargo body type is not known.

### **Consistency Checks:**

	IF	THEN
VV141	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) equals 00	CARGO BODY TYPE (V33) must equal 00.
VV142	NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) is not equal to 00	CARGO BODY TYPE (V33) must not equal 00.
VV143	CARGO BODY TYPE (V33) equals 00	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV145	CARGO BODY TYPE (V33) equals 01	BODY TYPE (V05) must equal 50, 58 or 59.
VV163	BODY TYPE (V05) equals 99	CARGO BODY TYPE (V33) must equal 99.
VV164	BODY TYPE (V05) is not equal to 50-64, 66-79 or 99	CARGO BODY TYPE (V33) must equal 00.
VV174	VEHICLE TRAILING (V13) equals 1 and BODY TYPE (V05) equals 66	CARGO BODY TYPE (V33) must equal 98.
VV220	BODY TYPE (V05) equals 50, 59-64, 66-79 or 99	CARGO BODY TYPE (V33) must not equal 00.
VV221	BODY TYPE (V05) equals 60, 64 or 66-79 and SPECIAL USE (V08) equals 07	CARGO BODY TYPE (V33) must equal 98.
VV248	BODY TYPE (V05) equals 50 or 59	CARGO BODY TYPE (V33) must equal 01.
VV249	BODY TYPE (V05) equals 58	CARGO BODY TYPE (V33) must equal 01 or 98.

# <u>Warnings</u>

IF	THEN

VV185

66

CARGO BODY TYPE (V33) equals VEHICLE TRAILING (V13) should 98 and BODY TYPE (V05) equals equal 1.

### V34 HAZARDOUS MATERIALS PLACARDED

Screen H	leading:	NGA (	NGA Crash Data		
Screen N	Name:	Hazar	dous Materials (650-E)		
Long Na	me:	Was this vehicle carrying hazardous materials and was it placarded?			
SAS Nan	ne:	Vehicle.Haz_Mat			
Oracle N	ame:	GES.NGA_Type.HazardPlak			
Element	Values:				
Screen	Oracle	SAS			
3	3	0	Not Applicable		
1	1	1	Yes		
2	2	2	No		
4	4	9	Unknown		
Remarks	:				

Enter **Not Applicable** when the vehicle is not a medium/heavy truck or a bus. Also, use this code when the vehicle is a medium/heavy truck or a bus, the PAR has a Hazardous Materials related block, and 'None' is indicated or the PAR indicates that hazardous materials are not being transported by this vehicle (e.g. an empty truck).

Enter **Yes** when the vehicle is a medium/heavy truck or a bus, and the PAR indicates that hazardous materials were being transported by this vehicle, and this vehicle is displaying a HazMat Placard.

Enter **No** when the vehicle is a medium/heavy truck or a bus, and the PAR indicates that hazardous materials are being transported by this vehicle, and this vehicle is not displaying a HazMat Placard.

Enter **Unknown** when the vehicle is a medium/heavy truck or a bus, and the PAR does not have a hazardous materials related block, and the narrative does not mention any such materials (default) OR the PAR indicates hazardous materials are being transported by this vehicle, but does not indicate whether a HazMat Placard is displayed or the hazardous materials related block has been left blank.

Also, enter this code when the body type is unknown.

# Consistency Checks:

	IF	THEN
VV143	CARGO BODY TYPE (V33) equals 00	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV146	HAZARDOUS MATERIALS PLACARDED (V34) equals 0 or 2	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.
VV147	HAZARDOUS MATERIALS PLACARDED (V34) is not equal to 0 or 2	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 0000.
VV152	HAZARDOUS MATERIALS PLACARDED (V34) equals 1	HAZARDOUS MATERIALS RELEASE (V36) must not equal 0.
VV157	BODY TYPE (V05) equals 99	HAZARDOUS MATERIALS PLACARDED (V34) must equal 9.
VV158	HAZARDOUS MATERIALS PLACARDED (V34) equals 1 or 9	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 0000.
VV159	HAZARDOUS MATERIALS PLACARDED (V34) equals 9	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999.
VV160	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV168	HAZARDOUS MATERIALS RELEASE (V36) equals 0	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
VV169	BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.

### V35 HAZARDOUS MATERIALS PLACARD NUMBER

Screen Heading:	NGA Crash Data
Screen Name:	Placard Number (660-E)
Long Name:	What is the hazardous materials placard number?
SAS Name:	Vehicle.Hazm_No
Oracle Name:	GES.NGA_Type.HazardPlakNum

#### **Element Values**:

#### Range with spreads included:

0004, 0222, 0223, 0331, 0402, 1001-1003, 1005, 1006, 1008-1018, 1020-1023, 1026-1030, 1032, 1033, 1035-1041, 1043-1046, 1048-1053, 1055-1058, 1060-1067, 1069-1073, 1075-1083, 1085-1093. 1098-1100. 1104-1115. 1118. 1120. 1123. 1125-1131. 1133-1137. 1139. 1142-1150. 1152-1173, 1175-1185, 1188-1199, 1201, 1202-1204, 1206-1208, 1210, 1212-1214, 1216, 1218-1224, 1226, 1228-1235, 1237-1239, 1242-1251, 1255-1257, 1259, 1261-1268, 1270-1272, 1274-1282, 1286-1289, 1292-1310, 1312-1314, 1318, 1320-1328, 1330-1334, 1336-1341, 1343-1350, 1352-1358, 1360-1366, 1369, 1370, 1372-1374, 1376, 1378-1386, 1389-1398, 1400-1415, 1417-1423, 1426-1428, 1431-1433, 1435-1439, 1442, 1444-1459, 1461-1463, 1465-1467, 1469-1477, 1479. 1481-1496. 1498-1500. 1502-1517. 1541. 1544-1551. 1553-1562. 1564. 1567. 1569-1575. 1577-1608, 1610-1614, 1616-1618, 1620-1631, 1633, 1634, 1636-1665, 1669-1674, 1677-1680, 1683-1695, 1697-1705, 1707-1719, 1722-1733, 1736-1771, 1773-1784, 1786-1794, 1796, 1798-1819, 1821, 1823-1841, 1843, 1845-1849, 1851, 1854, 1855, 1858-1860, 1862-1873, 1884-1889, 1891, 1892, 1894, 1895, 1897, 1898, 1902, 1903, 1903, 1905-1908, 1910-1923, 1928, 1929, 1931, 1932, 1935, 1938-1942, 1944, 1945, 1950-1984, 1986-1994, 1999-2006, 2008-2038, 2044-2059, 2067-2085, 2087-2108, 2110-2116, 2118-2126, 2128-2219, 2222, 2224-2229, 2232-2267, 2269-2291, 2293-2313, 2315-2348, 2350-2354, 2356-2364, 2366-2414, 2416-2422, 2424, 2426-2449, 2451-2475, 2477, 2478, 2480-2491, 2493, 2495-2498, 2501-2509, 2511-2518, 2520-2522, 2524-2531, 2533-2536, 2538, 2541, 2542, 2545-2548, 2550-2558, 2560-2562, 2564, 2565, 2567, 2570-2574, 2576-2612, 2614-2624, 2626-2630, 2642, 2643, 2644-2651, 2653, 2655-2662, 2664, 2666-2674, 2676-2693, 2698, 2699, 2707-2711, 2713-2717, 2719-2730, 2732-2735, 2738-2790, 2793-2803, 2805-2807, 2809-2815, 2817-2823, 2826, 2829-2831, 2834, 2835, 2837-2842, 2844-2846, 2849-2865, 2869-2876, 2878-2881, 2883-2907, 2909-2913, 2918, 2920-2931, 2933-2938, 2940-2943, 2945-2956, 2965-3028, 3030-3043, 3048-3057, 3064-3066, 3070-3073, 3076, 3077-3080, 3082-3172, 3174-3176, 3178-3192, 3194, 3200, 3203, 3205-3301, 9011, 9018, 9026, 9035, 9037, 9069, 9083, 9084, 9088, 9136, 9180, 9183, 9187-9195, 9199, 9200, 9202, 9206, 9259, 9260, 9263, 9264, 9269, 9274-9278

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Screen	Oracle	SAS	
0 xxxx *	XXXX	0000 xxxx 9999	Not Applicable Code Actual Hazardous Material Placard Number Unknown

Range is a compilation of the 1993 Emergency Response Guidebook.

### Remarks:

Code **Not Applicable** is used when the vehicle is not a medium/heavy truck or a bus. Also, this code is used when the vehicle is a medium/heavy truck or a bus, the PAR has a Hazardous Materials related block, and 'None' is indicated or the PAR indicates that Hazardous Materials are not being transported by this vehicle (e.g., an empty truck).

Code the actual number when given on the PAR. This vehicle must be a medium/heavy truck or a bus.

Code **Unknown** is used when the vehicle is a medium/heavy truck or a bus, the PAR does not have a Hazardous Material related block, and the narrative does not mention any such materials (default).

This code is used when the vehicle is a medium/heavy truck or a bus and a placard is indicated but the placard number is not given OR it is unknown if a placard is present OR the Hazardous Materials related block has been left blank.

Also, this code is used when the body type of the vehicle is unknown.

### **Consistency Checks:**

	IF	THEN
VV146	HAZARDOUS MATERIALS PLACARDED (V34) equals 0 or 2	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.
VV147	HAZARDOUS MATERIALS PLACARDED (V34) is not equal to 0 or 2	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 0000.
VV149	HAZARDOUS MATERIALS PLACARD NUMBER (V35) is not equal to 0000	HAZARDOUS MATERIALS RELEASE (V36) must not equal 0.
VV153	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.

VV158	HAZARDOUS MATERIALS PLACARDED (V34) equals 1 or 9	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 0000.
VV159	HAZARDOUS MATERIALS PLACARDED (V34) equals 9	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999.
VV161	BODY TYPE (V05) equals 99	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 9999.
VV162	BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 0000.
RANGE	HAZARDOUS MATERIALS PLACARD NUMBER (V35) must be within the range specified under the element values section, above.	
Warnings		
	IF	THEN
VV148	HAZARDOUS MATERIALS PLACARD NUMBER (V35) equals	HAZARDOUS MATERIALS RELEASE (V36) should equal 0.

0000

### V36 HAZARDOUS MATERIALS RELEASE

Screen Heading:	NGA Crash Data		
Screen Name:	Hazardous Release (670-E)		
Long Name:	Was an hazardous cargo released from the vehicle cargo tank or compartment?		
SAS Name:	Vehicle.Haz_Ma_R		
Oracle Name:	GES.NGA_Type.HazardRelease		
Element Values:			
Screen Oracle	SAS		
3 3 1 1 2 2 4 4	0 Not Applicable 1 Yes 2 No 9 Unknown		

#### Remarks:

This variable indicates whether or not any hazardous cargo was released from the vehicle cargo tank or compartment.

Code **Not Applicable** is used when the vehicle is not a medium/heavy truck or a bus. Also, this code is used when the vehicle is a medium/heavy truck or bus, the PAR has a hazardous materials related block, and 'None' is indicated OR the PAR indicates that hazardous materials were not being transported by this vehicle.

Code **Yes** is used when the vehicle is a medium/heavy truck or a bus, the PAR indicates that hazardous materials were being transported by this vehicle, and a release (spill) from the vehicle is indicated.

NOTE: Spilled gasoline from a fuel tank is not considered a hazardous materials release.

Code **No** is used when the vehicle is a medium/heavy truck or a bus and the PAR indicates a cargo of hazardous materials but does not indicate a release or spill.

Code **Unknown** is used when the vehicle is a medium/heavy truck or a bus, the PAR does not have a hazardous materials related block, and the narrative does not mention any such materials (default).

This code is used when the PAR indicates that a release or spill occurred but it is unknown if the material was hazardous.

Also, use this code when the body type of the vehicle is unknown.

# **Consistency Checks:**

	IF	THEN
VV149	HAZARDOUS MATERIALS PLACARD NUMBER (V35) is not equal to 0000	HAZARDOUS MATERIALS RELEASE (V36) must not equal 0.
VV152	HAZARDOUS MATERIALS PLACARDED (V34) equals 1	HAZARDOUS MATERIALS RELEASE (V36) must not equal 0.
VV154	BODY TYPE (V05) is not equal to 60, 64, 66-79 or 99	HAZARDOUS MATERIALS RELEASE (V36) must equal 0.
VV155	BODY TYPE (V05) equals 99	HAZARDOUS MATERIALS RELEASE (V36) must equal 9.
VV156	BODY TYPE (V05) equals 66 and VEHICLE TRAILING (V13) equals 1	HAZARDOUS MATERIALS RELEASE (V36) must equal 0.
VV168	HAZARDOUS MATERIALS RELEASE (V36) equals 0	HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.
<u>Warnings</u>		

	IF	THEN
VV148	HAZARDOUS MATERIALS PLACARD NUMBER (V35) equals 0000	HAZARDOUS MATERIALS RELEASE (V36) should equal 0.

# **V10B NUMBER OF OCCUPANTS**

Screen Heading:		Vehicle Occupants		
Screen Name:		Numbe	r Occupants (20-E)	
Long Name:		How many occupants are in vehicle #?		
SAS Name:		Vehicle.NumOccs		
Oracle Name:		GES.Vehicle.NumOccs		
Element V	alues			
Screen	Oracle	SAS		
0 1, *	0 1, -9999	0 1, 999	Zero Persons Total Number of Occupants in this Vehicle Unknown	

### Remarks:

Enter **Zero Persons** when this vehicle is in transport and unoccupied.

Count and enter the total number of occupants (injured and uninjured) associated with this vehicle.

In bus crashes, the total number of occupants must be entered.

Enter **Unknown** when the PAR does not indicate the total number of occupants for the vehicle.

Enter **Unknown** if this is a "hit-and-run" vehicle, unless evidence clearly establishes the number of occupants present.

### **Consistency Checks:**

#### Errors

	IF	THEN
VP207A	BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS (V10B) is greater than 00	EJECTION (P06) must equal 0.
VV012A	BODY TYPE (V05) equals 01-05, 07-09 or 17	NUMBER OF OCCUPANTS (V10B) must not be greater than 15.
VV013A	BODY TYPE (V05) equals 06, 11, 14 or 15	NUMBER OF OCCUPANTS (V10B) must not be greater than 22.

VV015A	BODY TYPE (V05) equals 80-89	NUMBER OF OCCUPANTS (V10B) must not be greater than 5.
VV192A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER PRESENCE (D01) must equal 0.
VV196A	DRIVER DISTRACTED BY (D07) equals 3	NUMBER OF OCCUPANTS (V10B) must be greater than 01.
VV207A	NUMBER OF OCCUPANTS (V10B) equals 00	VIOLATIONS CHARGED (D02) must equal 95.
VV208A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER'S VISION OBSCURED BY (D04) must equal 95.
VV209A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER MANEUVERED TO AVOID (D06) must equal 95.
VV210A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER DISTRACTED BY (D07) must equal 95.
VV216C	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER'S ZIP CODE (D08) must equal 99998.

### <u>Warnings</u>

	IF	THEN
VV032A	BODY TYPE (V05) equals 01-05, 07-09 or 97	NUMBER OF OCCUPANTS (V10B) should not be greater than 8.
VV033A	BODY TYPE (V05) equals 12	NUMBER OF OCCUPANTS (V10B) should not be greater than 15.
VV034A	BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79	NUMBER OF OCCUPANTS (V10B) should not be greater than 12.
VV036A	BODY TYPE (V05) equals 80-89 or 91	NUMBER OF OCCUPANTS (V10B) should not be greater than 2.
VV037A	BODY TYPE (V05) equals 90	NUMBER OF OCCUPANTS (V10B) should not be greater than 6.
VV241A	SPECIAL USE (V08) equals 01	NUMBER OF OCCUPANTS (V10B) should be greater than 01.

# Post Entry

	IF	THEN
VP045A	at least one NUMBER OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP199A	NUMBER OF OCCUPANTS (V10B) is greater than 00	there must be only one occupant coded as the driver (P03=1).

# V10 NUMBER OF OCCUPANTS CODED

Screen Heading:	Vehicle Occupants
Screen Name:	Coded Occupants (25-R)
Long Name:	How many coded occupants in vehicle #?
SAS Name:	Vehicle.Occ_Invl
Oracle Name:	GES.Vehicle.NumOccCoded
Element Values:	

Screen	Oracle	SAS	
0	0	0	Zero Persons Coded
1,	1,	1,	Number of Occupants Coded for This vehicle

### Remarks:

Note: Some State PARs only list injured occupants.

However, additional data will be coded for injured bus occupants only.

# Consistency Checks:

	IF	THEN
VP207	BODY TYPE (V05) equals 80-91 and NUMBER OF OCCUPANTS CODED (V10) is greater than 00	EJECTION (P06) must equal 0.
VV012	BODY TYPE (V05) equals 01-05, 07-09 or 17	NUMBER OF OCCUPANTS CODED (V10) must not be greater than 15.
VV013	BODY TYPE (V05) equals 06, 11, 14 or 15	NUMBER OF OCCUPANTS CODED (V10) must not be greater than 22.
VV015	BODY TYPE (V05) equals 80-89	NUMBER OF OCCUPANTS CODED (V10) must not be greater than 5.
VV192	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER PRESENCE (D01) must equal 0.

VV207	NUMBER OF OCCUPANTS CODED (V10) equals 00	VIOLATIONS CHARGED (D02) must equal 95.	
VV208	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER'S VISION OBSCURED BY (D04) must equal 95.	
VV209	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER MANEUVERED TO AVOID (D06) must equal 95.	
VV210	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER DISTRACTED BY (D07) must equal 95.	
VV216	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER'S ZIP CODE (D08) must equal 99998.	
VV301A	NUMBER OF OCCUPANTS CODED	(V10) must be known.	
VV301B	NUMBER OF OCCUPANTS CODED (V10) must equal the number of occupants coded for this vehicle.		

### <u>Warnings</u>

	IF	THEN
VV032	BODY TYPE (V05) equals 01-05, 07-09 or 97	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 8.
VV033	BODY TYPE (V05) equals 12	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 15.
VV034	BODY TYPE (V05) equals 06, 14-15, 23, 42 or 60-79	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 12.
VV036	BODY TYPE (V05) equals 80-89 or 91	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 2.
VV037	BODY TYPE (V05) equals 90	NUMBER OF OCCUPANTS CODED (V10) should not be greater than 6.
VV241	SPECIAL USE (V08) equals 01	NUMBER OF OCCUPANTS CODED (V10) should be greater than 01.

# Post Entry

	IF	THEN
VP045	at least one NUMBER OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP199	NUMBER OF OCCUPANTS CODED (V10) is greater than 00	there must be only one occupant coded as the driver (P03=1).

### D01 DRIVER PRESENCE

Screen Heading:	Vehicle Occupants
Screen Name:	Driver Presence (680-R)
Long Name:	Was a Driver Present in the vehicle at the Time of the Crash?
SAS Name:	Vehicle.dr_pres
Oracle Name:	GES.Vehicle.DriverPresenceID
Element Values:	

Screen	Oracle	SAS	
1	26871	0	Unattended Vehicle (No Driver Involved)
2	26872	1	Driver Operated Vehicle
3	26873	2	Hit and Run (Vehicle and/or Driver Left Scene)
4	26874	9	Unknown Driver Presence

### Remarks:

This variable serves as a flag to identify driverless, in-transport motor vehicles.

**Unattended Vehicle (No Driver Involved)** indicates no driver was physically in the intransport vehicle at the time that it was involved in the crash. A child sitting in the driver's seat does not automatically indicate that the child was operating the vehicle (see discussion under **Driver Operated Vehicle,** below).

**Driver Operated Vehicle** applies when the PAR indicates there is a driver. Do not automatically code **Driver Operated Vehicle** when a child is sitting in the driver's seat. The PAR must indicate that the child was controlling the vehicle in some manner to consider the child a driver.

**Hit and Run (Vehicle and/or Driver Left Scene)** applies when this motor vehicle was a "hitand-run" vehicle. [i.e., Hit & Run (V02), is encoded (Yes, Driver Or Car & Driver Left Scene)]. If it is known that the driver operated the vehicle but the PAR is unclear or inadequate regarding the issue of hit-and-run, then default to **Driver Operated Vehicle**.

**Unknown Driver Presence** is coded when it is unknown if there was a driver present in the vehicle. This element includes instances when a person was present in the in-transport vehicle, but it is unknown if the person was the driver.

	IF	THEN
PP062	A previous occupant has been identified as the driver.	This occupant cannot be coded as the driver.
VV186	DRIVER PRESENCE (D01) equals 0	DRIVER'S VISION OBSCURED BY (D04) must equal 95.
VV187	DRIVER PRESENCE (D01) equals 0	DRIVER MANEUVERED TO AVOID (D06) must equal 95.
VV188	DRIVER PRESENCE (D01) equals 0	VIOLATIONS CHARGED (D02) must equal 95.
VV189	DRIVER PRESENCE (D01) equals 0	DRIVER DISTRACTED BY (D07) must equal 95.
VV189A	DRIVER PRESENCE (D01) equals 1 or 2	DRIVER DISTRACTED BY (D07) must equal 00-14 or 96-99.
VV191	DRIVER PRESENCE (D01) equals 0	ACCIDENT TYPE (V23) must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, 92, 93 or 98.
VV192	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER PRESENCE (D01) must equal 0.
VV192A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER PRESENCE (D01) must equal 0.
VV193	JACKKNIFE (V14) equals 1	DRIVER PRESENCE (D01) must not equal 0.
VV198	DRIVER PRESENCE (D01) equals 2	HIT-AND-RUN (V02) must equal 1.
VV202	HIT-AND-RUN (V02) equals 1	DRIVER PRESENCE (D01) must equal 2.
VV216B	DRIVER PRESENCE (D01) equals 0	DRIVER'S ZIP CODE (D08) must equal 99998.
VV231	DRIVER PRESENCE (D01) equals 0	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.
VV236	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	DRIVER PRESENCE (D01) must equal 0.
VV255	TRAVEL SPEED (V11) equals 00 and DRIVER PRESENCE (D01) not equal to 0	SPEED RELATED (D09) must equal 0.

# <u>Warnings</u>

	IF	THEN
VV190	DRIVER PRESENCE (D01) equals 0	VEHICLE ROLE (V22) should not equal 0 or 9.
Post Entry		
	IF	THEN
AD026	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0210	at least one DRIVER PRESENCE (D01) must equal 0.
DP001	DRIVER PRESENCE (D01) equals 0 or 9	there must not be a Person Level form for that vehicle with PERSON TYPE (P03) equal to 1.
DP004	DRIVER PRESENCE (D01) equals 1	there must be one and only one Person Level form for that vehicle with PERSON TYPE (P03) equal to 1.
DP141	DRIVER PRESENCE (D01) equals 9	at least one PERSON TYPE (P03) must equal 9.

# P01 VEHICLE NUMBER (OCCUPANTS)

Screen H	eading:	Regarding Vehicle # Occupant #		
Screen Name:		None (N)		
Long Name:		None		
SAS Name:		Person.Vehno		
Oracle Name:		GES.Person.VehicleID, GES.Vehicle.VehicleNumber		
Element	Values:			
Screen 1-30	Oracle 1-30	SAS 1-30	Computer Assigned Number	

### Remarks:

The in-transport motor vehicles within a crash are numbered sequentially by the computer beginning with 1; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped.

## **P02 PERSON NUMBER (OCCUPANTS)**

Screen Heading:		Regarding Vehicle # Occupant #	
Screen Name:		None (N)	
Long Name:		None	
SAS Name:		Person.Perno	
Oracle Name:		GES.Person.OccNumber	
Element Values:			
Screen 1,	Oracle 1,	SAS 1,	Computer Assigned Number

#### Remarks:

Occupants of each in-transport motor vehicle are numbered sequentially by the computer, beginning with "1"; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped. In most cases the numbering will follow the seat position, starting with the left front and moving left to right and front to back.

Persons appended to vehicle for motion (e.g., bicyclist holding onto vehicle) are non-motorists; they are not occupants.

Drivers do not have to be coded "1" (e.g., right hand drive vehicles containing left front occupant). However, code the assumed driver of a hit-and-run vehicle as "1." Assume only one occupant is in a hit-and-run vehicle (unless reliable evidence to the contrary exists), and assume this person is the driver.

# **P03 PERSON TYPE (OCCUPANTS)**

Screen Heading:	Vehicle Occupants
Screen Name:	Person Type (760-R)
Long Name:	What is the person type of this occupant?
SAS Name:	Person.Per_type
Oracle Name:	GES.Person.PersonTypeID

### **Element Values**:

Screen	Oracle	SAS	
1	26704	1	Driver Of A Motor Vehicle In-Transport (Occupant)
2	26705	2	Passenger Of A Motor Vehicle In-Transport (Occupant)
	26706		Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist)
	<del>- 26707 -</del>		Occupant Of A Non-motor Vehicle Transport Device
			<del>(Non-Motorist)</del>
<del>5</del>	<del>26708</del>		<u>Nonoccupant - Pedestrian (Non-Motorist)</u>
	<del>26709</del>		Nonoccupant - Cyclist/Pedalcyclist (Non-Motorist)
7	26710		Nonoccupant - Other Or Unknown (Non-Motorist)
8	26711	9	Unknown Occupant Type In A Motor Vehicle In-Transport
			(Occupant)

### Remarks:

Hit-and-run vehicles are assumed to have only one occupant (unless reliable evidence to the contrary exists), and that person is assumed to be the driver. All other persons riding in or on the vehicle are considered to be passengers.

Enter **Unknown Occupant Type In A Motor Vehicle In-Transport** when it is unknown whether this occupant was a driver or passenger.

### **Consistency Checks:**

	IF	THEN
AP021	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0000	PERSON TYPE (P03) must not equal 5, 6 or 8.
AP061	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P3) equals 5	NON MOTORIST'S ACTION (P19) must equal 21 or 22.

PA083	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4	the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.
PA096	PERSON TYPE (P03) equals 5 or 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.
PA201	PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01.
PP002	PERSON TYPE (P03) equals 1	SEATING POSITION (P04) must not equal 21-53.
PP034	PERSON TYPE (P03) equals 1	RESTRAINT SYSTEM USE (P15) must not equal 6.
PP040	PERSON TYPE (P03) equals 4 or 6	NON-MOTORIST'S ACTION (P19) must not equal 21-29.
PP041	PERSON TYPE (P30) equals 5 or 8	NON MOTORIST'S ACTION (P19) must not equal 01-10.
PP046	PERSON TYPE (P03) equals 2	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00.
PP046A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	SEATING POSITION (P04) and EJECTION (P06) must equal null.
PP047	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.
PP048	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0.
PP048A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	VEHICLE NUMBER (V01) must equal null.
PP068	PERSON TYPE (P03) equals 3	NON MOTORIST'S ACTION (P19) must equal 00.
PP072	PERSON TYPE (P03) equals 1, 2 or 9	NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0.
PP073	PERSON TYPE (P3) equals 3	NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0.
PP082	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is null	PERSON TYPE (P03) must not equal 3-8.
PV010	PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59	SEATING POSITION (P04) must not equal 12-50 or 52.

PV011	PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08	BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93.
VP002	PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01-02, 04, 10, 30-32, 39, 41, 90 or 91	SEATING POSITION (P04) must not equal 50 or 51.
VP234	HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0.

# <u>Warnings</u>

	IF	THEN
AP024	SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120.
AP027	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5	SCHOOL BUS RELATED (A21) should equal 1.
PA051	PERSON TYPE (P03) equals 5 and NON MOTORIST LOCATION (P13) equals 08, 18 or 98	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620.
PA053	NON MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
PP009	PERSON TYPE (P03) equals 2 or 9	SEATING POSITION (P04) should not equal 11.
PP018	PERSON TYPE (P03) equals 1	SEATING POSITION (P04) should not equal 12-19.
PP045	PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) should equal 0.
PP061	NON MOTORIST SAFETY EQUIPMENT USE (P20) equals 2	PERSON TYPE (P03) should equal 6.
PP081	PERSON TYPE (P03) equals 3	NON MOTORIST LOCATION (P13) should not equal 01, 02, 11 or 12.
PP085	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07	PERSON TYPE (P03) should not equal 1.

# Post Entry

	IF	THEN
AP005	HARMFUL EVENT (A06) equals 21	at least one person must have PERSON TYPE (P03) equal to 5.
AP006	HARMFUL EVENT (A06) equals 22	at least one person must have PERSON TYPE (P03) equal to 6 or 8.
AP008	HARMFUL EVENT (A06) equals 6	at least one PERSON TYPE (P03) equal to 1-2 or 9 must have INJURY SEVERITY (P09) equal to 1-5.
AP015	NUMBER OF MOTOR VEHICLES (A03) is greater than 00	at least one PERSON TYPE (P03) should equal 1, 2 or 9.
AP023	RELATION TO JUNCTION (A09) equals 01 or 11 and PERSON TYPE (P03) equals 5 for the first non-motorist	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890.
AP039	RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12 and PERSON TYPE (P03) equals 5 for the first non-motorist	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
AP040	RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920.
AP054	TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29, and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0006, 0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055.
AP077	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0420	at least one PERSON TYPE (P03) must equal 4.
AP128	HARMFUL EVENT (A06) equals 27	at least one person mus have PERSON TYPE (P03) equal 4 or 8.
AP155	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 9999	at least one person must have PERSON TYPE (P03) equal 4 or 8 (P03) must equal 8.
DP001	DRIVER PRESENCE (D01) equals 0 or 9	there must not be a Person Level form for that vehicle with PERSON TYPE (P03) equal to 1.
DP004	DRIVER PRESENCE (D01) equals 1	there must be one and only one Person Level form for that vehicle with PERSON TYPE (P03) equal to 1.

DP095	VIOLATIONS CHARGED (D02) equals 01 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 1 or 7.
DP141	DRIVER PRESENCE (D01) equals 9	at least one PERSON TYPE (P03) must equal 9.
PA049	at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920.
PA058	at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099.
PP062	A previous occupant has been identif can be coded (P03 = 1) as the driver	
PP082A	PERSON TYPE (P03) equals 3	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26.
PP082A	PERSON TYPE (P03) equals 4	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 8.
PP082A	PERSON TYPE (P03) equals 5	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21.
PP082A	PERSON TYPE (P03) equals 6	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22.
PP082A	PERSON TYPE (P03) equals 8	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.
VA218	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P03) equals 5, and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.

VP010	HARMFUL EVENT (A06) equals 21	at least one PERSON TYPE (P03) must be equal 5.
VP010A	at least one PERSON TYPE (P03) equals 5	at least one HARMFUL EVENT (A06) must equal 21.
VP011	HARMFUL EVENT (A06) equals 22	at least one PERSON TYPE (P03) must be equal to 6.
VP011A	at least one PERSON TYPE (P03) equals 6	at least one HARMFUL EVENT (A06) must equal 22.
VP012	HARMFUL EVENT (A06) equals 27	at least one PERSON TYPE (P03) must equal 4 or 8.
VP012A	at least one PERSON TYPE (P03) equals 4 or 8	at least one HARMFUL EVENT (A06) must equal 27.
VP012B	at least one PERSON TYPE (P03) equals 3	at least one HARMFUL EVENT (A06) must equal 26.
VP013	HARMFUL EVENT (A06) equals 06	at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5.
VP045	at least one NUMBER OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP045A	at least one NUMBER OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP046	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.
VP047	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720.
VP056	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049.
VP057	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011.

VP136	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024, 0034, 0048 or 0049.
VP199	NUMBER OF OCCUPANTS CODED (V10) is greater than 00	there must be only one occupant coded as the driver (P03=1).
VP199A	NUMBER OF OCCUPANTS (V10B) is greater than 00	there must be only one occupant coded as the driver (P03=1).
VP224	BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2	RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9.

## P04 SEATING POSITION

Screen Heading:	Occupant Characteristics
Screen Name:	Seat Position (770-R)
Long Name:	What Is This Occupant's Seating Position?
SAS Name:	Person.Seat_pos
Oracle Name:	GES.Person.SeatID

### **Element Values**:

Screen	Oracle	SAS	
n/a	null	0	Non-Motorist
1	26726	11	Front Seat, Left Side
2	26727	12	Front Seat, Middle
3	26728	13	Front Seat, Right Side
4	26729	18	Front Seat, Other
5	26730	19	Front Seat, Unknown
6	26731	21	Second Seat, Left Side
7	26732	22	Second Seat, Middle
8	26733	23	Second Seat, Right Side
9	26734	28	Second Seat, Other
10	26735	29	Second Seat, Unknown
11	26736	31	Third Seat, Left Side
12	26737	32	Third Seat, Middle
13	26738	33	Third Seat, Right Side
14	26739	38	Third Seat, Other
15	26740	39	Third Seat, Unknown
16	26741	50	Sleeper Section of Cab (Truck)
17	26742	51	Other Passenger in Passenger or Cargo Area
18	26743	52	Trailing Unit
19	26744	53	Riding on Exterior of Vehicle
20	26745	99	Unknown

### Remarks:

Seat position is coded by the location of the occupant in relation to the seat row and the forward longitudinal axis of the vehicle.

More than one person may be assigned the same seating position; however, this is allowed only when a person is sitting on someone's lap (e.g., child on or in mother's lap).

If the PAR does not specifically state that one person was on the lap of another, then see the discussion below under elements **Front Seat**, **Other**; **Second Seat**, **Other**; and **Third Seat**, **Other**.

In seat rows designated for only two passengers, enter elements Front Seat, Left Side; Front Seat, Right Side; Second Seat, Left Side; Second Seat, Right Side; Third Seat, Left Side; Third Seat, Right Side; or Other Passenger in Passenger or Cargo Area.

Enter **Front Seat, Left Side** if there is an assumed driver of a hit-and-run vehicle unless evidence indicates a different position for the person or persons.

**Front Seat, Other; Second Seat, Other;** and **Third Seat, Other** are used to record the position of someone sitting on the floor or lying across the seat. In addition, enter these elements when two or more persons are sitting abreast of one another in the same seating location (as opposed to on or in someone's lap), since only one occupant can be assigned the seat's position. If the PAR provides enough specific information, then assign the seat position to the older person.

Enter **Front Seat, Other** if the only seat in the front seating area is a driver's seat (e.g., bucket, pedestal, etc.), and the occupant was in the area but not in the seat. This situation could occur because of vehicle design or seat removal. The same logic applies to other seat areas. Enter **Other Passenger In Passenger Or Cargo Area** when a person is in the fourth or higher seat row but not in a seat.

Enter **Sleeper Section of Cab (Truck)** if the occupant's vehicle is a medium or heavy truck and has a cab sleeper, and this occupant is in the sleeper section at the time of the crash.

Enter **Other Passenger in Passenger or Cargo Area** when an occupant is in the fourth or higher numbered seat area, in an enclosed area where no defined seating exists or using a fold-down type seat in its folded down position. Use, also, for bus passengers (not driver).

If seating in the vehicle is longitudinal rather than lateral, use the basic idea of a vehicle interior being divided laterally into roughly equal thirds and visualize lateral rows of seats to determine what seat position is the best descriptor.

For rearward facing seats use the basic idea described above in the previous paragraph to describe the occupant's seat position.

If a seat row has more than three designated seat positions, the occupants should have their positions assigned as usual for the left and right positions, while the two center positions would be encoded as **Other** (i.e., **Front Seat, Other; Second Seat, Other; Third Seat, Other** or **Other Passenger in Passenger or Cargo Area**) depending upon the seat row.

Persons appended to the vehicle for motion are not considered to be occupants of the vehicle.

For motorcycles, code the driver **Front Seat, Left**; sidecar passenger **Front Seat, Right**; passenger behind the driver **Second Seat, Left** and passenger on the lap of the driver (in front of ) **Front Seat, Left**.

Enter **Trailing Unit** when an occupant is in or on a trailing unit {i.e., Vehicle Trailing (V13), for this occupant's vehicle must be coded >= "1", one or more trailing units )}.

Enter **Riding on Vehicle Exterior of Vehicle** when an occupant is riding on a fender, the boot of a convertible, the open cargo box of a light truck, etc.

## **Consistency Checks:**

	IF	THEN
PP002	PERSON TYPE (P03) equals 1	SEATING POSITION (P04) must not equal 21-53.
PP046A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	SEATING POSITION (P04) and EJECTION (P06) must equal null.
PP074	SEATING POSITION (P04) equals 12 or 21-53	AIR BAG AVAILABILITY/FUNCTION (P21) must equal 0.
PP075	SEATING POSITION (P04) equals 22, 23 or 31-53	RESTRAINT SYSTEM USE (P15) must not equal 5.
PP076	SEATING POSITION (P04) does not equal 11 or 13	AIR BAG AVAILABILITY/FUNCTION (P21) must not equal 1 or 2.
PP077	For Occupants, the value "00" must n (P04).	ot be coded for SEATING POSITION
PP080	AIR BAG AVAILABILITY/FUNCTION (P21) equals 1 or 2	SEATING POSITION (P04) must not equal 12 or 21-99.
PP084	SEATING POSITION (P04) equals 50 or 53	RESTRAINT SYSTEM USE (P15) must equal 7.
PV001	PERSON TYPE (P30) equals 1 and BODY TYPE (V05) equals 80-89	SEATING POSITION (P04) must not equal 00, 12-53 or 99.
PV005	PERSON TYPE (P03) equals 2 or 9, and BODY TYPE (V05) equals 80-89	SEATING POSITION (P04) must not equal 13-19 or 22-53.
PV006	SEATING POSITION (P04) equals 52	VEHICLE TRAILING (V13) must not equal 1.
PV007	PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50- 59	SEATING POSITION (P04) must not equal 11-39, 50, 52 or 99.
PV010	PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59	SEATING POSITION (P04) must not equal 12-50 or 52.

VP002	PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01 02, 04, 10, 30-32, 39, 41, 90 or 91	SEATING POSITION (P04) must not equal 50 or 51.						
Warnings								
	IF	THEN						
PP009	PERSON TYPE (P03) equals 2 or 9	SEATING POSITION (P04) should not equal 11.						
PP018	PERSON TYPE (P03) equals 1	SEATING POSITION (P04) should not equal 12-19.						
PP033	RESTRAINT SYSTEM USE (P15) equals 1	SEATING POSITION (P04) should not equal 12, 22, 32 or 50-53.						
PV166	SEATING POSITION (P04) equals 31-39	BODY TYPE (V05) should not equal 01, 02, 03, 04 or 05.						
VP174D	BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11	AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9.						
VP192	If SEATING POSITION (P04) equals 53 and BODY TYPE (V05) does not equal 01, 06 or 30-39	EJECTION (P06) should equal 0.						

### **P06 EJECTION**

Screen Heading:	Occupant Characteristics	
Screen Name:	Ejection (780-E)	
Long Name:	Was the occupant totally or partially thrown from the vehicle as a result of the crash?	
SAS Name:	Person.Eject	
Oracle Name:	Oracle Name: GES.Person.EjectionID	
Element Values:		
Screen Oracle	SAS	

0010011	Orabio	0, 10	
1	26754	0	Not Ejected
2	26755	1	Totally Ejected
3	26756	2	Partially Ejected
4	26758	9	Unknown
5	26757	7	Ejected - Unknown Degree
6	26759	8	Not Applicable

### Remarks:

Ejection refers to occupants being totally or partially thrown from the vehicle (including the bed of pickup trucks) during the course of the crash. This includes occupants of jeeps, go carts, snowmobiles, and three or four-wheel ATVs.

Partial ejection refers to those instances where some part but not all of an occupant's body is, at some time during the crash sequence, outside the occupant compartment. Although it would not seem to be a problem it can be fatal if the part outside is the occupant's head. Because of the dynamics of the vehicle and the kinematics of the occupants during an ejection sequence, it is often the occupant's own vehicle which causes the injury as it rolls onto the occupant.

Enter **Not Ejected** if the PAR specifically so states for a given occupant. Enter **Not Ejected** for occupants of a hit-and-run vehicle, unless the PAR specifically indicates that ejection occurred.

Enter **Totally Ejected** when the occupant's body is entirely outside the vehicle but may be in contact with the vehicle.

Enter **Partially Ejected** when part of the occupant's body remains in the vehicle. This does not apply to occupants who are not initially in the seating compartment of the vehicle (e.g., pickup beds, boot of a convertible, and persons riding on open tailgates), since any ejection for them is coded as **Totally Ejected**.

Enter **Unknown** when the PAR specifically indicates unknown or when the person was injured and there is no information on ejection.

Enter **Ejected - Unknown Degree** when the PAR indicates that an occupant is ejected but fails to discriminate between total and partial ejection.

**Not Applicable** is used for persons who are riding on the exterior of a vehicle, motorcycle occupants or non-motorists. Exterior of the vehicle includes running boards, roof, fenders and bumpers; but not the bed of pickup trucks, open tail gate or boot of a convertible.

#### **Consistency Checks:**

	IF	THEN
PV103	EJECTION (P06) equals 1, 2 or 7	this person's vehicle's MOST HARMFUL EVENT (V20) must not equal 06.
PV125	EJECTION (P06) equals 1, 2 or 7	BODY TYPE (V05) must not equal 80-89.
PP046A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	SEATING POSITION (P04) must equal null and EJECTION (P06) must equal 8.
PP070	EJECTION (P06) equals 1, 2 or 7	RESTRAINT SYSTEM USE (P15) must not equal 5.
VP207	BODY TYPE (V05) equals 80-89 and NUMBER OF OCCUPANTS CODED (V10) is greater than 00	EJECTION (P06) must equal 8.
VP207A	BODY TYPE (V05) equals 80-89 and NUMBER OF OCCUPANTS (V10B) is greater than 00	EJECTION (P06) must equal 8.
VP208	HIT AND RUN (V02) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 and BODY TYPE (V05) not equal to 80-89	EJECTION (P06) must equal 0.
RANGE	EJECTION (P06) must equal 0, 1, 2,	7, 8, or 9.
Warnings		

	IF	THEN
PP037	EJECTION (P06) equals 1, 2 or 7	RESTRAINT SYSTEM USE (P15)
		should equal 0, 7 or 9.

PP045	PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) should equal 0.
PP069	EJECTION (P06) equals 1, 2 or 7	INJURY SEVERITY (P09) should not equal 0.
VP192	SEATING POSITION (P04) equals 53 and BODY TYPE (V05) does not equal 01, 06 or 30-39	EJECTION (P06) should equal 0.

### P21 AIR BAG AVAILABILITY/FUNCTION

Screen H	leading:	Occupant Characteristics		
Screen N	lame:	Bag Av	vailable (870-E)	
Long Na	me:	What is the air bag availability/function in the seat position of this occupant?		
SAS Nan	ne:	Person.Airbag		
Oracle N	ame:	GES.AirBag.AirbagavailID		
Element	Values:			
Screen 1 2 3 n/a 4	Oracle 1 2 3 null 9	SAS 0 1 2 8 9	No air bag available Deployed Non-deployed Not applicable Unknown if available or deployed	

#### **Remarks:**

This variable seeks to capture whether the vehicle was equipped with an air bag (in the seat position of this occupant) and, if so; did it deploy.

**No Air Bag Available** is used for all seating positions which are not equipped with air bags. Also use this code for every seating position in vehicles which do not come equipped with air bags in any position (e.g., motorcycles, early-model passenger cars, etc.).

Enter **Deployed** when the PAR indicates that an air bag deployed for the seat position occupied by this person.

Enter **Non-deployed** when the PAR indicates that an air bag existed at this occupants seat position but it did not deploy.

Enter **Unknown if available or deployed** when it is not known whether an air bag is available in the seat position of this occupant or an air bag was available but it is not known whether it deployed.

**Not applicable** applies if the person type is non-motorist (i.e., P03, person type, equals SAS values 3, 4, 5, 6 or 8).

# **Consistency Checks:**

	IF	THEN
PP074	SEATING POSITION (P04) equals 12 or 21-53	AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0.
PP076	SEATING POSITION (P04) does not equal 11 or 13	AIR BAG AVAILABILITY/FUNCTION (P21) must not equal 1 or 2.
PP080	AIR BAG AVAILABILITY/FUNCTION (P21) equals 1 or 2	SEATING POSITION (P04) must not equal 12 or 21-99.
PV172	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2	BODY TYPE (V05) must equal 01-39, 48 or 49; 60-79 [if MODEL YEAR (V06) is >1996] or 40-42, 45, 50, 58 or 59 [if MODEL YEAR (V06) is > 1993].
PV196A	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 1- 9,17 or 49	MODEL YEAR (V06) must be greater than 1971.
PV196B	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 20- 25, 28, 29 or 48	MODEL YEAR (V06) must be greater than 1990.
PV196C	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1, 2 or 9 and BODY TYPE (V05) equals 14- 16, 19, 30-33, 39	MODEL YEAR (V06) must be greater than 1992.
RANGE	PERSON TYPE (P03) equals 1, 2 or 9	AIR BAG AVAILABILITY/ FUNCTION (P21) must equal 0, 1, 2 or 9 and must not equal null.
RANGE	PERSON TYPE (P03) equals 3, 4 5, 6 or 8	AIR BAG AVAILABILITY/ FUNCTION (P21) must not equal 0, 1, 2 or 9.
MULTIPLE RESPONSE	There must only one response per or FUNCTION (P21)	ccupant for AIR BAG AVAILABILITY/

# <u>Warnings</u>

	IF	THEN
PV171	AIR BAG AVAILABILITY/FUNCTION (P21) equals 1 or 2 and BODY TYPE (V05) equals 20	VEHICLE MAKE (V03) should equal 06, 07, 09, 12, 14, 20, 21, 22, 35, 41 or 49.
PV172A	AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and VEHICLE MODEL YEAR (V06) > 1996	BODY TYPE (V05) should not equal 40, 41, 42, 45 or 50-99.
VP173	BODY TYPE (V05) equals 40-45 or 50-97	AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 0.
VP174D	BODY TYPE (V05) equals 1-9 or 17 and MODEL YEAR (V06) is greater than 1994 and SEAT POSITION (P04) equals 11	AIR BAG AVAILABILITY/ FUNCTION (P21) should equal 1, 2 or 9.

# P07 AGE (OCCUPANTS)

Screen Heading:		Occupant Characteristics			
Screen Name:		Age (7	Age (790-E)		
Long Name:		Enter the person's age.			
SAS Name:		Persor	n.Age		
Oracle Name:		GES.Person.Age			
Element Values:					
Screen	Oracle	SAS			
0	0	0	Less Than One Year Old		
XXX	XXX	xxx	Person's Age		
*	-9999	999	Unknown		

## Remarks:

The person's age at the time of the crash is recorded with respect to the person's last birthday.

### **Consistency Checks:**

	IF	THEN
PV011	PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08	BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93.
PP013A	AGE (P07) must equal 0-105 or 999 a	and must not equal null.
<u>Warnings</u>		
	IF	THEN

PP013	UNLIKELY: AGE (P07) is greater than	92 and not equal to 999.
PP036	RESTRAINT SYSTEM USE (P15) equals 6	AGE (P07) should equal 00-10 or 999.

# P08 SEX (OCCUPANTS)

Screen Heading:	Occupant Characteristics
Screen Name:	Sex (800-E)
Long Name:	What is the person's sex?
SAS Name:	Person.sex
Oracle Name:	GES.Person.SexID

# Element Values:

Screen	Oracle	SAS	
1	26712	1	Male
2	26713	2	Female
3	26714	9	Unknown

# Remarks:

Self-explanatory

# **P09 INJURY SEVERITY (OCCUPANTS)**

Screen H	leading:	Occupant Characteristics		
Screen N	Name:	Injury \$	Severity (810-E)	
Long Na	me:	What i	s the police reported injury severity for this occupant?	
SAS Nan	ne:	Persor	n.Inj_sev	
Oracle Name: GES.Person.InjurySeverityID		Person.InjurySeverityID		
Element	Values:			
Screen	Oracle	SAS		
1	26746	0	No Injury (O)	
2	26747	1	Possible Injury (C)	
3	26748	2	Nonincapacitating Evident Injury (B)	
4	26749	3	Incapacitating Injury (A)	
	00750	-		

- 5 26750 4 Fatal Injury (K)
  - 6 26751 5 Injured, Severity Unknown
- 7 26752 6 Died Prior To Crash
- 8 26753 9 Unknown

### Remarks:

Enter the police reported injury severity for this person (i.e., occupant, pedestrian or nonmotorist). Most jurisdictions use the KABCO injury coding scheme.

K = Killed A = Incapacitating Injury B = Nonincapacitating Injury C = Possible Injury O = No Injury

If the police report contains a detailed description of the injuries but does not translate the injuries into the KABCO codes, use the police method for doing so. For example, injuries which are considered to be of an incapacitating nature are classified as "A", Nonincapacitating-evident injuries are classified as "B", and possible injuries are "C". Property damage only (i.e., no injury) is classified as "O".

Enter **Injured**, **Severity Unknown** if the police report indicates a "U" or in any other way communicates the idea that the person was injured but the severity is unknown.

Enter **Died Prior to Crash** only if the police explicitly states the person died prior to the crash. This code is also used if the police report indicates the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning. This code does not apply if the police report specifically states that the cause of death is a result of crash-related injury or that on-set occurred after the crash. Further clarification: this code applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, but is silent about the time of on-set and if on-set is the result of injuries sustained in the crash.

As a general rule, if the PAR is "blank" where the injury severity is assessed and the person was at the scene during the police investigation, enter **No Injury (O)**. If the PAR is "blank" and the person was not present during the police investigation, enter **Unknown**. The following states use the KABCO injury coding scheme: Illinois (incl. Chicago), Michigan, New Mexico, North Carolina, Texas (incl. Dallas), Wisconsin, and the city of Los Angeles. Not all states use the KABCO scheme. Listed below, by state, are alternative schemes; a mapping to the GES scheme is provided.

State	PAR Code/Definition		NASS Scheme/ Code
Alabama	K	= Killed	K - 4
	А	= Visible or carried from scene	A - 3
	В	= Bruise/abrasion/swelling	B - 2
	С	= Not visible - has pain/faint	C - 1
	Blank	= No documentation of driver or	Blank - 0
		occupant injury	
		= No set unknown code	

Arizona	5	= Fatal Injury	K - 4
	4	= Incapacitating injury	A - 3
	3	= Non-incapacitating Evident	B - 2
	2	= Possible Injury	C - 1
	1	= No injury	O - 0
	6	= Unknown	U - 9

California	1	= Fatal	K - 4
	2	= Severe injury	A - 3
	3	= Other visible injury	B - 2
	4	= Complaint of pain	C - 1

Blank	= Occupant present	O - 0
Blank	= Occupant not present	- 9

Colorado*	5	= Fatal	K - 4
	4	= Evident - incapacitating	A - 3
	3	= Evident - non-incapacitating	B - 2
	2	= Possible injury	C - 1
	1	= No injury	O - 0
	*Ther	e is a box at the top of the PAR indicating	g number of persons
	iniured	I If this box is marked 0 and the injury co	ode is left "blank"

injured. If this box is marked 0 and the injury code is left "blank", assume "No injury". If the box is marked 1 (or more) pertaining to the vehicle occupants in question and the injury code is "blank", assume "Injured, severity unknown". If "blanks" are present in both the persons injured box and the injury code box, assume "Unknown".

Florida	5	= Fatal (within 90 days) injury	K - 4
	4	= Incapacitating	A - 3
	3	= Non-Incapacitating	B - 2
	2	= Possible	C - 1
	1	= None	O - 0
		= No set unknown code	- 9
	6	= Non-traffic fatality	- 9

### Indiana

Nature of Most Severe Injury	Location of Most Severe Injury	Victim's Injury Status	
1-11 Any Entry	1-12 Any Entry	6 Dead	K-4
1-11 Any Entry	1-12 Any Entry	2 Semiconscious 3 Incoherent 4 Unconscious	A-3
1 Severed 2 Internal 4 Severe Burn 7 Severe Bleed (Arterial) 8 Fracture/Dislocation	1-12 Any Entry	1 Conscious 5 Shock 7 Refused Med	A-3
3 Minor Burn 6 Minor Bleed 10 Complaint 11 None Visible	1-2, 4-12 Eye	1 Conscious 5 Shock 7 Refused Med	A-3
3 Minor Burn 6 Minor Bleed	1-2, 4-12 Any EXCEPT eye)	1 Conscious 5 Shock 7 Refused Med	B-2
5 Abrasion 9 Contusion/Bruise	1-12 Any Entry	1 Conscious 5 Shock 7 Refused Med	B-2
10 Compliant of Pain 11 None Visible	1-2, 4-12 (Any EXCEPT eye)	1 Conscious 5 Shock 7 Refused Med	C-1
11 None Visible	Blank or Slashed	1 Conscious	0-0
Blank or Slashed	Blank or Slashed	Blank or Slashed	0-0
Unknown	Unknown	Unknown	U-9

State	PAR Co	ode/Definition	NASS Scheme/ Code
lowa	1 2 3 4 0 Blank	<ul> <li>= Fatal Injury</li> <li>= Major (incapacitating)</li> <li>= Minor (bruises and abrasions)</li> <li>= Possible (complaint of pain)</li> <li>= Unknown</li> <li>= No documentation of driver or occupants on back of PAR</li> </ul>	K - 4 A - 3 B - 2 C - 1 U - 9 O - 0
Kentucky	1	= Fatal	K - 4

иску	1	= Fatal	<b>K</b> - 4
	2	= Incapacitating	A - 3
	3	= Non-Incapacitating	B - 2
	4	= Possible Injury	C - 1
	5	= None Detected	O - 0

### Maryland

05	= Fatal	K - 4
04	= Disabled (Incapacitated)	A - 3
03	= Injured - not Incapacitated	B - 2
02	= Possible injury	C - 1
01	= Not Injured (& present)	O - 0
01	= Not Known (if left scene)	- 9
Blank	= No documentation of driver or	
	occupants on front of PAR	

#### Massachusetts

1	= Killed	K - 4
2	= Serious Visible Injury	A - 3
3	= Minor Visible Injury	B - 2
4	= No visible injury but complaints of pain	C - 1
Blank	= No documentation of driver or	O - 0
	occupants on front of PAR	
	= No set unknown code	- 9

#### Missouri

1	= Fatal	K - 4
2	= Disabling	A - 3
3	= Evident-Not Disabling	B - 2
4	= Probable-Not Apparent	C - 1
5	= None Apparent	O - 0
6	= Unknown	U - 9

#### Nebraska

1	= Killed	K - 4
2	= Disabling - cannot leave scene without assistance	A - 3
3	= Visible but not disabling	B - 2
4	= Possible but not visible	C - 1
Blank	= Occupant present	O - 0
Blank	= Occupant not present	- 9

# New Jersey

Location of Injury	Type of Injury	Victim's (	Condition
Any Entry	Any Entry	Killed	K-4
Any Entry	Any Entry	Incapacitated	A-3
Any Entry	amputation, concussion, internal, fracture/dislocation	Moderate injury complaint of pain	A-3
Еуе	burn, bleeding, complaint of pain	Moderate injury complaint of pain	A-3
Any Entry	bleeding, contusion bruise, abrasion	Moderate Injury	B-2
Any Entry (EXCEPT Eye) -	complaint of pain -	complaint of pain -	C-1 0-0
U	U	U	U

New fork			
Location of Injury	Type of Injury	Victim's	Condition
Any Entry	Any Entry	Apparent Death	K-4
Any Entry	Any Entry	Unconscious, Semi- Conscious, Incoherent	A-3
Any Entry	amputation, concussion, internal, severe burn, moderate burn, fracture/dislocation	Shock, Normal	A-3
Eye	minor bleeding, minor burn, complaint of pain	Shock, Normal	A-3
All but eye	minor bleeding minor burn	Shock, Normal	B-2
Any Entry	contusions-bruise abrasion	Shock, Normal	B-2
All but eye	complaint of pain	Shock, Normal	C-1 0-0
Х	Х	Х	Х

# New York

# Consistency Checks:

<u>Warnings</u>

	IF	THEN
AP098	STRATUM (A23) equals 3	at least one INJURY SEVERITY (P09) should equal 2, 3 or 4.
AP144	STRATUM (A23) equals 4	INJURY SEVERITY (P09) should not equal 2, 3, 4 or 5.
AV230	STRATUM (A23) equals 4 and at least one BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 1, 2, 3 or 4.
PP011	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1	INJURY SEVERITY (P09) should not be blank, 0 or 9.
PP015	UNLIKELY: INJURY SEVERITY (P09	) is equal to 6.
PP069	EJECTION (P06) equals 1or 2	INJURY SEVERITY (P09) should not equal 0.

### Post Entry

	IF	THEN
AP008	HARMFUL EVENT (A06) equals 06	at least one PERSON TYPE (P03) equal to 1-2 or 9 must have INJURY SEVERITY (P09) equal to 1-5.
AV231	STRATUM (A23) equals 4 and no BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 2, 3 or 4.
PV188	(any) INJURY SEVERITY (P09) equals 1, 2, 3, 4 or 5 and (any) BODY TYPE (V05) equals 60-79	STRATUM (A23) should equal 02.
PV233	INJURY SEVERITY (P09) equals 1 and at least one BODY TYPE (V23) equals 60-79	STRATUM (A23) should not equal 4.
VP013	HARMFUL EVENT (A06) equals 06	at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5.
VP143	no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 2-5 and no BODY TYPE (V05) EQUALS 60-79 -or- no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 1-5 and at least 1 BODY TYPE (V05) EQUALS 60-79	STRATUM (A23) should equal 4.

# P10 TAKEN TO HOSPITAL OR TREATMENT FACILITY (OCCUPANTS)

Screen Heading:		Occupant Characteristics			
Screen N	Name:	Transp	ported (820-E)		
Long Na	me:	Is this person transported to a hospital or another treatment facility?			
SAS Name:		Person.Hospital			
Oracle Name:		GES.P	Person.Treatment		
Element Values:					
Screen	Oracle	SAS			
1 2 3	1 2 3	0 1 9	No Yes Unknown		

#### Remarks:

This variable addresses transportation directly from the scene to a treatment facility. The means of transportation is not a consideration.

Enter **No** when the person is not transported directly from the scene to a hospital. Use this element when the person is pronounced dead-at-the-scene and is transported to a funeral home. Neither Injury severity nor treatment at the scene are a consideration.

Enter **Yes** when the PAR indicates that the person is transported directly from the scene to a hospital or treatment facility (hospital, clinic, doctor's office, etc.). The person need not have been injured. The means of transportation is not a consideration. If the person died on route to a hospital or medical facility or was pronounced dead-on-arrival at a hospital or medical facility, enter **Yes**.

Enter **Unknown** if it cannot be determined if the person is transported directly from the scene to a medical facility. Use this attribute if the police report indicates the person will "seek own medical treatment" and it cannot be determined if the person goes directly to a medical facility.

### **Consistency Checks:**

### <u>Errors</u>

	IF	THEN
VP234	HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0.
Post Entry		
	IF	THEN
PP011	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10)	INJURY SEVERITY (P09) should not be blank, 0 or 9

equals 1

# D08 DRIVER'S ZIP CODE

Screen Name:       Zip Code (730-E)         Long Name:       What is the driver's zip code?         SAS Name:       Vehicle.Dr_zip_c         Oracle Name:       GES.Dr_zipcode         Element:       Screen         Screen       Oracle SAS xxxxx       SAS xxxxx         Screen       Oracle SAS xxxxx       Code actual 5-digit zip code         00000       00000       Not resident of US or Territories         99998       99998       No driver present         *       99999       Unknown         Range <sup>1</sup>	Screen Heading:	Driver I	Data		
SAS Name:       Vehicle.Dr_zip_c         Oracle Name:       GES.Drver.Zipcode         Element Values:       Code actual 5-digit zip code         00000       00000       Not resident of US or Territories         99998       99998       No driver present         *       99999       Unknown         Range <sup>1</sup> (first, second, and third characters):         000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	Screen Name:	Zip Co	de (730-E)		
Oracle Name:       GES.Driver.Zipcode         Element Values:       Code actual 5-digit zip code         00000       00000       Not resident of US or Territories         09098       99998       99998         99998       99999       No driver present         *       99999       Unknown         Range1       (first, second, and third characters):         0000, 000, 000, 000, 000, 000, 000, 00	Long Name:	What is	s the driver's zip code?		
Element Values:         Screen       Oracle       SAS       Code actual 5-digit zip code         00000       00000       00000       Not resident of US or Territories         99998       99998       99999       No driver present         *       99999       Unknown         Range <sup>1</sup> (first, second, and third characters):         000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	SAS Name:	Vehicle	e.Dr_zip_c		
Screen xxxxx         Oracle xxxxx         SAS xxxxx         Code actual 5-digit zip code           00000         00000         00000         Not resident of US or Territories           99998         99998         99999         No driver present           *         99999         Unknown           Range <sup>1</sup> (first, second, and third characters):           0000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	Oracle Name:	GES.D	river.Zipcode		
xxxxx       xxxxx       Code actual 5-digit zip code         00000       00000       00000       Not resident of US or Territories         99998       99998       99998       No driver present         *       99999       Unknown         Range1         (first, second, and third characters):         0000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	Element Values:				
99998       99998       99998       No driver present         *       99999       99999       Unknown         Range <sup>1</sup> (first, second, and third characters):         000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,			Code actual 5-digit zip code		
* 99999 99999 Unknown Range <sup>1</sup> (first, second, and third characters): 000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	00000 00000 0	00000	0000 Not resident of US or Territories		
Range <sup>1</sup> (first, second, and third characters): 000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	99998 99998 9	99998	9998 No driver present		
000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701, 703-708, 710-714, 716-731, 734-816, 820-838, 840-847, 850,	* 99999 9	9999 Unknown			
$\delta 2 - \delta 2 $	Range <sup>1</sup>		000, 004-098, 100-212, 214-268, 270-342, 344, 346-347, 349-352, 354-374, 376-397, 400-418, 420-427, 430-458, 460-508, 510-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-648, 650-658, 660-662, 664-681, 683-689, 690-693, 700-701,		

1. Range is a compilation of Section 6 of the 1997 National Five Digit Zip Code & Post Office Directory

#### Remarks:

For the purposes of this variable, a driver is considered to reside at the address listed on the police crash report. This address was most likely taken from the driver's license given to the police officer and/or from the licensing state's drivers license file.

If the driver's address is present and the ZIP code is missing or not available, then determine the correct ZIP code by using the two volume National Five Digit Zip Code & Post Office Directory.

Code **Not resident of US or Territories** is used when the address found on the PAR indicates that the driver resides at an address which has not been assigned a ZIP code by the US Post Office.

No driver present is used when there is no driver in this vehicle.

Code **Unknown** is used whenever the ZIP cannot be determined. For example, use this code when no information is provided on the PAR about the driver (e.g., hit and run). In addition, use this code if the driver, licensed or not, has no permanent address. For example, the driver could be living out of his/her vehicle (camper, motor home, etc.) or the driver could be "homeless."

If a ZIP CODE is listed on the PAR but it is not a valid number use this code.

#### **Consistency Checks:**

Errors

	IF	THEN
VV216	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER'S ZIP CODE (D08) must equal 99998.
VV216A	DRIVER'S ZIP CODE (D08) must be i values section, above.	in the range specified in the element
VV216B	DRIVER PRESENCE (D01) equals 0	DRIVER'S ZIP CODE (D08) must equal 99998.
VV216C	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER'S ZIP CODE (D08) must equal 99998.
RANGE	DRIVER'S ZIP CODE (D08)equals 99998	DRIVER PRESENCE (D01) must equal 0
RANGE	The first character of DRIVER'S ZIP C	CODE (D08) must not be blank.
RANGE	DRIVER'S ZIP CODE (D08) must not of the ges.vehicle and ges.driver table	

### **D09 SPEED RELATED**

Screen Heading:		Driver Data		
Screen N	lame:	Speed	Related (725-E)	
Long Na	me:	Is the c	driver's speed a factor in the crash?	
SAS Name:		Vehicle.speedrel		
Oracle Name:		GES.Driver.SpeedRelated		
Element Values:				
Screen	Oracle	SAS		
1 2 3 4	1 2 3 8	0 1 9 8	No Yes Unknown No driver present	

#### Remarks:

This variable captures when speed is a contributing factor.

Enter **No** when there is no indication that this driver's speed was a factor.

Enter **Yes** when excessive speed (this includes too fast for conditions) by this driver is noted as a contributing factor or a speeding violation has been issued to this driver. Note: Do not use this value if the violation or contributing factor is "too slow" or an equivalent.

Enter **Unknown** if the driver is a hit-and-run driver and no information is available about speed as a contributing factor.

No driver present is used when there is no driver in this vehicle.

#### **Consistency Checks:**

	IF	THEN
VV250	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00	SPEED RELATED (D09) must equal 8.
VV253	VIOLATIONS CHARGED (D02) equals 03	SPEED RELATED (D09) must equal 1.

VV255	TRAVEL SPEED (V11) equals 00 and DRIVER PRESENCE (D01) not equal to 0	SPEED RELATED (D09) must equal 0.
RANGE	SPEED RELATED (D09) equals 8	DRIVER PRESENCE (D01) must equal 0.
RANGE	DRIVER PRESENCE (D01) equals 0.	SPEED RELATED (D09) must equal 8.
<u>Warnings</u>		
	IF	THEN
VV251	CRITICAL EVENT (V26) equals 6	SPEED RELATED (D09) should equal 1.

# P11 POLICE REPORTED ALCOHOL INVOLVEMENT (DRIVERS)

Screen He	eading:	Driver	Data
Screen Na	ame:	Alcoho	I (830-E)
Long Nam	ne:	Did the police report alcohol presence or involvement for this driver?	
SAS Name	e:	Person.Per_alch	
Oracle Na	Pracle Name: GES.Person.Police_AlcoholID		erson.Police_AlcoholID
Element V	/alues:		
Screen	Oracle	SAS	
1 2 3 4 5	26720 19431 26721 26723 26724	0 1 2 8 9	Not Applicable Alcohol Not Involved Alcohol Involved Not Reported Unknown (Police Reported)

#### **Remarks:**

The phrase "alcohol involved" means that alcohol is present in the person (drivers of in-transport motor vehicles and non-motorists only). Involvement is not an indication that alcohol was in any way a cause of the crash, even though it may have been. If the PAR indicates that opened or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for all occupants of in-transport motor vehicles who are not drivers.

**Alcohol Not Involved** applies if the investigating officer's assessment is that alcohol is not present in the driver.

**Alcohol Involved** is coded if the police indicate alcohol presence in the driver via: (1) a specific data element on the police report form, (2) the police charge the driver with DUIL, (3) the police mention in the narrative section of the report that the person had been drinking (or alcohol was present or involved) or (4) the police report has a positive BAC test result (BAC >.00).

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is present. If the police report indicates that a driver was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Enter **Not Reported** if there is a specific location on the police report for assessment of alcohol but the investigating officer fails to make either a positive or negative assessment. Also use this

code If no block exists on the PAR for reporting alcohol presence and no other information is available.

Enter **Unknown (Police Reported)** if alcohol involvement is specifically indicated on the PAR as unknown. In general, police reports have blocks to check either positive or negative alcohol involvement. However, if a police report has provision for the investigating officer to respond "unknown involvement", then enter this element. In addition, enter this element for hit-and-run drivers unless clear evidence to the contrary exists.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
PP047	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.
RANGE	PERSON TYPE (P03) equals 1	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must not equal 0.
RANGE	PERSON TYPE (P03) equals 9	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.
RANGE	PERSON TYPE (P03) equals 4-8	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must not equal 0.
RANGE	POLICE REPORTED ALCOHOL INVO 8 or 9 and must not equal null.	OLVEMENT (P11) must equal 0, 1, 2,
ntn (		

Post Entry

	IF	THEN
DP095	VIOLATIONS CHARGED (D02) equals 1 or 2 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2.

## P17 POLICE REPORTED DRUG INVOLVEMENT (DRIVERS)

Screen He	eading:	Driver	Data
Screen Na	ame:	Drugs	(835-E)
<b>Long Name:</b> Did the police report drug presence or involvement for this		police report drug presence or involvement for this driver?	
SAS Name	e:	Person.Per_Drug	
Oracle Name:		GES.P	erson.Police_DrugID
Element V	/alues:		
Screen	Oracle	SAS	
1 2 3 4 5	19432 26715 26716 26718 26719	0 1 2 8 9	Not Applicable Drugs Not Involved Drugs Involved Not Reported Unknown (Police Reported)

#### **Remarks:**

The phrase "other drug involvement" includes prescription and "over-the-counter" medications as well as "illicit" substances (e.g., in most cases, marijuana, cocaine, heroin, etc. where usage has not been prescribed by a doctor). Also, "other drug involvement" means that an other drug is present in the person (drivers of in-transport motor vehicles and non-motorists only). It is not an indication that the drug usage was in any way a cause of the crash, even though it may have been. If the PAR indicates that other drugs were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for all occupants of motor vehicles in-transport who are not drivers.

**Drugs Not Involved** applies if the investigating officer's assessment is that no other drugs were present in the person.

**Drugs Involved** is coded if the police indicate that other drugs are present in the person via: (1) a specific data element on the police report form or (2) the police mention in the narrative section of the report that other drugs are present in the person.

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is used. If the police report indicates that a driver was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

Enter **Not Reported** if there is a specific location on the police report for assessment of other drug presence but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting other drugs and no other information is available.

Enter **Unknown (Police Reported)** if other drug presence is specifically indicated on the PAR as unknown. A growing number of police reports have blocks to check either positive or negative other drug presence. However, if a police report has provision for the investigating officer to respond "unknown presence", then enter this element. In addition, enter this element for hit-and-run drivers unless clear evidence to the contrary exists.

#### **Consistency Checks:**

Errors

	IF	THEN
PP048	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0.
RANGE	PERSON TYPE (P03) equals 1	POLICE REPORTED DRUG INVOLVEMENT (P17) must not equal 0.
RANGE	PERSON TYPE (P03) equals 9	POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0.
RANGE	PERSON TYPE (P03) equals 4-8	POLICE REPORTED DRUG INVOLVEMENT (P17) must not equal 0.

Post Entry

	IF	THEN
DP095	VIOLATIONS CHARGED (D02) equals 1 or 2 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2.

# **D02 VIOLATIONS CHARGED**

Screen Heading:	Driver violations
Screen Name:	Driver Violations (690-E)
Long Name:	What driver violations are charged by the police?
SAS Name:	Vehicle.Violatn
Oracle Name:	GES.DriverViolation.ViolationID

### **Element Values**:

Oracle	SAS	
26247	0	None
26250	1	Alcohol
26251	2	Drugs
26252	3	Speeding
26696	4	Reckless Driving
26697	5	Driving with a Suspended or Revoked License
26698	6	Failure to Yield Right-of-Way
26699	7	Running a Traffic Signal or Stop Sign
26700	50	Hit & Run (And No Information)
19428	96	Not Reported
26701	97	Violation Charged - No Details
26702	98	Other Violation
26703	99	Unknown if Charged
26704	95	No driver present
	26247 26250 26251 26252 26696 26697 26698 26699 26700 19428 26700 19428 26701 26702 26703	26247       0         26250       1         26251       2         26252       3         26696       4         26697       5         26698       6         26699       7         26700       50         19428       96         26701       97         26702       98         26703       99

### Remarks:

Enter **None** when there are no charges, the applicable section is blank or crossed out on the PAR or charges are "pending."

Enter **Speeding** if the driver is cited for any violation which lists speed as a factor (i.e., "x" amount over the limit, too fast for conditions, etc.)

Enter **Reckless Driving** if the driver is charged with reckless driving or driving to endanger. It should be recognized that careless driving and reckless driving are not the same. If the PAR indicates "careless driving" and does not indicate driving to endanger, reckless driving should not be coded.

Enter **Failure To Yield** if this driver is charged with: "failure to yield ...." (in any of its multitudinous forms).

Enter **Hit and Run (No Information)** when the driver and/or vehicle left the scene and there is no indication on the PAR that any violations were charged.

Enter **Not Reported** if there is a specific location on the police report for assessment of violations charged but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting violations charged and no other information is available.

Enter **Violation Charged - No Details** when a violation has been charged but there is a lack of information regarding the specific nature of the violation. For example, a violation number cannot be matched, a violation number is not legible or the PAR indicates that two violations were charged but there is no other information.

Enter **Other Violation** if this driver is charged with: "following too closely or failure to keep proper distance" or any other violation designated by the State as a moving violation. In addition, use when the PAR indicates a violation was charged that can be identified but cannot be classified in screen element values "2" through "8" above.

Enter **Unknown If Charged** when the PAR specifically indicates unknown or is unclear concerning whether or not a violation was issued. Clarification: If the applicable section on the PAR indicates the charges are "pending", element **None** applies.

No driver present is used when there is no driver in this vehicle.

#### **Consistency Checks:**

	IF	THEN
VV188	If DRIVER PRESENCE (D01) equals 0	VIOLATIONS CHARGED (D02) must equal 95.
VV197	VIOLATIONS CHARGED (D02) equals 50	HIT AND RUN (V02) must equal 1.
VV203	HIT-AND-RUN (V02) equals 1	VIOLATIONS CHARGED (D02) must not equal 99.
VV207	NUMBER OF OCCUPANTS CODED (V10) equals 00	VIOLATIONS CHARGED (D02) must equal 95.
VV207A	NUMBER OF OCCUPANTS (V10B) equals 00	VIOLATIONS CHARGED (D02) must equal 95.
VV253	VIOLATIONS CHARGED (D02) equals 03	SPEED RELATED (D09) must equal 1.
RANGE	VIOLATIONS CHARGED (D02) must 96, 97, 98, 99.	equal 0, 1, 2, 3, 4, 5, 6, 7, 50, 95,
RANGE	DRIVER PRESENCE (D01) equals 0	VIOLATIONS CHARGED (D02) must equal 95.

RANGE	DRIVER PRESENCE (D01) equals 1 or 2	VIOLATIONS CHARGED (D02) must not equal null.
MULTIPLE RESPONSE	VIOLATIONS CHARGED (D02) equals 0	no other violations must be coded for this driver
MULTIPLE RESPONSE	VIOLATIONS CHARGED (D02) equals 95	no other violations must be coded for this driver
MULTIPLE RESPONSE	VIOLATIONS CHARGED (D02) equals 96	no other violations must be coded for this driver
MULTIPLE RESPONSE	VIOLATIONS CHARGED (D02) equals 50	no other violations must be coded for this driver
MULTIPLE RESPONSE	VIOLATIONS CHARGED (D02) equals 99	no other violations must be coded for this driver
MULTIPLE RESPONSE	each VIOLATIONS CHARGED (D02) once per driver.	element value must be coded only

# <u>Warnings</u>

	IF	THEN
PP046B	VIOLATIONS CHARGED (D02) equals 1	at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 98.

# Post Entry

	IF	THEN
AD043	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0760	at least one VIOLATIONS CHARGED (D02) should not equal 00.
DA123	VIOLATIONS CHARGED (D02) equals 07	at least one TRAFFIC CONTROL DEVICE (A16) must equal 1-9, 21, 97, 98 or 99.
DP095	VIOLATIONS CHARGED (D02) equals 1 or 2 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2.

## D04 DRIVER'S VISION OBSCURED BY

Screen Heading:	Visual Obstructions
Screen Name:	Visual Obstructions (700-E)
Long Name:	What visual obstructions may contribute to the crash?
SAS Name:	Vehicle.Vis_obsc
Oracle Name:	GES.DriverVision.VisionID

### **Element Values**:

Screen	Oracle	SAS	
1	1	00	No Obstruction
2	2	01	Rain, Snow, Smoke, Sand, Dust
3	3	02	Reflected Glare, Bright Sunlight, Headlights
4	4	03	Curve Or Hill
5	5	04	Building, Billboard or Other Design Features (Includes Signs,
			Embankment)
6	6	05	Trees, Crops, Vegetation
7	7	06	Moving Vehicle (Including Load)
8	8	07	Parked Vehicle
9	9	08	Splash Or Spray Of Passing Vehicle
10	10	09	Inadequate Defrost Or Defog System
11	11	10	Inadequate Lighting System
12	12	11	Obstruction Interior To The Vehicle
13	13	12	External Mirrors
14	14	13	Head Restraints
15	15	14	Broken Or Improperly Cleaned Windshield
16	16	15	Fog
17	26190	50	Hit-And-Run (And No Information)
18	19487	96	Not Reported
19	26460	97	Vision Obscured - No Details
20	26669	98	Other Obstruction
21	26670	99	Unknown Whether Vision Was Obscured
22	26671	95	No driver present

#### Remarks:

This variable attempts to identify visual circumstances that may have contributed to the cause of the crash. These circumstances ("visual obstructions") can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider driver or witness statements unless verified by the investigating police officer.

Enter **No Obstruction** when the PAR indicates that there were no visual obstructions for this driver.

Screen element values "2" through "16" are selected if indicated on the PAR.

Enter Moving Vehicle (Including Load) if the vehicle was in motion (on a trafficway).

Enter **Parked Vehicle** if the vehicle was not in motion (i.e., in-transport or not in-transport).

Enter **Inadequate Defrost or Defog System** when the presence of frost or fog on the windshield was due to an inadequate system. The PAR must state specifically that the system was not operating properly. The presence of frost or fog alone on the windshield should be coded **Broken or Improperly Cleaned Windshield**.

Enter **Inadequate Lighting System** when the PAR indicates this driver's vision was impaired because the exterior lighting system (including head-lights, fog-lights, etc.) of the driver's vehicle was either turned off or not operating properly. This response should not be used to describe inadequate lighting systems of other vehicles (e.g., oncoming motor vehicles).

Enter **Fog** when the ongoing weather condition was described as "fog". Do not use this code when only the vehicle windshield is described as "fogged". The choice of code **Inadequate Defrost or Defog System** or **Broken or Improperly Cleaned Windshield** will then depend upon whether the defrost/defog system is noted as not functioning.

Enter **Hit and Run** if the PAR specifically indicates unknown in a section that concerns driver vision and the driver is coded [Hit & Run (Vehicle and/or Driver Left Scene)] in variable Driver Presence (D01). However, if the PAR reports a vision impediment (subsequently determined by the police after the driver left the scene) for a hit-and-run driver, then enter the indicated element rather than this element. This includes entering **No Obstruction** if so indicated on the PAR.

Enter **Not Reported** if there is a specific location on the police report for assessment of vision obstructions but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting vision obstructions and no other information is available.

Enter **Vision Obscured - No Details** when the PAR indicates that "some" vision impediment exists but does not clearly indicate the nature of the impediment.

Enter **Other Obstruction** when the PAR indicates a vision impediment that cannot be attributed to one of the other elements above (screen element values "02" through "16").

Enter **Unknown Whether Vision Was Obscured** when the PAR indicates that the driver's field of view (visual field) at the time of the crash is unknown <u>and</u> the driver did not leave the scene.

No driver present is used when there is no driver in this vehicle.

# Consistency Checks:

	IF	THEN
AD150	ATMOSPHERIC CONDITION (A20) equals 1	DRIVER'S VISION OBSCURED BY (D04) must not equal 15.
VV186	DRIVER PRESENCE (D01) equals 0	DRIVER'S VISION OBSCURED BY (D04) must equal 95.
VV199	DRIVER'S VISION OBSCURED BY (D04) equals 50	HIT AND RUN (V02) must equal 1.
VV204	HIT AND RUN (V02) equals 1	DRIVER'S VISION OBSCURED BY (D04) must not equal 99.
VV208	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER'S VISION OBSCURED BY (D04) must equal 95.
VV208A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER'S VISION OBSCURED BY (D04) must equal 95.
RANGE	DRIVER'S VISION OBSCURED BY ( 05, 06, 07, 08, 09, 10, 11, 12, 13, 14	
RANGE	DRIVER PRESENCE (D01) equals 1, 2 or 9	DRIVER'S VISION OBSCURED BY (D04) must not equal null.
RANGE	DRIVER PRESENCE (D01) equals 0	DRIVER'S VISION OBSCURED BY (D04) must equal 95.
MULTIPLE RESPONSE	DRIVER'S VISION OBSCURED BY (D04) equals 00	no other visual obstruction must be coded for this driver
MULTIPLE RESPONSE	DRIVER'S VISION OBSCURED BY (D04) equals 50	no other visual obstruction must be coded for this driver
MULTIPLE RESPONSE	DRIVER'S VISION OBSCURED BY (D04) equals 95	no other visual obstruction must be coded for this driver
MULTIPLE RESPONSE	DRIVER'S VISION OBSCURED BY (D04) equals 96	no other visual obstruction must be coded for this driver
MULTIPLE RESPONSE	DRIVER'S VISION OBSCURED BY (D04) equals 99	no other visual obstruction must be coded for this driver
MULTIPLE RESPONSE	each DRIVER'S VISION OBSCURED coded more than once per driver.	BY (D04) element value must not be

# <u>Warnings</u>

	IF	THEN		
AD091	ROADWAY SURFACE CONDITION (A15) equals 1	DRIVER'S VISION OBSCURED BY (D04) should not equal 08.		
DA124	DRIVER'S VISION OBSCURED BY (D04) equals 01	ATMOSPHERIC CONDITION (A20) should not equal 1.		
DA159	DRIVER'S VISION OBSCURED BY (D04) equals 15	ATMOSPHERIC CONDITION (A20) should equal 5, 6, 7 or 9.		
Post Entry				
	IF	THEN		
AD034	<b>IF</b> PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0007	THEN at least one DRIVER'S VISION OBSCURED BY (D04) must equal 07 or 11.		
AD034 AD088	PEDESTRIAN/BIKE ACCIDENT	at least one DRIVER'S VISION OBSCURED BY (D04) must equal		

### **D06 DRIVER MANEUVERED TO AVOID**

Screen Heading:	What the Driver Maneuvered to Avoid
Screen Name:	What the Driver Maneuvered to Avoid (710-E)
Long Name:	Encode the attribute(s) which indicate what the driver attempted to avoid.
SAS Name:	Vehicle.Drman_av
Oracle Name:	GES.DriverManveuver.ManeuverID

#### **Element Values**:

Screen	Oracle	SAS	
1	26240	00	Driver Did Not Maneuver To Avoid
2	26241	01	Object In Road
3	26242	02	Poor Road Conditions (Puddle, Ice, Pothole, Etc.)
4	26405	03	Animal In Road
5	26685	04	Vehicle In Road
6	26686	05	Pedestrian, Pedalcyclist or Other Non-Motorist In Road
7	26687	50	Hit & Run (And No Information)
8	19489	96	Not Reported
9	26688	97	Avoidance Maneuver - No Details
10	26689	99	Unknown If Driver Maneuvered To Avoid
11	26690	95	No driver present

#### Remarks:

This variable identifies the thing(s) the driver attempted to avoid. The maneuver may have subsequently contributed to the cause of the crash. Code the thing(s) the drive tried to avoid whether the maneuver was successful or not (i.e., whether or not the driver was able to avoid the object, poor road condition, animal, vehicle or non-motorist).

If the person or object is off the road when the maneuver takes place, then this action should not be coded here (a driver who leaves the road and swerves to avoid a pedestrian on the sidewalk would be coded as **Driver Did Not Maneuver To Avoid**).

Do not consider driver or witness statements unless verified by the investigating police officer.

Enter **Driver Did Not Maneuver To Avoid** when the preponderance of the information on the PAR indicates that there were no avoidance type maneuvers made by the driver prior to the First Harmful Event. Additionally, use this value when the object avoided was a "phantom vehicle". A "phantom vehicle" is a vehicle alleged by the driver to have been involved but which the reporting officer cannot substantiate. Use this code if (all) the thing(s) the driver tried to avoid are off the road.

Screen Element values "02" through "06" are selected if indicated on the PAR.

Enter **Poor Road Conditions (Puddle, Ice, Pothole, etc.)** when the driver maneuvered to avoid the location of a road condition. Treat the condition as if it were an object. Do not use this code if the driver lost control while traveling on/over the road condition but made no maneuver to avoid it.

Enter **Hit-And-Run (No Information)** if the PAR specifically indicates unknown in this driver's vehicle or environmental related section and the driver is coded [Hit & Run (Vehicle and/or Driver Left Scene)] for variable Driver Presence (D01). However, if the PAR reports a maneuver to avoid (subsequently determined by the police after the driver left the scene) for a hit-and-run driver, then enter the indicated element rather than this element. This includes entering **Driver Did Not Maneuver To Avoid** if the preponderance of the evidence on the PAR so indicates.

Enter **Not Reported** if there is a specific location on the police report for assessment of what the driver maneuvered to avoid but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting what the driver maneuvered to avoid and no other information is available.

Enter **Avoidance Maneuver - No Details** when the PAR indicates that some action was taken by the driver to avoid something or someone in the road but does not clearly indicate what this person or thing was.

Enter **Unknown If Driver Maneuvered To Avoid** when the PAR indicates it is unknown whether or not a nonvisual environmentally related problem existed at the time of the crash <u>and</u> the driver did not leave the scene [i.e., Driver Presence (D01) encoded other than (Driver Left Scene)].

No driver present is used when there is no driver in this vehicle.

### **Consistency Checks:**

	IF	THEN
VV187	DRIVER PRESENCE (D01) equals 0	DRIVER MANEUVERED TO AVOID (D06) must equal 95.
VV195	ACCIDENT TYPE (V23) equals 34, 36, 38, 40, 54, 56, 58 or 60	DRIVER MANEUVERED TO AVOID (D06) must not equal 00.
VV200	DRIVER MANEUVERED TO AVOID (D06) equals 50	HIT AND RUN (V02) must equal 1.
VV205	HIT AND RUN (V02) equals 1	DRIVER MANEUVERED TO AVOID (D06) must not equal 96 or 99.
VV209	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER MANEUVERED TO AVOID (D06) must equal 95.
VV209A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER MANEUVERED TO AVOID (D06) must equal 95.

VV213	DRIVER MANEUVERED TO AVOID (D06) equals 00	MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 17.
RANGE	DRIVER MANEUVERED TO AVOID (D06) must equal 00, 01, 02, 03, 04, 05, 50, 95, 96, 97, 99 or null.	
RANGE	DRIVER PRESENCE (D01) equals 0	DRIVER MANEUVERED TO AVOID (D06) must equal 95.
RANGE	DRIVER MANEUVERED TO AVOID (D06) equals 95	DRIVER PRESENCE (D01) must equal 0.
MULTIPLE RESPONSE	DRIVER MANEUVERED TO AVOID (D06) equals 00	no other D06 response must be coded for this driver
MULTIPLE RESPONSE	DRIVER MANEUVERED TO AVOID (D06) equals 50	no other D06 response must be coded for this driver
MULTIPLE RESPONSE	DRIVER MANEUVERED TO AVOID (D06) equals 95	no other D06 response must be coded for this driver
MULTIPLE RESPONSE	DRIVER MANEUVERED TO AVOID (D06) equals 96	no other D06 response must be coded for this driver
MULTIPLE RESPONSE	DRIVER MANEUVERED TO AVOID (D06) equals 99	no other D06 response must be coded for this driver
MULTIPLE RESPONSE	each DRIVER MANEUVERED TO AN coded only once per driver.	VOID (D06) element value must be

# <u>Warnings</u>

	IF	THEN
VV211	DRIVER MANEUVERED TO AVOID (D06) equals 03	CRITICAL EVENT (V26) should equal 87-89.
VV212	DRIVER MANEUVERED TO AVOID (D06) equals 05	CRITICAL EVENT (V26) should equal 80-85.
VV214	DRIVER MANEUVERED TO AVOID (D06) equals 04	CRITICAL EVENT (V26) should equal 50-56, 59-68, 70-74 or 78.
VV215	DRIVER MANEUVERED TO AVOID (D06) equals 01	CRITICAL EVENT (V26) should equal 90-92.
VV218	CORRECTIVE ACTION ATTEMPTED (V27) equals 00 or 1	DRIVER MANEUVERED TO AVOID (D06) should equal 00, 50 or 95.

## **D07 DRIVER DISTRACTED BY**

Screen I	Heading:	Driver Distractions		
Screen I	Name:	Driver Distractions (720-E)		
Long Na	me:	Encode the driver distraction(s).		
SAS Nar	ne:	Vehicle.Dr_Dstrd		
Oracle N	lame:	GES.DriverDistraction.DistractionID		
Element	Values:			
Screen	Oracle	SAS		
1 2 3 4 5 6 7 8 9 10 11 12	26268 17133 26270 26271 26398 26690 26691 26692 26693 26694 16911 16912	0 1 3 4 5 6 7 8 9 10 11 12	Not Distracted Looked But Did Not See By Other Occupant(s) By moving object in vehicle While talking or listening to cellular phone While dialing cellular phone While adjusting climate controls While adjusting radio, cassette, CD While adjusting radio, cassette, CD While using other device/controls integral to vehicle While using or reaching for device/object brought into vehicle Sleepy or fell asleep Distracted by outside person, object or event	
13 14 15	16913 16914 19488	<ul> <li>13 Eating or drinking</li> <li>14 Smoking related</li> <li>96 Not Reported</li> </ul>		

15 19488 96 Not Reported 16 16910 97 Inattentive or los

- 161691097Inattentive or lost in thought171691598Other, distraction/inattention
- 18 26695 99 Unknown if distracted
- 19 26696 95 No driver present

## Remarks:

Record the attribute(s) which best describe this driver's attention to driving prior to the driver's realization of an impending critical event or just prior to impact if realizations of an impending critical event does not occur. If this driver's vehicle has two critical crash envelopes, record the attribute(s) which best describe the driver's attention prior to the first Critical Precrash Event (i.e., prior to realization of the impending danger which the driver successfully avoided). Intoxication is not considered a distraction.

**Not distracted** is used when the driver is known to have been completely attentive to driving prior to realization of impending danger.

**Looked but did not see** is used when the driver is paying attention to driving, but does not see the relevant vehicle, object, etc. This code should be used when a driver has an opportunity to take some action prior to impact, but the driver takes no action and no other distractions apply. This situation frequently occurs when an overtaking vehicle is in the driver's "blind spot" or at intersections when a crossing vehicle is not noticed. If the driver sees the vehicle, object, etc., but does not consider it a danger than, and no other distractions apply then code **Not distracted**.

**By other occupant(s)** is used when the driver was distracted by another occupant in this driver's vehicle prior to realization of impending danger. Examples of other occupant distraction include conversing with or looking at another occupant.

**By moving object in vehicle** is used when the driver was distracted by a moving object in this driver's vehicle prior to realization of impending danger. Examples included a dropped object, a moving pet, insect or cargo.

While talking or listening to cellular phone is used when the driver is talking or listening on a cellular phone.

While dialing cellular phone is used when the driver is dialing a cellular phone.

While adjusting climate controls is used when someone is distracted from the driving task while adjusting the air conditioner heater, etc.

While adjusting radio, cassette, CD is used when someone is distracted from the driving task while adjusting or using the radio, cassette, CD which are mounted in the vehicle.

While using other device/controls integral to vehicle is used when the driver is distracted while using a device in the vehicle including adjusting windows (power or manual) adjusting door locks (power or manual, adjusting side view mirrors (power or manual), adjusting rear view manual, adjusting seat (power or manual), adjusting steering wheel, and adjusting seat belt, etc. (OEM equipment).

While using or reaching for device/object brought into vehicle is used when the driver is distracted while using or reaching for a device in the vehicle including a radar detector, CDs, razors, portable CD player, headphones, cigarette lighter, etc. The use of another device to light a cigarette other than the vehicle's cigarette lighter should be coded **smoking related**.

**Sleepy or fell asleep** is used when the driver was sleeping or dozing prior to realization of impending danger or just prior to impact if realization did not occur.

**Distracted by outside person, object or event** is used when the driver was distracted by an outside person, object or event prior to realization of impending danger. Examples include animals on the roadside or a previous crash. Do not use this code for a person, object or event which the driver has recognized and for which the driver has taken some action (e.g. avoiding a pedestrian on the roadway)

**Eating or drinking** is used when the driver is eating or drinking or involved in an activity related to these actions (i.e. picking food from carton placed on passenger seat, reaching to throw out used food wrapper, etc.)

**Smoking related** is used when the driver is smoking or involved in an activity related to smoking, such as lighting his cigarette, putting his ashes in the ash tray, etc. The act of using the cigarette lighter of the vehicle, is coded **While using other device/object in vehicle**. Any other method of lighting the cigarette would be coded **Smoking related**.

Enter **Not Reported** if there is a specific location on the police report for assessment of driver distractions but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting driver distractions and no other information is available.

**Inattentive or lost in thought** is used when the driver is thinking about items other than the driving task (daydreaming).

**Other, distraction/inattention** is used when details regarding this driver's inattention are known but none of the specified codes are applicable (e.g., incapacitating illness).

Unknown if distracted is used when the PAR specifically indicates unknown.

No driver present is used when there is no driver in this vehicle.

#### **Consistency Checks:**

	IF	THEN
VV189	DRIVER PRESENCE (D01) equals 0	DRIVER DISTRACTED BY (D07) must equal 95.
VV189A	DRIVER PRESENCE (D01) equals 1 or 2	DRIVER DISTRACTED BY (D07) must equal 00-14 or 96-99.
VV196A	DRIVER DISTRACTED BY (D07) equals 3	NUMBER OF OCCUPANTS (V10B) must be greater than 01.
VV210	NUMBER OF OCCUPANTS CODED (V10) equals 00	DRIVER DISTRACTED BY (D07) must equal 95.
VV210A	NUMBER OF OCCUPANTS (V10B) equals 00	DRIVER DISTRACTED BY (D07) must equal 95.
RANGE	DRIVER DISTRACTED BY (D07) mu 11, 12, 13, 14, 95, 96, 97, 98 or 99.	ist equal 0, 1, 3, 4, 5, 6, 7, 8, 9, 10,
RANGE	DRIVER DISTRACTED BY (D07) equals 95	DRIVER PRESENCE (D01) must equal 0.

MULTIPLE RESPONSE	DRIVER DISTRACTED BY (D07) equals 00	no other driver distraction must be coded for this driver
MULTIPLE RESPONSE	DRIVER DISTRACTED BY (D07) equals 95	no other driver distraction must be coded for this driver
MULTIPLE RESPONSE	DRIVER DISTRACTED BY (D07) equals 96	no other driver distraction must be coded for this driver
MULTIPLE RESPONSE	DRIVER DISTRACTED BY (D07) equals 99	no other driver distraction must be coded for this driver
MULTIPLE RESPONSE	each DRIVER DISTRACTED BY (D0 once per driver.	7) element value must be coded only

## P15 RESTRAINT SYSTEM USE (OCCUPANTS)

Screen Heading:	Restraints Used
Screen Name:	Restraints Used (845-E)
Long Name:	What restraints are being used by this occupant immediately prior to the crash?
SAS Name:	Person.Rest_sys
Oracle Name:	GES.Restraint.RestraintID

## **Element Values**:

Screen	Oracle	SAS	
1	10313	0	None Used or N/A
2	10319	5	Motorcycle Helmet
3	10328	7	None Available
4	10327	9	Unknown If Used
5	10316	1	Lap/Shoulder Belt
6	10317	2	Lap Belt
7	10318	3	Shoulder Belt
8	10323	6	Child Safety Seat
9	10324	8	Restraint Used - Specifics Unknown or Other

#### Remarks:

This variable encodes what was documented on the PAR regarding occupant use of available vehicle restraints (i.e., belts, child safety seat or helmet). There is no differentiation here regarding the type of restraint (i.e. manual or automatic).

Enter **None Used** when the PAR indicates that the occupant did not use a restraint. In order to code this value, the PAR first has to indicate that there was a restraint available and that the occupant of that seat position did not use the available restraint. **N/A** applies when the person type is non-motorist.

Enter **Lap/Shoulder Belt** when the PAR indicates that both a lap and a shoulder belt were used. Also, use this code if the PAR has a block which identifies Lap or Shoulder separately and "Lap/Shoulder" is checked.

Enter Child Safety Seat if a child restraint is used in conjunction with shoulder and/or lap belts.

Enter **None Available** when the PAR indicates that no restraint was available in the seat position of this occupant. Use this code for persons who are riding in the sleeper section of the cab of a truck and persons who are riding on the exterior of the vehicle--Seating Position (P04) coded [Sleeper Section of Cab (Truck)] or [Riding on Exterior of Vehicle].

Enter **Restraint Used - Specifics Unknown or Other** if the PAR indicates that some type of restraint was in use but the type of restraint is not clear.

Enter **Unknown If Used** if there is no area on the PAR for the officer to report restraint use or the information on the PAR is inadequate to determine restraint use.

Note: The presence of an air bag system does not mean that there are no active belts present. In fact, most if not all air bag equipped vehicles also have some belt restraint system installed in the seat positions protected by the air bags.

Persons such as children who are held by another person are not considered to be restrained, nor to have restraints available.

#### **Consistency Checks:**

#### Errors

	IF	THEN
PP034	PERSON TYPE (P03) equals 1	RESTRAINT SYSTEM USE (P15) must not equal 6.
PP070	EJECTION (P06) equals 1 or 2	RESTRAINT SYSTEM USE (P15) must not equal 5.
PP075	SEATING POSITION (P04) equals 22, 23 or 31-53	RESTRAINT SYSTEM USE (P15) must not equal 5.
PP084	SEATING POSITION (P04) equals 50 or 53	RESTRAINT SYSTEM USE (P15) must equal 7.
PV066	RESTRAINT SYSTEM USE (P15) equals 1-3 or 6	BODY TYPE (V05) must not equal 80-89 or 90.
RANGE	PERSON TYPE (P03) equals 1, 2 or 9	RESTRAINT SYSTEM USE (P15) must equal 0, 1, 2, 3, 5, 6, 7, 8 or 9 and must not be null.
RANGE	PERSON TYPE (P03) equals 3, 4, 5, 6, 8 or 9	RESTRAINT SYSTEM USE (P15) must equal null.
MULTIPLE RESPONSE	Only one element value must be code (P15) per occupant.	ed for RESTRAINT SYSTEM USE
<u>Warnings</u>		

	IF	THEN
PP033	RESTRAINT SYSTEM USE (P15) equals 1	SEATING POSITION (P04) should not equal 12, 22, 32, 50-53.
PP036	RESTRAINT SYSTEM USE (P15) equals 6	AGE (P07) should equal 00-10 or 999.

	PP037	EJECTION (P06) equals 1or 2	RESTRAINT SYSTEM USE (P15) should equal 0, 7 or 9.
	PP045	PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) should equal 0.
	PP049	RESTRAINT SYSTEM USE (P15) equals 3	RESTRAINT TYPE (P16) should not equal 2.
	PV068	RESTRAINT SYSTEM USE (P15) equals 5	BODY TYPE (V05) should equal 80-90.
Enti	<b>.</b>		

## Post Entry

|--|

#### THEN

VP224	BODY TYPE (V05) equals 80-90	RESTRAINT SYSTEM USE (P15)
	and there is at least one PERSON	must equal 0, 5 or 9.
	TYPE (P03) equal to 1 or 2	

## P18 PERSON'S PHYSICAL IMPAIRMENT (DRIVERS)

~ ~ ~

Screen Heading:	Physical Impairments
Screen Name:	Physical Impairments (860-E)
Long Name:	Did the police identify any contributory physical impairments?
SAS Name:	Person.Impairmt
Oracle Name:	GES.Impairment.ImpairID

#### **Element Values**:

Screen	Oracle	SAS	
1	26791	00	None
2	26792	01	III, Blackout
3	26793	02	Drowsy, Sleepy, Fell Asleep, Fatigued
4	26794	03	Requires Cane Or Crutches
5	26795	04	Paraplegic Or Restricted To Wheelchair
6	26796	05	Impaired Due To Previous Injury
7	26797	06	Deaf
8	26798	07	Blind
9	26799	97	Physical Impairment-No Details
10	26800	98	Other Physical Impairment
11	26801	99	Unknown If Physically Impaired

#### Remarks:

This question attempts to identify physical impairments of drivers which may have contributed to the cause of the crash. These impairments can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider pedestrian, non-motorist or witness statements unless verified by the investigating police officer.

Enter **None** when the PAR indicates that there were no physical impairments for this person. Also use this code if physical impairment is not reported on the PAR.

Enter **III**, **Blackout** when indicated on the PAR. Enter this element even if the source of the illness or loss of consciousness is alcohol or drug related.

Enter **Drowsy**, **Sleepy**, **Fell Asleep**, **Fatigued** when indicated on the PAR. Alcohol or other drugs may be the source of this impairment.

Enter **Requires Cane Or Crutches** when indicated on the PAR.

Enter **Paraplegic or Restricted to Wheelchair** if this person has to use a wheelchair or is paraplegic (may or may not have used a wheelchair).

Enter **Impaired Due To Previous Injury** if the PAR specifically indicates this condition (e.g., pedestrian is involved in this crash subsequent to his/her involvement in a previous crash in which the pedestrian was injured). This element should be extremely rare.

Enter **Deaf** when indicated on the PAR.

Enter **Blind** when indicated on the PAR.

Enter **Physical Impairment - No Details** when the PAR indicates that "some" physical impairment exists but does not clearly indicate the nature of the impairment.

Enter **Other Physical Impairment** when the PAR indicates a physical impairment that cannot be attributed to one of the other elements above (Screen element values "2" through "8"), e.g., the driver is charged with DUIL.

Enter **Unknown If Physically Impaired** when the PAR indicates that the person's physical condition at the time of the crash is unknown.

#### **Consistency Checks:**

	IF	THEN
PP046	PERSON TYPE (P03) equals 2	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00.
PA083	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4	the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.
RANGE	PERSON TYPE (P03) equals 1, 3, 4, 5, 6 or 8	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00, 01, 02, 03, 04, 05, 06, 07, 97, 98 or 99 and must not equal null.
RANGE	PERSON TYPE (P03) equals 2 or 9	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal null.
MULTIPLE RESPONSE	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 00	no other physical impairments must be coded for this driver
MULTIPLE RESPONSE	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 97	no other physical impairments must be coded for this driver
MULTIPLE RESPONSE	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 99	no other physical impairments must be coded for this driver
MULTIPLE RESPONSE	each PERSON'S PHYSICAL IMPAIR coded only once per driver.	MENT (P18) element value must be

# <u>Warnings</u>

	IF	THEN
PP085	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07	PERSON TYPE (P03) should not equal 1.
PP046B	VIOLATIONS CHARGED (D02) equals 1	at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 98.
Post Entry		

THEN

AP235	First character of	at least one PERSON'S PHYSICAL
	PEDESTRIAN/BIKE ACCIDENT	IMPAIRMENT (P18) should equal
	TYPE (A24) equals 1	04.

IF

# P01 VEHICLE NUMBER (NON-MOTORISTS)

Screen Heading:		Regarding Vehicle # Occupant #		
Screen Name:		None (N)		
Long Name:		None		
SAS Name:		Person.Vehno		
Oracle Name:		GES.Person.VehicleID		
Element	Values:			
Screen <b>n/a</b>	Oracle -1	SAS 0	Non-Motorist	

## **Remarks:**

All Non-Motorists are assigned SAS element value 0 and Oracle element value -1. GES.Person.VehicleID is set to -1 for all non-motorists.

## **P02 PERSON NUMBER (NON-MOTORISTS)**

Screen Heading:		Regarding Non-Motorist #
Screen Name:		None(N)
Long Name:		None
SAS Name:		Person.Perno
Oracle Name:		GES.Person.OccNumber
Element	Values:	
Screen	Oracle	SAS

0010011			
1,	1,	1,	Computer Assigned Number

IF

#### Remarks:

Non-motorists are numbered sequentially by the computer, beginning with "1"; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped.

Persons appended to vehicle for motion (e.g., bicyclist holding onto vehicle) are non-motorists; they are not occupants.

Vehicle Number (P01 - Non-motorists) is assigned the value -1 by the computer for all non-motorists.

#### **Consistency Checks:**

Post Entry

AP135A

THEN

The PERSON NUMBERS (P02) of the non-motorists within a crash must be consecutively numbered. The number of non-motorists coded for a crash must equal NUMBER OF NON-MOTORISTS (A04).

# P03 PERSON TYPE (NON-MOTORISTS)

Screen Heading:	Non-Motorist Data
Screen Name:	Person Type (890-R)
Long Name:	What is the person type of this non-motorist?
SAS Name:	Person.Per_type
Oracle Name:	GES.Person.PersonTypeID

## **Element Values**:

Screen	Oracle	SAS	
<u> </u>	26704	1	Driver Of A Motor Vehicle In-Transport (Occupant)
2		2	Passenger Of A Motor Vehicle In-Transport (Occupant)
3	26706	3	Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist)
4	26707	4	Occupant Of A Non-motor Vehicle Transport Device
			(Non-Motorist)
5	26708	5	Nonoccupant / Pedestrian (Non-Motorist)
6	26709	6	Nonoccupant / Cyclist/Pedalcyclist (Non-Motorist)
7	26710	8	Nonoccupant / Other Or Unknown (Non-Motorist)
<del>8</del>	<del>26711</del>		Unknown Occupant Type In A Motor Vehicle In-Transport
			<del>(Occupant)</del>

#### Remarks:

Enter Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist) when a person is in or on a motor vehicle which is not in-transport when struck.

Enter **Occupant of a Non-motor Vehicle Transport Device (Non-Motorist)** when a person is associated with either (1) an animal or (2) a non-motorist conveyance. Association with an animal means that the non-motorist was either riding on an animal or in an animal powered conveyance.

A non-motorist conveyance is defined as any human-powered device by which a non-motorist may move or by which a pedestrian or non-motorist may move another non-motorist, other than by pedaling. A non-motorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheelchair, rickshaw, etc. This includes those persons in a non-motorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

Enter **Non-occupant / Pedestrian (Non-Motorist)** when the non-motorist is a pedestrian. A Pedestrian is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a non-motorist conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

Enter **Non-occupant / Cyclist/Pedalcyclist (Non-Motorist)** when the non-motorist is a bicyclist or other cyclist (generically a pedalcyclist). A bicyclist refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion. Other cyclist refers to all other pedalcyclists (tricyclist, unicyclist, etc.). This includes those pedalcyclists who hold onto a motor vehicle in motion. A "Big Wheel" should be treated as a tricycle.

Enter **Non-occupant / Other Or Unknown (Non-Motorist)** when the non-motorist is any other person not included under the above definitions. For example, enter this value for any person outside a trafficway or outside sidewalk or path contiguous with a trafficway.

#### **Consistency Checks:**

	IF	THEN
AP021	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0000	PERSON TYPE (P03) must not equal 5, 6 or 8.
AP061	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P3) equals 5	NON MOTORIST'S ACTION (P19) must equal 21 or 22.
PA083	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4	the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.
PA096	PERSON TYPE (P03) equals 5 or 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.
PA201	PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01.
PP002	PERSON TYPE (P03) equals 1	SEATING POSITION (P04) must not equal 21-53.
PP034	PERSON TYPE (P03) equals 1	RESTRAINT SYSTEM USE (P15) must not equal 6.
PP040	PERSON TYPE (P03) equals 4 or 6	NON-MOTORIST'S ACTION (P19) must not equal 21-29.
PP041	PERSON TYPE (P30) equals 5 or 8	NON MOTORIST'S ACTION (P19) must not equal 01-10.
PP046	PERSON TYPE (P03) equals 2	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00.
PP046A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	SEATING POSITION (P04) and EJECTION (P06) must equal null.

PP047	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.
PP048A	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	VEHICLE NUMBER (V01) must equal null.
PP048	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0.
PP068	PERSON TYPE (P03) equals 3	NON MOTORIST'S ACTION (P19) must equal 00.
PP072	PERSON TYPE (P03) equals 1, 2 or 9	NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0.
PP073	PERSON TYPE (P3) equals 3	NON MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0.
PP082	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is null	PERSON TYPE (P3) must not equal 3-8.
PP083	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is equal to 01-30 or 99	PERSON TYPE (P3) must not equal 1, 2 or 9.
PV001	PERSON TYPE (P03) equals 1 and BODY TYPE (V05) equals 80-89	SEATING POSITION (P04) must not equal 00, 12-53 or 99.
PV005	PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 80-89	SEATING POSITION (P04) must not equal 13-19 or 22-53.
PV007	PERSON TYPE (P03) equals 2 and BODY TYPE (V05) equals 50-59	SEATING POSITION (P04) must not equal 11-39, 50, 52 or 99.
PV010	PERSON TYPE (P03) equals 9 and BODY TYPE (V05) equals 50-59	SEATING POSITION (P04) must not equal 12-50 or 52.
PV011	PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08	BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93.
VP002	PERSON TYPE (P03) equals 2 or 9 and BODY TYPE (V05) equals 01-02, 04, 10, 30-32, 39, 41, 90 or 91	SEATING POSITION (P04) must not equal 50 or 51.
VP234	HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0.

	IF	THEN
AP024	SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120.
AP027	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0120 and PERSON TYPE (P03) equals 5	SCHOOL BUS RELATED (A21) should equal 1.
PA051	PERSON TYPE (P03) equals 5 and NON MOTORIST LOCATION (P13) equals 08, 18 or 98	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620.
PA053	NON MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
PP009	PERSON TYPE (P03) equals 2 or 9	SEATING POSITION (P04) should not equal 11.
PP018	PERSON TYPE (P03) equals 1	SEATING POSITION (P04) should not equal 12-19.
PP045	PERSON TYPE (P03) equals 1, 2 or 9; RESTRAINT SYSTEM USE (P15) equals 1-3, 6, 8 or 9 and BODY TYPE (V05) is not equal to 80-89	EJECTION (P06) should equal 0.
PP061	NON MOTORIST SAFETY EQUIPMENT USE (P20) equals 2	PERSON TYPE (P03) should equal 6.
PP081	PERSON TYPE (P03) equals 3	NON MOTORIST LOCATION (P13) should not equal 01, 02, 11 or 12.
PP085	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07	PERSON TYPE (P03) should not equal 1.
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# Post Entry

	IF	THEN
AP005	HARMFUL EVENT (A06) equals 21	at least one person must have PERSON TYPE (P03) equal to 5.
AP006	HARMFUL EVENT (A06) equals 22	at least one person must have PERSON TYPE (P03) equal to 6 or 8.

AP008	HARMFUL EVENT (A06) equals 6	at least one PERSON TYPE (P03)
		equal to 1-2 or 9 must have INJURY SEVERITY (P09) equal to 1-5.
AP015	NUMBER OF MOTOR VEHICLES (A03) is greater than 00	at least one PERSON TYPE (P03) should equal 1, 2 or 9.
AP023	RELATION TO JUNCTION (A09) equals 01 or 11 and PERSON TYPE (P03) equals 5 for the first non-motorist	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0810, 0821, 0822, 0829, 0830, 0840 or 0890.
AP039	RELATION TO JUNCTION (A09) equals 01, 02, 11 or 12 and PERSON TYPE (P03) equals 5 for the first non-motorist	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.
AP040	RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610, 0620, 0910 or 0920.
AP054	TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28 or 29, and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0006, 0007, 0009, 0010, 0012, 0018, 0019, 0021-0024, 0048, 0049 or 0055.
AP077	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0420	at least one PERSON TYPE (P03) must equal 4.
AP128	HARMFUL EVENT (A06) equals 27	at least one person mus have PERSON TYPE (P03) equal 4 or 8.
AP155	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 9999	at least one person must have PERSON TYPE (P03) equal 4 or 8 (P03) must equal 8.
DP001	DRIVER PRESENCE (D01) equals 0 or 9	there must not be a Person Level form for that vehicle with PERSON TYPE (P03) equal to 1.
DP004	DRIVER PRESENCE (D01) equals 1	there must be one and only one Person Level form for that vehicle with PERSON TYPE (P03) equal to 1.
DP095	VIOLATIONS CHARGED (D02) equals 01 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 1 or 7.
DP141	DRIVER PRESENCE (D01) equals 9	at least one PERSON TYPE (P03) must equal 9.

PA049	at least one PERSON TYPE (P03) equals 5 and HARMFUL EVENT (A06) equals 21 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510-0539, 0610, 0620, 0710-0790, 0810-0890, 0910 or 0920.
PA058	at least one PERSON TYPE (P03) equals 6 and HARMFUL EVENT (A06) equals 22 and EVENT NUMBER (E01) equals 1	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001-0041, 0048, 0049, 0055, 0097, 0098 or 0099.
PP062	A previous occupant has been identifican be coded (P03 = 1) as the driver.	
PP082A	PERSON TYPE (P03) equals 3	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26.
PP082A	PERSON TYPE (P03) equals 4	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.
PP082A	PERSON TYPE (P03) equals 5	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21.
PP082A	PERSON TYPE (P03) equals 6	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22.
PP082A	PERSON TYPE (P03) equals 8	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.
VA218	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P03) equals 5, and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.
VP010	HARMFUL EVENT (A06) equals 21	at least one PERSON TYPE (P03) must be equal 5.
VP010A	at least one PERSON TYPE (P03) equals 5	at least one HARMFUL EVENT (A06) must equal 21.
VP011	HARMFUL EVENT (A06) equals 22	at least one PERSON TYPE (P03) must be equal to 6.

VP011A	at least one PERSON TYPE (P03) equals 6	at least one HARMFUL EVENT (A06) must equal 22.
VP012	HARMFUL EVENT (A06) equals 27	at least one PERSON TYPE (P03) must equal 4 or 8.
VP012A	at least one PERSON TYPE (P03) equals 4 or 8	at least one HARMFUL EVENT (A06) must equal 27.
VP012B	at least one PERSON TYPE (P03) equals 3	at least one HARMFUL EVENT (A06) must equal 26.
VP013	HARMFUL EVENT (A06) equals 06	at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5.
VP045	at least one NUMBER OF OCCUPANTS CODED (V10) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP045A	at least one NUMBER OF OCCUPANTS (V10B) equals 00 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.
VP046	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.
VP047	at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10-12 or 16 and at least one PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720.
VP056	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0022, 0023, 0033, 0048 or 0049.
VP057	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011.
VP136	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 10 and at least one PERSON TYPE (P03) equals 6	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0008, 0009, 0010, 0012, 0024, 0034, 0048 or 0049.
VP199	NUMBER OF OCCUPANTS CODED (V10) is greater than 00	there must be only one occupant coded as the driver (P03=1).

VP199A	NUMBER OF OCCUPANTS (V10B) is greater than 00	there must be only one occupant coded as the driver (P03=1).
VP224	BODY TYPE (V05) equals 80-90 and there is at least one PERSON TYPE (P03) equal to 1 or 2	RESTRAINT SYSTEM USE (P15) must equal 0, 5 or 9.

# P07 AGE (NON-MOTORISTS)

Screen Heading:		Non-motorist Data			
Screen N	lame:	Age (9	Age (900-E)		
Long Name:		Enter the person's age.			
SAS Name:		Person.Age			
Oracle Name:		GES.Person.Age			
Element Values:					
Screen	Oracle	SAS			
0	0	0	Less Than One Year Old		
XXX	XXX	XXX	Person's Age		
*	-9999	999	Unknown		

## Remarks:

The person's age at the time of the crash is recorded with respect to the person's last birthday.

### **Consistency Checks:**

	IF	THEN
PV011	PERSON TYPE (P03) equals 1 and AGE (P07) is less than 08	BODY TYPE (V05) must not equal 01-07, 09-60, 64-66, 78-79 or 93.
PP013A	AGE (P07) must equal 0-105 or 999 a	and must not equal null.
<u>Warnings</u>		
	IF	THEN

PP013	UNLIKELY: AGE (P07) is greater than	92 and not equal to 999.
PP036	RESTRAINT SYSTEM USE (P15) equals 6	AGE (P07) should equal 00-10 or 999.

# P08 SEX (NON-MOTORISTS)

Screen Heading:	Non-motorist Data
Screen Name:	Sex (910-E)
Long Name:	What is the person's sex?
SAS Name:	Person.sex
Oracle Name:	GES.Person.SexID

# Element Values:

Screen	Oracle	SAS	
1	26712	1	Male
2	26713	2	Female
3	26714	9	Unknown

# Remarks:

Self-explanatory

# **P09 INJURY SEVERITY (NON-MOTORISTS)**

Screen H	leading:	Non-motorist Data		
Screen Name:		Injury S	Severity (920-E)	
Long Name:		What is the police reported injury severity for this person?		
SAS Name: Person.Inj_sev		.Inj_sev		
Oracle Name:		GES.Person.InjurySeverityID		
Element	Values:			
Screen	Oracle	SAS		
1 2 3 4	26746 26747 26748 26749	0 1 2 3	No Injury (O) Possible Injury (C) Nonincapacitating Evident Injury (B) Incapacitating Injury (A)	

		-	
5	26750	4	Fatal Injury (K)

- 6 26751 5 Injured, Severity Unknown
- 7 26752 6 Died Prior To Crash
- 8 26753 9 Unknown

## Remarks:

Enter the police reported injury severity for this person (i.e., occupant, pedestrian or nonmotorist). Most jurisdictions use the KABCO injury coding scheme.

K = Killed A = Incapacitating Injury B = Nonincapacitating Injury C = Possible Injury O = No Injury

If the police report contains a detailed description of the injuries but does not translate the injuries into the KABCO codes, use the police method for doing so. For example, injuries which are considered to be of an incapacitating nature are classified as "A", Nonincapacitating-evident injuries are classified as "B", and possible injuries are "C". Property damage only (i.e., no injury) is classified as "O".

Enter **Injured**, **Severity Unknown** if the police report indicates a "U" or in any other way communicates the idea that the person was injured but the severity is unknown.

Enter **Died Prior to Crash** only if the police explicitly states the person died prior to the crash. This code also applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning. This code does not apply if the police report specifically states that the cause of death is a results of crash-related

## **Non-Motorists**

injury or that on-set occurred after the crash. Further clarification: this code applies if the police report indicates that the person died as a result of natural causes (e.g., heart attack), disease, drug overdose or alcohol poisoning, but is silent about the time of on-set and if on-set is the result of injuries sustained in the crash.

As a general rule, if the PAR is "blank" where the injury severity is assessed and the person was at the scene during the police investigation, enter **No Injury (O)**. If the PAR is "blank" and the person was not present during the police investigation, enter **Unknown**. The following states use the KABCO injury coding scheme: Illinois (incl. Chicago), Michigan, New Mexico, North Carolina, Texas (incl. Dallas), Wisconsin, and the city of Los Angeles. Not all states use the KABCO scheme. Listed below, by state, are alternative schemes; a mapping to the GES scheme is provided.

See State PAR Translation Tables Under P09 INJURY SEVERITY (OCCUPANTS).

#### **Consistency Checks:**

#### <u>Warnings</u>

	IF	THEN
AP098	STRATUM (A23) equals 3	at least one INJURY SEVERITY (P09) should equal 2, 3 or 4.
AP144	STRATUM (A23) equals 4	INJURY SEVERITY (P09) should not equal 2, 3, 4 or 5.
AV230	STRATUM (A23) equals 4 and at least one BODY TYPE (V5) equals 60-79	no INJURY SEVERITY (P09) should equal 1, 2, 3 or 4.
PP011	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1	INJURY SEVERITY (P09) should not be blank, 0 or 9.
PP015	UNLIKELY: INJURY SEVERITY (P09)	) is equal to 6.
PP069	EJECTION (P6) equals 1 or 2	INJURY SEVERITY (P09) should not equal 0.

#### Post Entry

	IF	THEN
AP008	HARMFUL EVENT (A06) equals 06	at least one PERSON TYPE (P03) equal to 1-2, 9 must have INJURY SEVERITY (P09) equal to 1-5.
AV231	STRATUM (A23) equals 4 and no BODY TYPE (V05) equals 60-79	no INJURY SEVERITY (P09) should equal 2, 3 or 4.

PV188	(any) INJURY SEVERITY (P09) equals 1, 2, 3, 4 or 5 and (any) BODY TYPE (V05) equals 60-79	STRATUM (A23) should equal 2.
PV233	INJURY SEVERITY (P09) equals 1 and at least one BODY TYPE (V23) equals 60-79	STRATUM (A23) should not equal 4.
VP013	HARMFUL EVENT (A06) equals 06	at least one occupant of this vehicle (PERSON TYPES (P03) 1-2 or 9) must have INJURY SEVERITY (P09) equal to 1-5.
VP143	no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 2-5 and no BODY TYPE (V05) EQUALS 60-79 -or- no MANNER OF LEAVING SCENE (V19) equals 2, no INJURY SEVERITY (P09) equals 1-5 and at least one BODY TYPE (V05) EQUALS 60-79	STRATUM (A23) should equal 4.

## P10 TAKEN TO HOSPITAL OR TREATMENT FACILITY (NON-MOTORISTS)

Screen H	leading:	Non-Motorist Data			
Screen Name:		Transp	orted (930-E)		
Long Name:		Is this person transported to a hospital or another treatment facility?			
SAS Name:		Person.Hospital			
Oracle Name:		GES.Person.Treatment			
Element Values:					
Screen	Oracle	SAS			
1 2 3	1 2 3	0 1 9	No Yes Unknown		

#### Remarks:

This variable addresses transportation directly from the scene to a treatment facility. The means of transportation is not a consideration.

Enter **No** when the person is not transported directly from the scene to a hospital or treatment facility. Use this element when the person is pronounced dead-at-the-scene and is transported to a funeral home. Neither Injury severity nor treatment at the scene are a consideration.

Enter **Yes** when the PAR indicates that the person is transported directly from the scene to a hospital or treatment facility (hospital, clinic, doctor's office, etc.). The person need not have been injured. The means of transportation is not a consideration. If the person died on route to a hospital or medical facility or was pronounced dead-on-arrival at a hospital or medical facility, enter **Yes**.

Enter **Unknown** if it cannot be determined if the person is transported directly from the scene to a medical facility. Use this attribute if the police report indicates the person will "seek own medical treatment" and it cannot be determined if the person goes directly to a medical facility.

vehicle should equal 0.

## **Consistency Checks:**

	IF	THEN
VP234	HIT AND RUN (V02) equals 1 and PERSON TYPE (P03) equals 1	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) must equal 0.
<u>Warnings</u>		
	IF	
	IF	THEN
PP011	TAKEN TO HOSPITAL OR TREATMENT FACILITY (P10) equals 1	INJURY SEVERITY (P09) should not be blank, 0 or 9.

## P11 POLICE REPORTED ALCOHOL INVOLVEMENT (NON-MOTORISTS)

Screen Heading:		Non-Motorist Data			
Screen Name:		Alcoho	I (940-E)		
Long Name:		Did the police report alcohol presence or involvement for this person?			
SAS Name:		Persor	n.Per_alch		
Oracle Name:		GES.Person.Police_AlcoholID			
Element Values:					
Screen	Oracle	SAS			
1 2 3 4 5	26720 19431 26721 26723 26724	0 1 2 8 9	Not Applicable Alcohol Not Involved Alcohol Involved Not Reported Unknown (Police Reported)		

#### Remarks:

The phrase "alcohol involved" means that alcohol is present in the person (drivers of in-transport motor vehicles and non-motorists only). Involvement is not an indication that alcohol was in any way a cause of the crash, even though it may have been. If the PAR indicates that opened or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement.

**Not Applicable** is used for non-motorists who are occupants of vehicles which are not in transport.

**Alcohol Not Involved** applies if the investigating officer's assessment is that alcohol is not present in the non-motorist.

**Alcohol Involved** is coded if the police indicate alcohol presence in the non-motorist via: (1) a specific data element on the police report form, (2) the police charge the driver with DUIL, (3) the police mention in the narrative section of the report that the person had been drinking (or alcohol was present or involved) or (4) the police report has a positive BAC test result (BAC >.00).

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is present. If the police report indicates that a non-motorist was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

#### **Non-Motorists**

Enter **Not Reported** if there is a specific location on the police report for assessment of alcohol but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting alcohol presence and no other information is available.

Enter **Unknown (Police Reported)** if alcohol involvement is specifically indicated on the PAR as unknown. In general, police reports have blocks to check either positive or negative alcohol involvement. However, if a police report has provision for the investigating officer to respond "unknown involvement", then enter this element.

### **Consistency Checks:**

	IF	THEN
PP047	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.
RANGE	PERSON TYPE (P03) equals 1	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must not equal 0.
RANGE	PERSON TYPE (P03) equals 9	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.
RANGE	PERSON TYPE (P03) equals 4-8	POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must not equal 0.
RANGE	POLICE REPORTED ALCOHOL INV 8 or 9 and must not equal null.	OLVEMENT (P11) must equal 0, 1, 2,
Post Entry		

	IF	THEN
DP095	VIOLATIONS CHARGED (D02) equals 1 or 2 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 2.

## P17 POLICE REPORTED DRUG INVOLVEMENT (NON-MOTORISTS)

<b>.</b>					
Screen Heading:		Non-Motorist Data			
Screen Name:		Drugs	(945-E)		
Long Name:		Did the	e police report drug presence or involvement for this person?		
SAS Name:		Persor	n.Per_Drug		
Oracle Name:		GES.P	erson.Police_DrugID		
Element Values:					
Screen	Oracle	SAS			
1	19432	0	Not Applicable		
2	26715	1	Drugs Not Involved		
3	26716	2	Drugs Involved		
4	26718	8	Not Reported		
Б	26710	0	Linknown (Delice Reported)		

5 26719 9 Unknown (Police Reported)

## Remarks:

The phrase "other drug involvement" includes prescription and "over-the-counter" medications as well as "illicit" substances (e.g., in most cases, marijuana, cocaine, heroin, etc. where usage has not been prescribed by a doctor). Also, "other drug involvement" means that an other drug is present in the person (drivers of in-transport motor vehicles and non-motorists only). It is not an indication that the drug usage was in any way a cause of the crash, even though it may have been. If the PAR indicates that other drugs were found in the vehicle, then this information does not by itself constitute involvement.

Not Applicable is used for all non-motorists who are occupants of vehicles which are not in transport.

**Drugs Not Involved** applies if the investigating officer's assessment is that no other drugs were present in the person.

**Drugs Involved** is coded if the police indicate that other drugs are present in the person via: (1) a specific data element on the police report form or (2) the police mention in the narrative section of the report that other drugs are present in the person.

Some PARs have a block labeled "Alcohol/Drugs." If "use" is indicated, and it cannot be determined which was used (e.g., narrative, arrest/charged section, etc.), then assume alcohol is used. If the police report indicates that a non-motorist was charged with DWI (driving while intoxicated or driving while impaired) and no clarification is offered to indicate if the DWI was alcohol related or other drug related (i.e., a specific data element; mentioned in the narrative section; BAC results), then assume alcohol presence.

### **Non-Motorists**

Enter **Not Reported** if there is a specific location on the police report for assessment of other drug presence but the investigating officer fails to make either a positive or negative assessment. Also use this code If no block exists on the PAR for reporting other drugs and no other information is available.

Enter **Unknown (Police Reported)** if other drug presence is specifically indicated on the PAR as unknown. A growing number of police reports have blocks to check either positive or negative other drug presence. However, if a police report has provision for the investigating officer to respond "unknown presence", then enter this element.

## **Consistency Checks:**

<u>Errors</u>

		IF	THEN	
F	PP048	PERSON TYPE (P03) equals 2 or 3	POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0.	
F	RANGE	PERSON TYPE (P03) equals 1	POLICE REPORTED DRUG INVOLVEMENT (P17) must not equal 0.	
F	RANGE	PERSON TYPE (P03) equals 9	POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 0.	
F	RANGE PERSON TYPE (P03		POLICE REPORTED DRUG INVOLVEMENT (P17) must not equal 0.	
Post Entry				
		IF	THEN	
I	DP095	VIOLATIONS CHARGED (D02) equals 1 or 2 and PERSON TYPE (P03) equals 1	either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG	

INVOLVEMENT (P17) must equal 2.

# **P13 NON-MOTORIST LOCATION**

Screen Heading:		Non-motorist Data		
Screen Name:		Location (950-E)		
Long Name:		What is the person's location at the time of the impact?		
SAS Name:		Persor	n.Locatn	
Oracle N	lame:	GES.N	IonMotorist.LocusID	
Element	Values:			
Screen	Oracle	SAS		
n/a 1 2 3 4 5 6 7 8	null 10196 10197 10198 10199 10200 10201 10202 10203 10204	00 01 02 08 09 11 12 18 19 20	Motorist (P03=SAS 1, 2 or 9) Intersection - In Crosswalk Intersection - On Roadway Intersection - Other Intersection - Unknown Location Nonintersection - In Crosswalk Nonintersection - On Roadway Nonintersection - Other Nonintersection - Other	
9	10204	20	In Crosswalk - Unknown If Intersection	

- 9 10204 20 In Crosswalk Unknow 10 10205 98 Other Location
- 11 10206 99 Unknown Location

## Remarks:

Select the value which best represents the location of the person (i.e., pedestrian or nonmotorist) at the time of impact.

In order to use the "Intersection" elements (screen values "1", "2", "3", and "4") the pedestrian or non-motorist must have been struck in the area formed by the junction of two or more trafficways.

Enter **Intersection - In Crosswalk** if the PAR indicates that the person was in a designated crosswalk. A crosswalk is defined as a marked area (generally delineated by solid white lines) used by persons when crossing a roadway.

Enter **Intersection - On Roadway** if the person was struck in the intersection (of the roadways) or within the junction of the two trafficways outside the intersection of the two roadways but on one of the roadways. Use this element, for example, if no crosswalk is present.

Enter **Intersection - Other** if the person is on a sidewalk or island within the junction of the trafficways. Sidewalk is defined as any improved surface primarily constructed for the use of pedestrians.

Enter **Intersection - Unknown** if the person is within the junction of two trafficways but their exact location is unknown.

Screen elements values "5", "6", "7", and "8" are applicable to crashes occurring in a non-intersection area (i.e., not within the junction of two or more named trafficways but on the "road" of a named trafficway). The junction of a driveway/alley access and a named trafficway is a Non-intersection area.

Enter **Non-intersection - In Crosswalk** if the person is in a crosswalk not associated with the junction of two named trafficways (e.g., a mid-block crosswalk or a crosswalk across a named trafficway which connects a driveway).

Enter **Non-intersection - On Roadway** when the PAR indicates that the person is on a roadway and not in a crosswalk and not in the junction of two named trafficways.

Enter **Non-intersection - Other** when the person is struck on the "road" of a named trafficway but not on the roadway (i.e., in or out of a crosswalk). This element includes person-location areas commonly referred to as islands, shoulders or parking lanes. This element may also include some bicycle lanes if these lanes are adjacent to the travel lanes (i.e., the roadway).

Enter **Non-intersection - Unknown** if the person is not struck in the junction of two named trafficways nor on a roadway (in or out of a crosswalk).

Enter **In Crosswalk - Unknown If Intersection** when it is known that the person is in a crosswalk but it is unknown if the crosswalk is associated with the junction of two named trafficways.

Enter **Other Location** if the person is not struck in the junction of two named trafficways nor on the "road" of a trafficway. This element includes person-location areas commonly referred to as medians, sidewalks or "roadside" (i.e., within the trafficway but not on the "road" and not within the junction of two or more named trafficways).

Non-Motorists who are occupants of a motor vehicle not in transport are coded with respect to the location of the vehicle.

#### **Consistency Checks:**

	IF	THEN
PA127	NON-MOTORIST LOCATION (P13) equals 11, 12, 18 or 19; and EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27	RELATION TO JUNCTION (A09) must not equal 01 or 11.

RANGE	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	NON-MOTORIST'S LOCATION (P13) must equal 01, 02, 08, 09, 11, 12, 18, 19, 20, 98 or 99 and must not equal null.				
RANGE	PERSON TYPE (P03) equals 1, 2 or 9	NON-MOTORIST'S LOCATION (P13) must equal null.				
Warnings						
	IF	THEN				
AP135	RELATION TO JUNCTION (A09) equals 03 or 13 and NUMBER OF NON-MOTORISTS (A4) is greater than 00	NON-MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09.				
PA051	PERSON TYPE (P03) equals 5 and NON-MOTORIST LOCATION (P13) equals 08, 18 or 98	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620.				
PA053	NON-MOTORIST LOCATION (P13) equals 01, 02, 08 or 09 and PERSON TYPE (P03) equals 5	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760 or 0790.				
PA130	NON-MOTORIST LOCATION (P13) equals 01, 02, 08 or 09	RELATION TO JUNCTION (A09) should equal 01, 02, 11 or 12.				
PP081	PERSON TYPE (P03) equals 3	NON-MOTORIST LOCATION (P13) should not equal 01, 02, 11 or 12.				
Post Entry						

	IF	THEN
AP001	EVENT NUMBER (E01) equals 1 and HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 1	there must be at least one NON- MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20 or 99.
AP002	EVENT NUMBER (E01) equals HARMFUL EVENT (A06) equals 21, 22 or 27, and RELATION TO ROADWAY (A10) equals 2 or 7	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.
AP003	EVENT NUMBER (E01) equals HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 3	there must be at least one NON- MOTORIST LOCATION (P13) equal to 08, 18, 98 or 99.

AP004

EVENT NUMBER (E01) equals HARMFUL EVENT (A06) equals 21, 22 or 27 and RELATION TO ROADWAY (A10) equals 99 there must be at least one NON-MOTORIST LOCATION (P13) equal to 09, 19 or 99.

## P22 NON-MOTORIST STRIKING VEHICLE NUMBER

Screen Heading:		Non-Motorist Data		
Screen Name:		Harmir	Harming Vehicle # (1000-E?)	
Long Name:		Enter the non-motorist's striking vehicle number.		
SAS Name:		Person.Str_veh		
Oracle Name:		GES.NonMotorist.StrikeVehicleID		
Element Values:				
Screen	Oracle	SAS		
n/a	n/a	00	Not Applicable - Vehicle Occupant	
1-30	*	1-30	Assigned Vehicle Number	
?	?	99	Unknown	

\* The Oracle value is set equal to the value of GES.Vehicle.VehicleID for the in-transport motor vehicle which comes in contact with the non-motorist.

#### Remarks:

This variable captures the vehicle which made contact with the non-motorist being coded. The value entered must match the vehicle number of the striking vehicle.

If the non-motorist made contact with more than one vehicle, code the number of the vehicle that caused the most significant injury. If it is not possible to determine which vehicle caused the most significant injury, code the number of the vehicle which made contact first.

Code **Unknown** is used when it cannot be determined which vehicle made contact.

#### **Consistency Checks:**

<u>Errors</u>

	IF	THEN
PA201	PERSON TYPE (P03) equals 3-8 and NUMBER OF MOTOR VEHICLES (A03) equals 01	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal 01.
PP082	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is null	PERSON TYPE (P03) must not equal 3-8.

PP083	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) is equal to 01-30 or 99	PERSON TYPE (P03) must not equal 1, 2 or 9.
RANGE	PERSON TYPE (P03) equals 3, 4, 5, 6 or 8	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must be greater than 0 and must not equal null.
RANGE	PERSON TYPE (P03) equals 1, 2 or 9	NON-MOTORIST STRIKING VEHICLE NUMBER (P22) must equal null.
Post Entry		
	IF	THEN
PA200	NON-MOTORIST STRIKING VEHICL the NUMBER OF MOTOR VEHICLE to 99.	
PP082A	PERSON TYPE (P03) equals 3	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 26.
PP082A	PERSON TYPE (P03) equals 4	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.
PP082A	PERSON TYPE (P03) equals 5	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 21.
PP082A	PERSON TYPE (P03) equals 6	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 22.
PP082A	PERSON TYPE (P03) equals 8	the NON-MOTORIST'S STRIKING VEHICLE (P22) must be involved in an event where HARMFUL EVENT (A06) equals 27.
VA218	MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00; at least one PERSON TYPE (P03) equals 5 and, for this person, NON- MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.

## P18 PERSON'S PHYSICAL IMPAIRMENT (NON-MOTORISTS)

Screen Heading:	Physical Impairments
Screen Name:	Physical Impairments (970-E)
Long Name:	Did the police identify any contributory physical impairments?
SAS Name:	Person.Impairmt
Oracle Name:	GES.Impairment.ImpairID

#### **Element Values**:

Screen	Oracle	SAS	
1	26791	00	None
2	26792	01	III, Blackout
3	26793	02	Drowsy, Sleepy, Fell Asleep, Fatigued
4	26794	03	Requires Cane Or Crutches
5	26795	04	Paraplegic Or Restricted To Wheelchair
6	26796	05	Impaired Due To Previous Injury
7	26797	06	Deaf
8	26798	07	Blind
9	26799	97	Physical Impairment-No Details
10	26800	98	Other Physical Impairment
11	26801	99	Unknown If Physically Impaired

~ ~ ~

#### Remarks:

This question attempts to identify physical impairments of non-motorists which may have contributed to the cause of the crash. These impairments can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider pedestrian, non-motorist or witness statements unless verified by the investigating police officer.

Enter **None** when the PAR indicates that there were no physical impairments for this person. Also use this code if physical impairment is not reported on the PAR.

Enter **III**, **Blackout** when indicated on the PAR. Enter this element even if the source of the illness or loss of consciousness is alcohol or drug related.

Enter **Drowsy**, **Sleepy**, **Fell Asleep**, **Fatigued** when indicated on the PAR. Alcohol or other drugs may be the source of this impairment.

Enter Requires Cane Or Crutches when indicated on the PAR.

Enter **Paraplegic or Restricted to Wheelchair** if this person has to use a wheelchair or is paraplegic (may or may not have used a wheelchair).

Enter **Impaired Due To Previous Injury** if the PAR specifically indicates this condition (e.g., pedestrian is involved in this crash subsequent to his/her involvement in a previous crash in which the pedestrian was injured). This element should be extremely rare.

Enter **Deaf** when indicated on the PAR.

Enter **Blind** when indicated on the PAR.

Enter **Physical Impairment - No Details** when the PAR indicates that "some" physical impairment exists but does not clearly indicate the nature of the impairment.

Enter **Other Physical Impairment** when the PAR indicates a physical impairment that cannot be attributed to one of the other elements above (screen element values "2" through "8").

Enter **Unknown If Physically Impaired** when the PAR indicates that the person's physical condition at the time of the crash is unknown.

### **Consistency Checks:**

Errors

	IF	THEN
PA083	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 04 and PERSON TYPE (P03) equals 4	the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.
PP046	PERSON TYPE (P03) equals 2	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00.
RANGE	PERSON TYPE (P03) equals 1, 3, 4, 5, 6 or 8	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal 00, 01, 02, 03, 04, 05, 06, 07, 97, 98 or 99 and must not equal null.
RANGE	PERSON TYPE (P03) equals 2 or 9	PERSON'S PHYSICAL IMPAIRMENT (P18) must equal null.
MULTIPLE RESPONSE	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 00	no other physical impairments must be coded for this driver
MULTIPLE RESPONSE	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 97	no other physical impairments must be coded for this driver
MULTIPLE RESPONSE	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 99	no other physical impairments must be coded for this driver
MULTIPLE RESPONSE	each PERSON'S PHYSICAL IMPAIRMENT (P18) element value must be coded only once per driver.	

## <u>Warnings</u>

	IF	THEN
PP085	PERSON'S PHYSICAL IMPAIRMENT (P18) equals 07	PERSON TYPE (P03) should not equal 1.
PP046B	VIOLATIONS CHARGED (D02) equals 1	at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 98.
Post Entry		

THEN

First character of	at least one PERSON'S PHYSICAL
PEDESTRIAN/BIKE ACCIDENT	IMPAIRMENT (P18) should equal
TYPE (A24) equals 1	04.
	PEDESTRIAN/BIKE ACCIDENT

IF

# **P19 NON-MOTORIST ACTION**

Screen Heading:	Non-Motorists Actions
Screen Name:	Non-Motorists Actions (980-E)
Long Name:	What are the non-motorist's actions at the moment prior to the crash?
SAS Name:	Person.Action
Oracle Name:	GES.NonMotoristAction.ActionID
Element Values:	

Screen Oracle SAS

## Non-Motorist- Vehicle Operator

1	26765	00	No Action
2	26766	01	Failing To Have Lights On When Required
3	26767	02	Operating Without Required Equipment
4	26768	03	Improper Or Erratic Lane Changing
5	26769	04	Failure To Keep In Proper Lane Or Running Off Road
6	26770	05	Making Improper Entry To Or Exit From Trafficway
7	26771	06	Operating The Vehicle In Other Erratic, Reckless, Careless Or
			Negligent Manner
8	26772	07	Failure To Yield Right Of Way
9	26773	08	Failure To Obey Traffic Signs, Traffic Control Devices Or Traffic
			Officers, Failure To Obey Safety Zone
10	26774	09	Making Other Improper Turn
11	26775	10	Driving On Wrong Side Of Road
12	26776	98	Other Action
13	26777	99	Unknown Action

### Other Non-Motorist

1 26779 00 No Action	
2 26780 21 Darting Or Running Into Road	
3 26781 22 Improper Crossing Of Roadway Or	Intersection (Jaywalking)
4 26782 24 Inattentive (Talking, Eating, Etc.)	
5 26783 25 Jogging	
6 26784 26 Non-Motorist Pushing A Vehicle	
7 26785 27 Walking With Traffic	
8 26786 28 Walking Against Traffic	
9 26787 29 Playing, Working, Sitting, Lying, Sta	nding, etc. In Roadway
10 26788 98 Other Action	
11 26789 99 Unknown Action	

### Remarks:

This variable attempts to identify circumstances that may have contributed to the cause of the crash. These circumstances ("actions") can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider driver or witness statements unless verified by the investigating police officer.

Enter **No Action** if the PAR does not indicate (either specifically or by implication) that one of the elements listed below applies to this non-motorist. Also, use this code when Person Type (P03) = (Occupant Of A Motor Vehicle Not In-Transport) for this non-motorist or when Person Type = (Occupant of a Non-Motor Vehicle Transport Device) and this non-motorist is not the vehicle operator.

### Non-Motorist - Vehicle Operator

SAS element values "01" through "10" and "98" apply to pedalcyclists and operators (as opposed to passengers) of non-motor vehicle transport devices--see P03, Person Type, SAS element values "4" (Occupant Of A Non-motor Vehicle Transport Device) and "6" [Non-Occupant - Cyclist (Pedalcyclist)]. Occupants Of Non-motor Vehicle Transport Devices who are passengers should be coded "00" (No Action).

Enter **Failing To Have Lights On When Required** if the PAR indicates that the pedalcycle or non-motor vehicle transport device was equipped with lights but failed to have them on when required.

Enter **Operating Without Required Equipment** if the PAR indicates that this non-motorist operated the pedalcycle or non-motor vehicle transport device, for example, without installation of the proper light equipment (e.g., headlights, taillights, etc.).

Enter **Other Action** if the PAR indicates that some "other action" (other than one of those listed in SAS elements "01" through "10" above), associated with the operation of the pedalcycle or non-motor vehicle transport device, applies to this person.

SAS elements "21" through "29" and "98" apply to pedestrians or other non-motorists--see Person Type (P03), (Non-Occupant - Pedestrian), and (Non-Occupant - Other Or Unknown).

The intent of the non-motorist is crucial to the selection of the proper element. Determine the person's intent based upon the evidence available on the PAR.

### Other Non-Motorist

Enter **Darting or Running Into Road** when the person's activity just prior to impact can best be described as a sudden or impulsive dart, run, hurry, etc. movement across (as opposed to along) a road. For example, if a person's activity prior to the crash could best be described as jogging or running [see SAS element "25" (Jogging)], but just prior to the impact the non-motorist darted into the roadway, then enter this value.

Classic examples of this element include (1) children playing who suddenly run into the road to retrieve an object associated with their play (e.g. a ball), and (2) children who dash out from behind a parked car to cross the street.

Enter **Improper Crossing Of Roadway Or Intersection (Jaywalking)** if the person is engaged in crossing a road and was not in the continuation of jogging/running or did not engage in a "sudden or impulsive" dart, run, etc. Generally the crossing will be by walking; however crawling is included.

Enter **Inattentive (Talking, Eating, Etc.)** if a person is standing, sitting or lying, and perhaps waiting (e.g., chatting), but not a person walking, playing, working or jogging, and the PAR specifically indicates that the person was inattentive.

Enter **Jogging** if the person was engaged in running, jogging or moving quickly (hurrying) just prior to collision.

Enter **Walking With Traffic** is used if a person is on or over the road and is moving at a walking pace in the same direction as traffic prior to the collision; however, immediately before the impact, the person may have attempted to jump or run out of the path of the vehicle.

Enter **Walking Against Traffic** is used if a person is on or over the road and is moving at a walking pace in the opposite direction of traffic prior to the collision; however, immediately before the impact, the person may have attempted to jump or run out of the path of the vehicle.

Enter **Playing**, **Working**, **Sitting**, **Lying**, **Standing**, **etc. in Roadway** is used if a person is on or over the road and is:

Playing in the road before the vehicle arrived. The person must not have just run into the roadway after a ball, for example. Playing in the road includes ball games, fighting, grabbing hold of cars or playing "chicken" with vehicles;

Present in the road because of the requirement of his/her job. This includes police, emergency personnel, flagmen, traffic guards, roadway construction or maintenance crew, garbage men, etc., but not people who are in the street voluntarily, such as a civilian directing traffic at the scene of an crash; or

Standing, sitting, lying, etc. (but not moving) and the action does not fit in SAS element "24" [Inattentive (Talking, Eating, etc.)]

Joggers/runners can walk for a brief spell; walkers can run for short distances. When distinguishing joggers/runners (SAS element "25") from walkers (SAS elements "27" and "28") focus on the intent of the person's activity prior to their involvement in the crash.

Enter **Other Action** if the PAR indicates that an "action"--other than one which would "best fit" in the elements specifically described above, applies to this person. For example, use this element if a person is waiting to cross a road, loitering or waiting for a bus. The person can be anywhere off a road (e.g., sidewalk, median, traffic island, roadside, etc.).

Enter **Unknown Action** if the PAR indicates that some "action" is noted for this non-motorist, but the information on the PAR is insufficient or unclear to determine what action (element) to code.

# **Consistency Checks:**

## <u>Errors</u>

	IF	THEN
AP061	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0520 and PERSON TYPE (P03) equals 5	NON-MOTORIST'S ACTION (P19) must equal 21 or 22.
AP062	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0001, 0002, 0004, 0005 or 0049	at least one NON-MOTORIST'S ACTION (P19) must equal 07.
AP129	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0750 or 0840	NON-MOTORIST'S ACTION (P19) must not equal 21.
PA064	NON-MOTORIST'S ACTION (P19) equals 29	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0610 or 0620.
PP040	PERSON TYPE (P03) equals 4 or 6	NON-MOTORIST'S ACTION (P19) must not equal 21-29.
PP041	PERSON TYPE (P03) equals 5 or 8	NON-MOTORIST'S ACTION (P19) must not equal 01-10.
PP068	PERSON TYPE (P03) equals 3	NON-MOTORIST'S ACTION (P19) must equal 00.
RANGE	PERSON TYPE (P03) equals 6	NON-MOTORIST'S ACTION (P19) must equal one of the following <u>non-</u> <u>motorist - vehicle operator</u> responses: 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 98 or 99 and must not be null.
RANGE	PERSON TYPE (P03) equals 4	NON-MOTORIST'S ACTION (P19) must equal one of the following <u>non-</u> <u>motorist - vehicle operator</u> responses: 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 98, 99; the <u>other</u> <u>non-motorist</u> response 00 or null.
RANGE	PERSON TYPE (P03) equals 5 or 8	NON-MOTORIST'S ACTION (P19) must equal one of the following <u>other non-motorist</u> responses: 00, 21, 22, 24, 25, 26, 27, 28, 29, 98 or 99 and must not be null.

RANGE	PERSON TYPE (P03) equals 1	NON-MOTORIST'S ACTION (P19) must equal the <u>non-motorist -</u> <u>vehicle operator</u> response 00 or null.
RANGE	PERSON TYPE (P03) equals 2	NON-MOTORIST'S ACTION (P19) must equal the <u>other non-motorist</u> response 00 or null.
RANGE	PERSON TYPE (P03) equals 3 or 9	NON-MOTORIST'S ACTION (P19) must equal the <u>non-motorist -</u> <u>vehicle operator</u> response 00, <u>other</u> <u>non-motorist</u> response 00 or null.
MULTIPLE RESPONSE <u>Non-Motorist-Vehicle</u> <u>Operator</u>	NON-MOTORIST'S ACTION (P19) equals 00	no other non-motorist action must be coded for this non-motorist-vehicle operator.
	NON-MOTORIST'S ACTION (P19) equals 99	no other non-motorist action must be coded for this non-motorist-vehicle operator.
MULTIPLE RESPONSE	NON-MOTORIST'S ACTION (P19) equals 00	no other non-motorist action must be coded for this other non-motorist.
Other Non-Motorist	NON-MOTORIST'S ACTION (P19) equals 99	no other non-motorist action must be coded for this other non-motorist.
<u>Warnings</u>		

	IF	THEN
AP063	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0830	at least one NON-MOTORIST'S ACTION (P19) should equal 21.
PA065	NON-MOTORIST'S ACTION (P19) equals 07, NUMBER OF NON-MOTORISTS (A04) equals 01 and HARMFUL EVENT (A06) equals 22	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0001, 0002, 0003, 0004, 0005, 0018, 0019, 0021, 0026, 0040, 0049, 0097, 0098 or 0099.
PA168	NON-MOTORIST'S ACTION (P19) equals 27	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531.
PA169	NON-MOTORIST'S ACTION (P19) equals 28	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0532.
PA170	NON-MOTORIST'S ACTION (P19) equals 25	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531, 0532 or 0539.

## Post Entry

	IF	THEN
AP156	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0410 or 0430	at least one NON-MOTORIST'S ACTION (P19) must equal 29.
AP157	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0531	at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 27.
AP158	PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0532	at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 28.

# P20 NON-MOTORIST SAFETY EQUIPMENT USED

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Screen Heading:	Non-Motorist Safety Equipment
Screen Name:	Non-Motorist Safety Equipment (990-E)
Long Name:	What safety equipment did this non-motorist use?
SAS Name:	Person.Saf_Eqmt
Oracle Name:	GES.NonMotoristSafety.SafetyID

### Element Values:

Screen	Oracle	SAS	
1	26759	0	Not Applicable
2	19430	1	None Used
3	26760	2	Bicycle Helmet
4	26761	3	Reflective Equipment
n/a	n/a	4	Bicycle Helmet And Reflective Equipment
5	26763	8	Other Safety Equipment
6	26764	9	Unknown If Used

### Remarks:

This variable attempts to identify safety equipment worn or carried by the non-motorist [Person Type (P03) = (Occupant Of A Non-Motor Vehicle Transport Device), (Pedestrian), (Cyclist) or (Other or Unknown)].

Enter **None Used** when the PAR specifically states that the non-motorist was not wearing or carrying any type of safety equipment.

**N/A** is used when the non-motorist is not one of the Person Types: (Occupant Of A Non-Motor Vehicle Transport Device), (Pedestrian), (Cyclist) or (Other or Unknown).

Enter **Bicycle Helmet** when the PAR indicates that the non-motorist was wearing a bicycle safety helmet. The non-motorist does not have to be riding a bicycle at the time of the crash to use this code.

Enter **Reflective Equipment** when the PAR indicates that the non-motorist was wearing or carrying some type of reflective equipment. The emphasis is on the reflective property of the equipment and does not include devices which give off light under their own power (e.g. flashlights). The equipment can be reflective tape affixed to regular clothing, special reflective clothing, a reflective device which is worn or a reflective device which is carried. It can be made by the non-motorist and does not have to be specially designed as a safety device.

Enter Other Safety Equipment when the PAR indicates that the non-motorist was using safety equipment and it does not fit into elements: Bicycle Helmet, Reflective Equipment or Bicycle Helmet and Reflective Equipment. Any device that produces a visual signal but is not

reflective (e.g. flashlight) or any clothing that is non-reflective but considered to be safety equipment (hi-glo orange clothing) should be coded using this element.

Enter **Unknown If Used** if specifically stated on the PAR or there is no information on the PAR that the non-motorist was using safety equipment or clothing.

### **Consistency Checks:**

### <u>Errors</u>

	IF	THEN
PP072	PERSON TYPE (P03) equals 1, 2 or 9	NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0.
PP073	PERSON TYPE (P03) equals 3	NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0.
RANGE	PERSON TYPE (P03) equals 4, 5, 6 or 8	NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0, 1, 2, 3, 8 or 9 and must not equal null.
RANGE	PERSON TYPE (P03) equals 1, 2, 3 or 9	NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0 or null.
MULTIPLE RESPONSE	NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 0	no other safety equipment must be coded for this non-motorist
MULTIPLE RESPONSE	NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 1	no other safety equipment must be coded for this non-motorist
MULTIPLE RESPONSE	NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 9	no other safety equipment must be coded for this non-motorist
MULTIPLE RESPONSE	each NON-MOTORIST SAFETY EQUIPMENT USE (P20) element value must be coded only once per non-motorist.	
<u>Warnings</u>		
	IF	THEN

PP061	NON-MOTORIST SAFETY	PERSON TYPE (P03) should equal
	EQUIPMENT USE (P20) equals 2	6.