NATIONAL ACCIDENT SAMPLING SYSTEM (NASS)

Analytical User's Manual

1987 File

U.S. Department of Transportation
National Highway Traffic Safety Administration
National Center for Statistics and Analysis
Washington, D.C. 20590

TABLE OF CONTENTS

SECTION 1

INTRODUCTION

The National Accident Sampling System (NASS) is a continuous nationwide accident data collection program sponsored by the U.S. Department of Transportion. It is operated by the National Center for Statistics and Analysis (NCSA) of the National Highway Traffic Safety Administration (NHTSA).

NASS provides an automated. comprehensive national traffic accident data base. Data collection began in 1979 in 10 geographic sites. called Primary Sampling Units (PSU's). The 1987 NASS file contains data from 31 PSU's. These PSU's are monitored by 4 Zone (Quality Control) Centers. These data are 'not' weighted to represent all police reported motor vehicle accidents occurring in the USA during the year. The data are for clinical analysis only.

The structure of the NASS has been changed between 1986 and 1987. therefore comparing the 1987 file with previous years is not recommended. The changes in the NASS file include: focusing on accidents involving automobiles and automobile derivatives. light trucks with gross vehicle weight less than 10.000 pounds. and vans: selecting the accident with the most serious injury having the most recent accident date from the group of accidents listed on a given day: and the elimination of most of the pedestrian and non-motorist record. the driver record and vehicle registration information.

The 1987 NASS file is available in two automated formats: a sequential data set. or a Statistical Analysis System (SAS) data set. Hardcopy data collection records. sanitized to protect privacy. are available for review. These records contain photographic slides. scene diagrams. and vehicle damage diagrams.

This Manual and the NASS Data Collection, Coding and Editing Manual – 1987 Crashworthiness Data Subsystem are the primary documentation supporting the automated file. When using this file one should be careful to understand the coding conventions of all variables used thoroughly. In addition, the user may find the following documents helpful:

Injury Coding Manual 1985 (Revised Edition)

CRASH3 User's Guide and Technical Manual (DOT-HS-805-732)

National Accident Sampling System Sample Design. Phases 2 and 3 (DOT-HS-805-273,274,275)

Collision Deformation Classification (SAE J224 MAR 84)

The first document is available from the DOT/Transportation Systems Center (DTS-32), Kendall Square, Cambridge, Massachusetts 02142. The next two documents are available through the National Technical Information Service (NTIS), Springfield, Virginia 22161. The last document is available from the Society of Automotive Engineers (SAE), Warrendale, Pennsylvania 15096.

Comments on the content and utility of the files and primary documentation are appreciated. Please address them to the National Center for Statistics and Analysis - NRD-30, National Highway Traffic Safety Administration, U.S. Department of Transportation, 400 Seventh St., S.W., Washington, D.C. 20590.

SECTION 2

THE SAMPLING SYSTEM AND SAMPLE DESIGN

The accidents investigated in the NASS for 1987 were based on the redesign of the NASS for 1988. The redesign specifications include reducing the number of PSU's from 50 to 36 and focusing the accident investigations to include only automobiles, automobile derivatives, light trucks and vans. The 1987 NASS provided the transition from 1986 to 1988. Of the 50 PSU's that existed in 1986, 30 were reselected as part of the redesign and 1 was carried over for three months. These 31 PSU's provided the data for the 1987 NASS.

The data collection forms used in 1986 were also used in 1987 except that almost all of the pedestrian and non-motorist record, the majority of the driver record and the vehicle registration information were eliminated.

The emphasis was on the vehicle types described above and more serious injury accidents. Due to the status of the PSU's (30 were available in 1987, the remaining six would not be available until the end of 1987), the unavailability of the redesign sample system, and the new forms being developed for the 1988 system, it was not possible to produce estimates representative of the entire country.

The selection of accidents in NASS is accomplished by the following: on specified days of the week, the police jurisdictions are contacted and all accidents that qualify for the NASS for which a police accident report has been filed since the last date that jurisdiction was contacted are listed. While being listed, each accident is classified into a stratum based on accident severity.

Accidents are stratified based on the most severe injury level in the accident and the transported and towaway status for the less severe accidents. The strata are shown in Table 2.1. For example, an accident involving a light truck whose driver was killed and a passenger car whose driver was uninjured would be classified as Stratum A. Accidents from Stratum E were not selected, therefore no data was collected in this stratum.

Under this procedure each team is assigned a fixed number of
accidents to be selected on a given contact day. To select a
sample, within each stratum the accidents are sorted in
descending order by (1) Accident Date, (2) Accident Time, and (3)
FAR Number. Beginning with Stratum A and continuing through to
Stratum D, the accident with the most recent accident date, time,
and FAR number is selected. This procedure is repeated until the
case load is fulfilled.

Table 2.1
1987 NASS Accident Strata

		Most Severe Police Reported Injury				
Automobile, Automobile Derivatives, Light Trucks and Vans	Fatal	Serious Injury	Minor Injury, No Injury, or Unknown			
			Trans- ported	Nontransported		
				Towaway	Nontowaway
All Types	A	B	C	D	E	

Special Considerations in the 1987 Sample

     The 1987 NASS provided for a transition from the 1986 NASS
to the 1988 NASS. The 1987 NASS allowed for the pilot testing of
the new variables, the training for the PSU's to collect the data
for the new variables, the start-up of the six new PSU's, and
the computer mainframe to be developed. Therefore it is not
recommended that the NASS 1987 file be used to produce national
estimates or the data available. Instead, it is advised that the
data be used for clinical research - similar to the
MultiDisciplinary Accident Investigations.

SECTION 3

DERIVED VARIABLES

Most of the data presented in the NASS record layout can be identified easily as coming from accident investigation and other activities of NASS field teams. The following data elements, however, are by-products of sampling procedures used by NASS or are derived from data processing applications, such as totaling the number of injured persons in a given accident. The following list identifies the specific data elements, gives their location in the Sequential File Record Layout, and explains their derivation:

VARIABLE NAME AND LOCATION	DESCRIPTION

MAXIMUM TREATMENT
(A71)

This single place numeric value indicates the most intensive treatment given to any occupant in the accident, using the following order of codes:
  1 FATAL
  3 HOSPITALIZATION
  4 TREATED AND RELEASED
  5 TREATMENT AT SCENE
  6 TREATMENT LATER
  8 TREATMENT - OTHER
  2 FATAL - RULED DISEASE
  9 UNKNOWN
  0 NO TREATMENT
This variable is derived by scanning the TREATMENT - MORTALITY variable in each occupant record in the accident.

MAXIMUM KNOWN A.I.S.
(A72)

This single place numeric value indicates the single most severe injury level reported for any occupant in the accident, using the following order of codes:
  6 MAXIMUM (UNTREATABLE) INJURY
  5 CRITICAL INJURY
  4 SEVERE INJURY
  3 SERIOUS INJURY
  2 MODERATE INJURY
  1 MINOR INJURY
  7 INJURY, UNKNOWN SEVERITY
  9 UNKNOWN IF INJURED
  0 NOT INJURED

VARIABLE NAME AND LOCATION	DESCRIPTION

ALCOHOL INVOLVED
(A73)

This single place numeric value indicates if any involved driver were reported to have had some alcohol involvement at the time of the accident. using the following codes:

  1 YES
  2 NO
  9 UNKNOWN

This variable is derived by scanning the POLICE REPORTED ALCOHOL PRESENCE and ALCOHOL TEST RESULT variables on the driver form. The ALCOHOL INVOLVED codes are derived as follows:

  (YES) 1 - If POLICE REPORTED ALCOHOL PRESENCE equals 1 (YES) or ALCOHOL TEST RESULT equals 01-49 (positive result).

  (NO) 2 - If POLICE REPORTED ALCOHOL PRESENCE equals 0 (NO) and ALCOHOL TEST RESULT equals 00 (NONE) or 96 (NONE GIVEN).

  (UNKNOWN) 9 - If the variables shown above have any other combination of values.

NUMBER OF SERIOUSLY INJURED PERSONS
(A74-75)

This two place numeric value indicates the total number of fatally and other seriously injured occupants involved in the accident. It is derived by totaling the number of occupant records in which either the TREATMENT - MORTALITY value is coded "1" (Fatal) or the A.I.S. SEVERITY value is coded "3-6".

NUMBER OF INJURED PERSONS
(A76-77)

This two place numeric value indicates the total number of injured occupants in the accident. It is derived by totaling the number of occupant records in which either the TREATMENT-MORTALITY value is coded "1" (fatal) or the A.I.S. SEVERITY value is coded "1-7".

7

VARIABLE NAME AND LOCATION	DESCRIPTION
=========================	=======================================

DAY OF WEEK
(A78-79)

This two place numeric
value indicates on which day
of the week the accident
occured.
To protect the confidentiality of
records concerning specific accidents
used by NASS, the accident date is
not provided. Instead, the accident
record indicates year, month, and DAY
OF WEEK of accident occurrence. DAY
OF WEEK values are coded as follows:

01	Sunday	05	Thursday
02	Monday	06	Friday
03	Tuesday	07	Saturday
04	Wednesday		

MAXIMUM KNOWN PEDESTRIAN A.I.S.
(P102)

This variable contains "0" as the
PEDESTRIAN A.I.S. variables were
not collected in 1987.

PEDESTRIAN I.S.S.
(P103-104)

This variable contains "0" as the
PEDESTRIAN A.I.S. and PEDESTRIAN
BODY REGION variables were not
collected in 1987.

VIN LENGTH
(V203-204)

This two place numeric value
indicates the number of characters
in the Vehicle Identification
Number (VIN) as originally recorded.
99 denotes unknown.

NUMBER SERIOUSLY INJURED
IN THIS VEHICLE
(V206-207)

This two place numeric value
indicates the total number of
fatally and other seriously injured
occupants of the vehicle. It is
derived by totaling the number of
occupant records for the vehicle in
which either the TREATMENT- MORTALITY
value is coded "1" (fatal) or the
A.I.S. SEVERITY value is coded
"3-6".

NUMBER INJURED
IN THIS VEHICLE
(V208-209)

This two place numeric value
indicates the total number of
injured occupants of the vehicle.
It is derived by totaling the number of
occupant records for the vehicle in
which either the TREATMENT-MORTALITY
value is coded "1" (fatal) or the A.I.S
SEVERITY value is coded "1-7".

VARIABLE NAME AND LOCATION	DESCRIPTION
========================	===================================

WHEELBASE SHORT
(V210-213)

WHEELBASE LONG
(V214-217)

These four place numeric values with one implied decimal indicate the shortest and longest number of inches between a passenger car's axles for a given make. model and model year. 9999 denotes unknown. These variables are derived from the VIN using the VINA program.
NOTE: If a model has only one length value. it will be coded in the WHEELBASE SHORT variable and the WHEELBASE LONG variable will be coded 9999 (UNKNOWN).

FRONT/REAR WHEEL DRIVE
(V218)

This single place numeric value indicates which wheels of a passenger car are powered. Values are coded as follows:

1   REAR WHEEL DRIVE
2   FRONT WHEEL DRIVE
8   NOT APPLICABLE. NOT A
    PASSENGER CAR
9   UNKNOWN

This variable is derived by scanning a coded table consisting of vehicle make. vehicle model and vehicle model year. to which a "drive" code has been appended.

MAXIMUM TREATMENT
IN THIS VEHICLE
(V219)

This single place numeric value indicates the most intensive treatment given to an occupant in this vehicle. Order of coding is the same as for the accident variable MAXIMUM TREATMENT (A71).

VARIABLE NAME AND LOCATION	DESCRIPTION
================================	====================================

WEIGHT OF
THE OTHER VEHICLE
(V220-222)

This three place numeric value
indicates the weight (in pounds) of
the other vehicle, if the most
severe impact is with another
vehicle. Values are coded as
follows:

001	LESS THAN 150 POUNDS
002 - 996	150-99,649 POUNDS
997	99,650 OR MORE
998	NOT APPLICABLE (MOST SEVERE IMPACT NOT WITH ANOTHER VEHICLE OR WITH VEHICLE HITTING ITSELF)
999	UNKNOWN

This variable is derived from the
VEHICLE CURB WEIGHT as coded for
the other vehicle.

BODY TYPE OF
THE OTHER VEHICLE
(V223-224)

This two place numeric value indi-
cates the body type of the other
vehicle if the most severe impact is
with another vehicle. If not, the
value is coded as follows:

98 - NOT APPLICABLE (Most severe
impact not with another vehicle
or with vehicle hitting itself).

This variable is derived from the BODY
TYPE as coded for the other vehicle.

MAXIMUM KNOWN
A.I.S. in this
Vehicle
(V225)

This single place numeric value
indicates the most severe injury
level reported for an occupant in
this vehicle.
Order of codes is the same as for the
accident variable MAXIMUM KNOWN AIS
(A72).

MAXIMUM KNOWN
OCCUPANT A.I.S.
(O108)

This single place numeric value
indicates the most severe injury
level reported for this occupant.
Order of codes is the same as for
the accident variable MAXIMUM KNOWN
A.I.S. (A72).

VARIABLE NAME AND LOCATION
==========================

DESCRIPTION
==

OCCUPANT I.S.S.
(0109-110)

This two place numeric value
provides an index score indicating
the relative severity of overall
injury to the individual vehicle
occupant. It is derived by adding
the squares of the highest A.I.S.
SEVERITY entries in each of the
three most severely injured body
regions. For example:

An Occupant suffered serious injury
(A.I.S.=3) to the legs (Body Region
5), moderate injury (A.I.S.=2) to
the pelvic area (Body Region 4), and
moderate to minor injuries elsewhere
(A.I.S.=2). The resulting I.S.S. is
the sum of the squares of these
three A.I.S. Severity scores:
(3**2) + (2**2) + (2**2) or 17.

11

Pos	Field	Group
1, 2	PSU NUMBER	IDENTIFICATION
3, 4, 5, 6	CASE NUMBER	
7	RECORD NUMBER	
8	///////////////////////////	
9	VERSION NUMBER	
10	///////////////////////////	
11	TYPE OF CASE	
12, 13	MONTH OF ACCIDENT	
14, 15	///////////////////////////	
16, 17	YEAR OF ACCIDENT	
18	///////////////////////////	
19, 20	NUMBER OF VEHICLE FORMS SUBMITTED	
21, 22	NO. OF PEDESTRIAN & NON-OCCUPANT FORMS SUBMITTED	
23, 24	FIRST HARMFUL EVENT	
25	MANNER OF COLLISION	
26	RELATION TO ROADWAY	
27, 28, 29, 30	TIME OF DAY OF ACCIDENT	AMBIENT CONDITIONS
31	LIGHT CONDITIONS	
32	ATMOSPHERIC CONDITIONS	
33, 34	RELATION TO JUNCTION	
35	INTERCHANGE GEOMETRY	
36	SCHOOL ZONE	
37	SCHOOL BUS RELATED	
38	RIGHT OR LEFT TURN ON RED	
39, 40	DRIVER LEVEL ENVIRONMENTAL DATA	
41	///////////////////////////	
42	///////////////////////////	
43	///////////////////////////	
44	///////////////////////////	
45	///////////////////////////	
46	///////////////////////////	

Pos	Field	Group
47, 48, 49, 50, 51, 52, 53, 54		
55, 56, 57, 58, 59, 60, 61, 62		
63, 64, 65, 66, 67, 68, 69, 70		
71	MAXIMUM TREATMENT	DERIVED VARIABLES
72	MAXIMUM KNOWN AIS	
73	ALCOHOL INVOLVEMENT	
74, 75	NUMBER OF SERIOUSLY INJURED PERSONS	
76, 77	NUMBER OF INJURED PERSONS	
78, 79	DAY OF WEEK OF ACCIDENT	

ACCIDENT RECORD

PEDESTRIAN/NONMOTORIST RECORD

IDENTIFICATION

Field	Label
1,2	PSU NUMBER
3,4,5,6	CASE NUMBER-STRATIFICATION
7	RECORD NUMBER
8	////////////
9	VERSION NUMBER
10	////////////TH

INTERVIEW

Field	Label
11,12	PEDESTRIAN OR NONMOTORIST'S NUMBER
13	PEDESTRIAN/NONMOTORIST TYPE
14,15	PEDESTRIAN/NONMOTORIST AGE
16	PEDESTRIAN/NONMOTORIST'S SEX
17,18	PEDESTRIAN/NONMOTORIST'S HEIGHT
19,20,21	PEDESTRIAN/NONMOTORIST'S WEIGHT
22,23	PEDESTRIAN/NONMOTORIST'S LOCATION
24	DISTANCE FROM INTER.
25,26	PEDESTRIAN ACTIVITY
27	TREATMENT-MORTALITY
28,29	HOSPITAL STAY
30,31	WORKING DAYS LOST
32	VEH. CONTACTED PED.

PEDESTRIAN INJURY CLASSIFICATION

1ST INJURY

Field	Label
33	BODY REGION
34	ASPECT
35	LESION
36	SYSTEM/ORGAN
37	AIS SEVERITY
38,39	INJURY SOURCE
40	DIR./INDIR. INJ.
41,42	SOURCE OF DATA

2ND INJURY

Field	Label
43	BODY REGION
44	ASPECT
45	LESION
46	SYSTEM/ORGAN
47	AIS SEVERITY
48,49	INJURY SOURCE
50	DIR./INDIR. INJ.
51,52	SOURCE OF DATA

PEDESTRIAN INJURY CLASSIFICATION (CONTINUED)

3RD INJURY

Field	Label
53	BODY REGION
54	ASPECT
55	LESION
56	SYSTEM/ORGAN
57	AIS SEVERITY
58,59	INJURY SOURCE
60	DIR./INDIR. INJ.
61,62	SOURCE OF DATA

4TH INJURY

Field	Label
63	BODY REGION
64	ASPECT
65	LESION
66	SYSTEM/ORGAN
67	AIS SEVERITY
68,69	INJURY SOURCE
70	DIR./INDIR. INJ.
71,72	SOURCE OF DATA

5TH INJURY

Field	Label
73	BODY REGION
74	ASPECT
75	LESION
76	SYSTEM/ORGAN
77	AIS SEVERITY
78,79	INJURY SOURCE
80	DIR./INDIR. INJ.
81,82	SOURCE OF DATA

6TH INJURY

Field	Label
83	BODY REGION
84	ASPECT
85	LESION
86	SYSTEM/ORGAN
87	AIS SEVERITY
88,89	INJURY SOURCE
90	DIR./INDIR. INJ.
91,92	SOURCE OF DATA

OFFICIAL RECORD

Field	Label
93	INJURY SEVERITY
94,95	TIME TO DEATH
96	TRAFFIC VIOLATION
97	ALCOHOL PRESENCE
98	ALCOHOL TEST RESULT
100,101	PEDESTRIAN RELATED FACTORS

DERIVED

Field	Label
102	MAXIMUM KNOWN AIS
103,104	INJURY SEVERITY SCORE

Left Column

#	Field	Section
1, 2	PSU NUMBER	IDENTIFICATION
3, 4, 5, 6	CASE NUMBER-STRATIFICATION	
7	RECORD NUMBER	
8	///////////////////////////////////////	
9	VERSION NUMBER	
10	///////////////////////////////////////	
11, 12	VEHICLE NUMBER	
13, 14	NUMBER OF OCCUPANT FORMS SUBMITTED	EXTERIOR ITEMS
15	VEHICLE ROLE	
16	MANNER OF LEAVING SCENE	
17	HIT AND RUN INVOLVEMENT	
18, 19	VEHICLE MODEL YEAR	
20, 21	VEHICLE MAKE	
22, 23	VEHICLE MODEL	
24	REGISTRATION OF VEHICLE	
25, 26, 27, 28, 29, 30, 31, 32, 33, 34	VEHICLE IDENTIFICATION NUMBER	
35, 36, 37, 38, 39, 40, 41	///	
42, 43	BODY TYPE	
44	TOWED TRAILING UNIT	
45, 46	SEATING CAPACITY/TRUCK VOCATION	
47	AXLE	1ST TIRE
48	TIRE	
49	CONDITION	
50	AXLE	2ND TIRE
51	TIRE	
52	CONDITION	
53	AXLE	3RD TIRE

VEHICLE RECORD

Right Column

#	Field	Section
54	TIRE	3RD TIRE CONT. / EXTERIOR ITEMS CONT.
55	CONDITION	
56	AXLE	4TH TIRE
57	TIRE	
58	CONDITION	
59	LEFT OUTSIDE MIRROR	
60	RIGHT OUTSIDE MIRROR	
61	OVERRIDE/UNDERRIDE	
62	REAR TURN SIGNAL COLOR	
63	CAB CONFIGURATION	
64	NUMBER OF AXLES-POWER UNIT	MEDIUM/HEAVY TRUCK & BUS DATA
65	NUMBER OF AXLES-1ST TRAILER	
66	NUMBER OF AXLES-2ND TRAILER	
67	NUMBER OF AXLES-3RD TRAILER	
68	FIRST TRAILER LENGTH	
69	SECOND TRAILER LENGTH	
70	THIRD TRAILER LENGTH	
71, 72, 73	MAXIMUM OVERALL WIDTH	
74, 75, 76	MAXIMUM OVERALL LENGTH	
77	TYPE OF BRAKES	
78	GROSS VEHICLE WEIGHT RATING (GVWR)	
79	VEHICLE SEQUENCE NUMBER	CDC/TDC HIGHEST DELTA "V" / DEFORMATION CLASSIFICATION
80, 81	OBJECT CONTACTED	
82, 83	DIRECTION OF FORCE	
84	DEFORMATION LOCATION	
85	LONG./LATERAL LOCATION	
86	VERT./LATERAL LOCATION	
87	TYPE OF DAMAGE DISTRIBUTION	
88, 89	DEFORMATION EXTENT GUIDE	
90	ACCIDENT SEQUENCE NUMBER	
91	VEHICLE SEQUENCE NUMBER	CDC/TDC FOURTH HIGHEST DELTA "V"
92, 93	OBJECT CONTACTED	
94, 95	DIRECTION OF FORCE	
96	DEFORMATION LOCATION	
97	LONG./LATERAL LOCATION	

14

Left column

#	Field	Group
98	VERT./LATERAL LOCATION	
99	TYPE OF DAMAGE DISTRIBUTION	
100 / 101	DEFORMATION EXTENT GUIDE	HIGHEST DELTA "V"
102	ACCIDENT SEQUENCE NUMBER	
103 / 104 / 105 / 106	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - L	
107 / 108 / 109	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - C1	
110 / 111 / 112	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - C2	
113 / 114 / 115	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - C3	
116 / 117 / 118	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - C4	
119 / 120 / 121	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - C5	
122 / 123 / 124	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - C6	
125 / 126 / 127 / 128	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - D	CRASH PROFILE
129 / 130 / 131 / 132	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - L	
133 / 134 / 135	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - C1	
136 / 137 / 138	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - C2	
139 / 140 / 141	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - C3	
142 / 143 / 144	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - C4	
145 / 146 / 147	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - C5	
148 / 149 / 150	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - C6	
151 / 152 / 153 / 154	CRASH DAMAGE DATA FOR 2ND HIGHEST DELTA "V" - D	
155	MORE THAN 2 CDC/TDC	

VEHICLE RECORD (CONTINUED)

Right column

#	Field	Sub-group	Group
156	VEHICLE SPECIAL USE		
157 / 158 / 159	ODOMETER READING		
160	PASSENGER COMPARTMENT INTEGRITY		
161 / 162	INTRUDING COMPONENT	DRIVER AREA	
163	MAG. OF INTRUSION		
164 / 165	INTRUDING COMPONENT	OTHER FRONT AREA	FRONT OCCUPANT AREA INTRUSION
166	MAG. OF INTRUSION		
167 / 168	INTRUDING COMPONENT	PASSENGER AREA	
169	MAG. OF INTRUSION		
170 / 171	INTRUDING COMPONENT	OTHER PASSENGER AREA	
172	MAG. OF INTRUSION		
173	STEERING COL. SEPARATION		
174	STEERING RIM DEFORMATION		
175	FIRE OCCURRENCE		
176	MOST SEVERE IMPACT ROLE		
177	ROLE OF OTHER CONTACTED PARTY		
178	ROLLOVER		
179	JACKKNIFE		
180	HAZARDOUS CARGO		
181 / 182 / 183	VEHICLE CURB WEIGHT		VEHICLE WEIGHT
184 / 185 / 186	VEHICLE CARGO WEIGHT		
187	CARGO WEIGHT INFO SOURCE		
188	BASIS FOR TOTAL DELTA "V"		
189 / 190	TOTAL DELTA "V"		
191 / 192 / 193	LONGITUDINAL COMPONENT OF DELTA "V"		RECONSTRUCTION RESULTS
194 / 195 / 196	LATERAL COMPONENT OF DELTA "V"		
197 / 198 / 199 / 200	ENERGY ABSORPTION		
201 / 202	TRAVEL SPEED		
203 / 204	VIN LENGTH		
205	///////////////////////////////		

206 207	NUMBER OF SERIOUSLY INJURED IN THIS VEHICLE	
208 209	NUMBER INJURED IN THIS VEHICLE	
210 211 212 213	WHEELBASE - SHORT	DERIVED (CONTINUED)
214 215 216 217	WHEELBASE - LONG	
218	FRONT/REAR WHEEL DRIVE	
219	MAXIMUM TREATMENT	
220 221 222	WEIGHT OF THE OTHER VEHICLE	
223 224	BODY TYPE OF THE OTHER VEHICLE	
225	MAXIMUM KNOWN AIS	

VEHICLE RECORD (CONTINUED)

16

DRIVER RECORD (left column)

#	Field	Section
1,2	PSU NUMBER	IDENTIFICATION
3,4,5,6	CASE NUMBER-STRATIFICATION	
7	RECORD NUMBER	
8	////////////////////////	
9	VERSION NUMBER	
10	////////////////////////	
11,12	VEHICLE NUMBER	
13,14	NUMBER OF OCCUPANTS THIS MOTOR VEHICLE	INTERVIEW
15	DRIVER PRESENCE IN VEHICLE	
16,17	MONTHS DRIVING EXPERIENCE THIS CLASS OF VEHICLE	
18,19,20	ESTIMATED MILEAGE THIS VEHICLE	
21,22,23	TOTAL MILEAGE ALL VEHICLES	
24	DRIVER EDUCATION	
25	TIME SINCE LAST DR. TRAIN	
26	FREQUENCY DRIVING ROAD	
27	TYPE OF OPERATION/CARRIER	
28	FEDERAL SAFETY REGULATED	
29	DRIVER'S CLASSIFICATION	
30,31	ACCIDENT TYPE	PRE-CRASH
32,33	ATTEMPTED AVOIDANCE MANEUVER	
34,35	DRIVER RELATED FACTOR	
36,37	1ST VIOLATION CHARGED	
38,39	2ND VIOLATION CHARGED	
40	ALCOHOL PRESENCE	OFFICIAL RECORD
41,42	ALCOHOL TEST RESULTS	
43	DRIVER LICENSE STATUS	
44	DRIVER LIC. TYPE COMPLIANCE	
45	DRIVER LIC. RESTRICTION	
46	PREVIOUS SPEEDING CONVICTION	
47	PREVIOUS OTHER HARMFUL MOVING	
48	PREVIOUS DWI CONVICTIONS	

(right column)

#	Field	Section
49	PREVIOUS SUSPENSION/REVOC	CONT.
50	PREVIOUS RECORDED ACCIDENTS	
51	FEDERAL AID SYSTEM	ADMINISTRATIVE TIME
52	CLASS TRAFFICWAY	
53,54	ROADWAY FUNCTION CLASS	
55	NUMBER OF TRAVEL LANES	ENVIRONMENTAL DATA
56,57,58	LANE WIDTH	
59	MEDIAN TYPE	
60,61	MEDIAN WIDTH	
62	ACCESS CONTROL	
63	TRAFFICWAY FLOW	
64	LEFT SHOULDER TYPE	
65	RIGHT SHOULDER TYPE	
66	ROADWAY ALIGNMENT	
67	CROSS SLOPE	
68,69,70	SUPERELEVATION	
71,72,73	DEGREE OF CURVATURE	
74,75,76	GRADE MEASUREMENT	
77	ROADWAY PROFILE	
78	ROADWAY SURFACE TYPE	
79	ROADWAY SURFACE CONDITION	
80,81	SPEED LIMIT	
82	RESTR. OF ROADWAY	
83,84	TRAFFIC CONTROL DEVICE	
85	TRAF. CNTL FUNC	
86	DESIGNATED TRUCK SYSTEM	
87,88	ENVIRONMENTAL RELATED FACTORS	

DRIVER RECORD

17

OCCUPANT RECORD

IDENTIFICATION

Columns	Field
1,2	PSU NUMBER
3,4,5,6	CASE NUMBER-STRATIFICATION
7	RECORD NUMBER
8	////////////////////////////
9	VERSION NUMBER
10	////////////////////////////
11,12	VEHICLE NUMBER
13,14	OCCUPANT NUMBER

TREATMENT

Columns	Field
15,16	OCCUPANT'S AGE
17	OCCUPANT'S SEX
18,19	OCCUPANT'S HEIGHT
20,21,22	OCCUPANT'S WEIGHT
23	OCCUPANT'S ROLE
24,25	OCCUPANT'S SEAT POSITION
26	ENTRAPMENT
27	EJECTION
28	EJECTION AREA
29	EJECTION MEDIUM
30	MEDIUM STATUS
31	TREATMENT - MORTALITY
32,33	HOSPITAL STAY
34,35	WORKING DAYS LOST

OCCUPANT INJURY CLASSIFICATION

Columns	Field
36,37	CHILD RESTRAINT MAKE/MODEL
38	TYPE OF CHILD RESTRAINT
39	CHILD SEAT ORIENTATION
40	CHILD RESTRAINT HARNESS
41	MANUAL RESTRAINT SYSTEM AVAIL.
42	MANUAL RESTRAINT SYSTEM USE
43	AUTOMATIC RESTRAINT SYSTEM AVAIL.
44	AUTOMATIC RESTRAINT FUNCTION

1ST INJURY:
45	BODY REGION
46	ASPECT
47	LESION

OCCUPANT INJURY CLASSIFICATION (CONTINUED)

1ST INJURY CONT.:
Columns	Field
48	SYSTEM/ORGAN
49	AIS SEVERITY
50,51	INJURY SOURCE
52	DIR./INDIR, INJ.
53,54	SOURCE OF DATA

2ND INJURY:
55	BODY REGION
56	ASPECT
57	LESION
58	SYSTEM/ORGAN
59	AIS SEVERITY
60,61	INJURY SOURCE
62	DIR./INDIR, INJ.
63,64	SOURCE OF DATA

3RD INJURY:
65	BODY REGION
66	ASPECT
67	LESION
68	SYSTEM/ORGAN
69	AIS SEVERITY
70,71	INJURY SOURCE
72	DIR./INDIR, INJ.
73,74	SOURCE OF DATA

4TH INJURY:
75	BODY REGION
76	ASPECT
77	LESION
78	SYSTEM/ORGAN
79	AIS SEVERITY
80,81	INJURY SOURCE
82	DIR./INDIR, INJ.
83,84	SOURCE OF DATA

5TH INJURY:
85	BODY REGION
86	ASPECT
87	LESION
88	SYSTEM/ORGAN
89	AIS SEVERITY
90,91	INJURY SOURCE

OCCUPANT INJURY CLASSIFICATION (CONTINUED)

5TH INJURY CONT.:
Columns	Field
92	DIR./INDIR, INJ.
93,94	SOURCE OF DATA

6TH INJURY:
95	BODY REGION
96	ASPECT
97	LESION
98	SYSTEM/ORGAN
99	AIS SEVERITY
100,101	INJURY SOURCE
102	DIR./INDIR, INJ.
103,104	SOURCE OF DATA

OTHER:
| 105 | INJURY SEVERITY |
| 106,107 | TIME TO DEATH |

DERIVED:
| 108 | MAXIMUM KNOWN AIS |
| 109,110 | INJURY SEVERITY SCORE |

SECTION 5

SAS FILE

NASS data are available in the form of a Statistical
Analysis System (SAS) file. SAS is a highly flexible statistical
package that provides a high level programming language for
effective matrix manipulation. and data management facilities.

SAS is a non-hierarchial data base. The SAS data base for
NASS consists of five individual data sets. one for each of the
five NASS record levels. i.e. Accident, Pedestrian. Vehicle.
Driver. and Occupant. Using modified relational database
concepts. SAS allows the natural hierarchial structure of NASS
data to be fully explored by the analyst. An analyst can create
a new SAS data set by merging data from several levels of the
NASS hierarchy--e.g.. vehicle and driver levels--through use of
an appropriate set of SAS commands within the DATA step.

SAS Data Base Contents

The variable names in the NASS/SAS data base are from the
data collection forms and are limited to eight characters. The
SAS data base is generally an exact representation of the data
contained on the NASS master file. The only exceptions are the
following:

    - Numeric variables for which 9. 99. etc. represent
    "unknown" are recoded to the SAS special missing value .U
    ("dot-u") and are not included in percentage tabulations:

    - The value of 95 ("test refused") for Driver Alcohol
    Test Results (ALCTEST) has been recoded to .B: the value
    of 96 ("not given") has been recoded to .C: the value of
    97 ("performed. results unknown") has been recoded to .D:
    and the value of 99 ("unknown") has been recoded to .U:
    these values are not included in percentage tabulations;

    - Missing data for numeric values are recoded as "." in
    SAS and are not included in percentage tabulations;

19

- Numeric variables not not coded on the accident, pedestrian, vehicle, driver and occupant forms in 1987 have been recoded to .N (Not Collected);

- Hour of Day (Time) is stored as a SAS time value, and has an output format of HHMM5.

PSU NUMBER (PSU), CASE NUMBER-STRATIFICATION (CASEID) and SEQUENCE NUMBER (CASENO) are identical variables across all NASS records. CASENO is the first three digits of CASEID. Therefore, PSU and either CASENO or CASEID can be used to merge NASS record levels. Similarly, VEHICLE NUMBER (VEHNO) is identical in the Vehicle, Driver, and Occupant record levels and can be used to merge these records in the DATA step.

The remainder of this Section presents the SAS layout for the 1987 NASS. In general, the order of variables in the SAS data sets follows the order of data fields on the master file (and thus the order of items on the data collection forms used by NASS investigation teams). The user can invoke PROC CONTENTS to produce the following list of SAS variables:

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
25	AAIS	NUM	2	56			MAXIMUM KNOWN AIS IN ACCIDENT
27	AINJSER	NUM	2	60			NUMBER OF SERIOUSLY INJURED PERSONS
28	AINJURED	NUM	2	62			TOTAL NUMBER OF INJURED PERSONS
26	ALCINV	NUM	2	58			ALCOHOL INVOLVED ACCIDENT
24	ATREAT	NUM	2	54			MAXIMUM TREATMENT IN ACCIDENT
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	NUM	3	10			SEQUENCE NUMBER
29	DAYWEEK	NUM	2	64			DAY OF WEEK
23	ENVIRON	NUM	2	52			ENVIRONMENTAL DATA
19	GEOMETRY	NUM	2	44			INTERCHANGE GEOMETRY
10	HARMEV1	NUM	2	24			FIRST HARMFUL EVENT
16	LGTCOND	NUM	2	38			LIGHT CONDITIONS
11	MANCOLL	NUM	2	26			MANNER OF COLLISION (BASED ON F.H.E.)
8	MONTH	NUM	2	20			MONTH OF ACCIDENT
13	PEDFORMS	NUM	2	30			NUMBER OF PED/NONMOTOR FORMS SUBMITTED
1	PSU	NUM	2	4			PSU NUMBER
5	RECNO	NUM	2	14			RECORD NUMBER
18	RELJUNC	NUM	2	42			RELATION TO JUNCTION
14	RELROAD	NUM	2	32			RELATION TO ROADWAY (LOCATION OF F.H.E.)
21	SCHBUS	NUM	2	48			SCHOOL BUS-RELATED
20	SCHZONE	NUM	2	46			ACCIDENT OCCURRENCE IN SCHOOL ZONE
4	STRATIF	CHAR	1	13			INITIAL STRATIFICATION
15	TIME	NUM	4	34	HHMM5.		TIME OF ACCIDENT
22	TURNRED	NUM	2	50			TURN ON RED RELATED
6	TYPECASE	NUM	2	16			TYPE OF CASE
12	VEHFORMS	NUM	2	28			NUMBER OF VEHICLE FORMS SUBMITTED
7	VERSION	NUM	2	18			VERSION NUMBER
17	WEATHER	NUM	2	40			ATMOSPHERIC CONDITIONS
9	YEAR	NUM	2	22			YEAR OF ACCIDENT

21

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
37	AIS1	NUM	2	54			AIS SEVERITY (FIRST)
38	AIS2	NUM	2	56			AIS SEVERITY (SECOND)
39	AIS3	NUM	2	58			AIS SEVERITY (THIRD)
40	AIS4	NUM	2	60			AIS SEVERITY (FOURTH)
41	AIS5	NUM	2	62			AIS SEVERITY (FIFTH)
42	AIS6	NUM	2	64			AIS SEVERITY (SIXTH)
19	ASPECT1	CHAR	1	36			ASPECT (FIRST)
20	ASPECT2	CHAR	1	37			ASPECT (SECOND)
21	ASPECT3	CHAR	1	38			ASPECT (THIRD)
22	ASPECT4	CHAR	1	39			ASPECT (FOURTH)
23	ASPECT5	CHAR	1	40			ASPECT (FIFTH)
24	ASPECT6	CHAR	1	41			ASPECT (SIXTH)
13	BODYREG1	CHAR	1	30			OIC BODY REGION (FIRST)
14	BODYREG2	CHAR	1	31			OIC BODY REGION (SECOND)
15	BODYREG3	CHAR	1	32			OIC BODY REGION (THIRD)
16	BODYREG4	CHAR	1	33			OIC BODY REGION (FOURTH)
17	BODYREG5	CHAR	1	34			OIC BODY REGION (FIFTH)
18	BODYREG6	CHAR	1	35			OIC BODY REGION (SIXTH)
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	NUM	3	10			SEQUENCE NUMBER
12	CONTACT	NUM	3	28			VEHICLE WHICH CONTACTED PEDESTRIAN
55	DIRINJ1	NUM	2	90			DIRECT/INDIRECT INJURY (FIRST)
56	DIRINJ2	NUM	2	92			DIRECT/INDIRECT INJURY (SECOND)
57	DIRINJ3	NUM	2	94			DIRECT/INDIRECT INJURY (THIRD)
58	DIRINJ4	NUM	2	96			DIRECT/INDIRECT INJURY (FOURTH)
59	DIRINJ5	NUM	2	98			DIRECT/INDIRECT INJURY (FIFTH)
60	DIRINJ6	NUM	2	100			DIRECT/INDIRECT INJURY (SIXTH)
10	DISTANCE	NUM	2	24			DISTANCE FROM INTERSECTION
43	INJSOU1	NUM	2	66			INJURY SOURCE (FIRST)
44	INJSOU2	NUM	2	68			INJURY SOURCE (SECOND)
45	INJSOU3	NUM	2	70			INJURY SOURCE (THIRD)
46	INJSOU4	NUM	2	72			INJURY SOURCE (FOURTH)
47	INJSOU5	NUM	2	74			INJURY SOURCE (FIFTH)
48	INJSOU6	NUM	2	76			INJURY SOURCE (SIXTH)
64	ISS	NUM	2	108			ISS
25	LESION1	CHAR	1	42			LESION (FIRST)
26	LESION2	CHAR	1	43			LESION (SECOND)
27	LESION3	CHAR	1	44			LESION (THIRD)
28	LESION4	CHAR	1	45			LESION (FOURTH)
29	LESION5	CHAR	1	46			LESION (FIFTH)
30	LESION6	CHAR	1	47			LESION (SIXTH)
63	MAIS	NUM	2	106			MAXIMUM KNOWN OCC/PED/NM AIS
65	PAGE	NUM	2	110			AGE OF PERSON (P)
75	PALCTEST	NUM	2	130			ALCOHOL TEST RESULTS (P)
73	PDEATH	NUM	2	126			TIME TO DEATH (P)
74	PDRINKNG	NUM	2	128			ALCOHOL PRESENCE (P)
11	PEDACT	NUM	2	26			PEDESTRIAN ACTIVITY
9	PEDLOC	NUM	2	22			PEDESTRIAN LOCATION

#	Name	Type	Width	Position	Description
62	PEDRF	NUM	2	104	PEDESTRIAN RELATED FACTORS
7	PERNO	NUM	2	18	PEDESTRIAN/NONMOTORIST'S NUMBER
8	PERTYPE	NUM	2	20	PEDESTRIAN/NONMOTORIST'S TYPE
67	PHEIGHT	NUM		114	HEIGHT OF PERSON (P)
70	PHOSPSTY	NUM		120	HOSPITAL STAY (P)
72	PINJSEV	NUM		124	INJURY SEVERITY (POLICE RATING) (P)
66	PSEX	NUM		112	SEX OF PERSON (P)
1	PSU	NUM		4	PSU NUMBER
69	PTRETMNT	NUM		118	TREATMENT-MORTALITY (P)
68	PWEIGHT	NUM		116	WEIGHT OF PERSON (P)
71	PWORKDYS	NUM		122	WORKING DAYS LOST (P)
5	RECNO	NUM		14	RECORD NUMBER
49	SOUDAT1	NUM		78	SOURCE OF DATA (FIRST)
50	SOUDAT2	NUM		80	SOURCE OF DATA (SECOND)
51	SOUDAT3	NUM		82	SOURCE OF DATA (THIRD)
52	SOUDAT4	NUM		84	SOURCE OF DATA (FOURTH)
53	SOUDAT5	NUM		86	SOURCE OF DATA (FIFTH)
54	SOUDAT6	NUM		88	SOURCE OF DATA (SIXTH)
4	STRATIF	CHAR	1	13	INITIAL STRATIFICATION
31	SYSORG1	CHAR	1	48	SYSTEM/ORGAN (FIRST)
32	SYSORG2	CHAR	1	49	SYSTEM/ORGAN (SECOND)
33	SYSORG3	CHAR	1	50	SYSTEM/ORGAN (THIRD)
34	SYSORG4	CHAR	1	51	SYSTEM/ORGAN (FOURTH)
35	SYSORG5	CHAR	1	52	SYSTEM/ORGAN (FIFTH)
36	SYSORG6	CHAR	1	53	SYSTEM/ORGAN (SIXTH)
6	VERSION	NUM		16	VERSION NUMBER
61	VIOLCHG	NUM	2	102	TRAFFIC VIOLATION CHARGED – PED/NONMOTOR

CONTENTS OF SAS DATA SET NASSANL.VEHICLE

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
64	ACCSEQ1	NUM	2	132			EVENT NUMBER IN ACCIDENT (HIGHEST)
65	ACCSEQ2	NUM	2	134			EVENT NUMBER IN ACCIDENT (2ND HIGHEST)
37	AXLESP	NUM	2	86			NUMBER OF AXLES (POWER UNIT)
38	AXLEST1	NUM	2	88			NUMBER OF AXLES (1ST TRAILER)
39	AXLEST2	NUM	2	90			NUMBER OF AXLES (2ND TRAILER)
40	AXLEST3	NUM	2	92			NUMBER OF AXLES (3RD TRAILER)
17	BODYTYPE	NUM	2	46			BODY TYPE
46	BRAKETY	NUM	2	104			TYPE OF BRAKE ACTUATION
36	CABCONF	NUM	2	84			CAB CONFIGURATION
103	CARGOWGT	NUM	3	228			VEHICLE CARGO WEIGHT
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	NUM	3	10			SEQUENCE NUMBER
102	CURBWGT	NUM	3	225			VEHICLE CURB WEIGHT
82	DOCCDC	NUM	2	184			DOCUMENTATION MORE THAN TWO CDC/TDC
88	DOCCMPNT	NUM	2	197			DOCUMENTATION OTHER (INTRUDING COMPONENT)
52	DOF1	NUM	2	116			DIRECTION OF FORCE (HIGHEST)
53	DOF2	NUM	2	118			DIRECTION OF FORCE(2ND HIGHEST)
89	DOINTRSN	NUM	2	199			DRIVER OTHER (MAGNITUDE OF INTRUSION)
86	DPCOMPNT	NUM	2	193			DRIVER PRIMARY (INTRUDING COMPONENT)
87	DPINTRSN	NUM	2	195			DRIVER PRIMARY (MAGNITUDE OF INTRUSION)
115	DRIVE	NUM	2	254			FRONT/REAR WHEEL DRIVE
105	DVBASIS	NUM	2	233			BASIS FOR TOTAL DELTA V (HIGHEST)
67	DVC1	NUM	3	139			'CRASH' DAMAGE DATA MAX DELTA V - C1
68	DVC2	NUM	3	142			'CRASH' DAMAGE DATA MAX DELTA V - C2
69	DVC3	NUM	3	145			'CRASH' DAMAGE DATA MAX DELTA V - C3
70	DVC4	NUM	3	148			'CRASH' DAMAGE DATA MAX DELTA V - C4
71	DVC5	NUM	3	151			'CRASH' DAMAGE DATA MAX DELTA V - C5
72	DVC6	NUM	3	154			'CRASH' DAMAGE DATA MAX DELTA V - C6
73	DVD	NUM	3	157			'CRASH' DAMAGE DATA MAX DELTA V - D
66	DVL	NUM	3	136			'CRASH' DAMAGE DATA MAX DELTA V - L
108	DVLAT	NUM	2	239			LATERAL COMPONENT OF DELTA V
107	DVLONG	NUM	2	237			LONGITUDINAL COMPONENT OF DELTA V
106	DVTOTAL	NUM	2	235			TOTAL DELTA V
109	ENERGY	NUM	3	241			ENERGY ABSORPTION
62	EXTENT1	CHAR	2	128			DEFORMATION EXTENT GUIDE (HIGHEST)
63	EXTENT2	CHAR	2	130			DEFORMATION EXTENT GUIDE(2ND HIGHEST)
96	FIRE	NUM	2	213			FIRE OCCURRENCE
54	GAD1	CHAR	1	120			DEFORMATION LOCATION (HIGHEST)
55	GAD2	CHAR	1	121			DEFORMATION LOCATION(2ND HIGHEST)
47	GVWR	NUM	2	106			GROSS VEHICLE WEIGHT RATING
101	HAZCARGO	NUM	2	223			HAZARDOUS CARGO
8	HITRUN	NUM	2	20			HIT & RUN INVOLVEMENT
97	IMPTYPE	NUM	2	215			TYPE OF MOST SEVERE IMPACT
100	JACKNIFE	NUM	2	221			JACKKNIFE
32	LMIRROR	NUM	2	76			TYPE OUTSIDE MIRROR (LEFT)
13	MAKE	NUM	2	30			VEHICLE MAKE
45	MAXLEN	NUM	2	102			MAXIMUM OVERALL LENGTH
44	MAXWIDTH	NUM	2	100			MAXIMUM OVERALL WIDTH

#	Variable	Type	Width	Pos	Description
14	MODEL	NUM	2	32	VEHICLE MODEL
12	MODELYR	NUM	2	28	VEHICLE MODEL YEAR
50	OBJCONT1	NUM	2	112	OBJECT CONTACTED (HIGHEST)
51	OBJCONT2	NUM	2	114	OBJECT CONTACTED(2ND HIGHEST)
9	OCCFORMS	NUM	2	22	NUMBER OF OCCUPANT FORMS SUBMITTED
84	ODOMETER	NUM	3	188	ODOMETER READING
117	OTBDYTYP	NUM	3	259	BODY TYPE OF THE OTHER VEHICLE
98	OTHROLE	NUM	2	217	ROLE OF OTHER CONTACTED VEH, OBJ, PER
116	OTVEHWGT	NUM	3	256	WEIGHT OF THE OTHER VEHICLE
34	OVERRIDE	NUM	2	80	OVERRIDE/UNDERRIDE THIS VEHICLE
85	PCINTEG	NUM	2	191	PASSENGER COMPARTMENT INTEGRITY
92	POCOMPNT	NUM	2	205	PASSENGER OTHER (INTRUDING COMPONENT)
93	POINTRSN	NUM	2	207	PASSENGER OTHER (MAGNITUDE OF INTRUSION)
90	PPCOMPNT	NUM	2	201	PASSENGER PRIMARY (INTRUDING COMPONENT)
91	PPINTRSN	NUM	2	203	PASSENGER PRIMARY (MAGN. OF INTRUSION)
1	PSU	NUM	2	4	PSU NUMBER
35	REARTURN	NUM	2	82	REAR TURN SIGNAL COLOR
5	RECNO	NUM	2	14	RECORD NUMBER
15	REGISTRA	NUM	2	34	REGISTRATION OF VEHICLE
33	RMIRROR	NUM	2	78	TYPE OUTSIDE MIRROR (RIGHT)
99	ROLLOVER	NUM	2	219	ROLLOVER
75	SDVC1	NUM	3	163	*CRASH* DAMAGE DATA 2ND DELTA V - C1
76	SDVC2	NUM	3	166	*CRASH* DAMAGE DATA 2ND DELTA V - C2
77	SDVC3	NUM	3	169	*CRASH* DAMAGE DATA 2ND DELTA V - C3
78	SDVC4	NUM	3	172	*CRASH* DAMAGE DATA 2ND DELTA V - C4
79	SDVC5	NUM	3	175	*CRASH* DAMAGE DATA 2ND DELTA V - C5
80	SDVC6	NUM	3	178	*CRASH* DAMAGE DATA 2ND DELTA V - C6
81	SDVD	NUM	3	181	*CRASH* DAMAGE DATA 2ND DELTA V - D
74	SDVL	NUM	3	160	*CRASH* DAMAGE DATA 2ND DELTA V - L
19	SEATCAP	NUM	2	50	SEATING CAPACITY/TRUCK VOCATION
56	SHL1	CHAR	1	122	SPECIFIC HORIZONTAL LOCATION (HIGHEST)
57	SHL2	CHAR	1	123	SPECIFIC HORIZONTAL LOCATION(2ND HIGHEST)
104	SOURCWGT	NUM	2	231	REPORTED SOURCE OF CARGO WEIGHT
83	SPECUSE	NUM	2	186	VEHICLE SPECIAL USE (THIS TRIP)
95	STEERDEF	NUM	2	211	STEERING RIM DEFORMATION
94	STEERSEP	NUM	2	209	STEERING COLUMN SEPARATION
4	STRATIF	CHAR	2	13	INITIAL STRATIFICATION
58	SVL1	CHAR	1	124	SPECIFIC VERTICAL LOCATION (HIGHEST)
59	SVL2	CHAR	1	125	SPECIFIC VERTICAL LOCATION(2ND HIGHEST)
20	TCAXLE1	NUM	2	52	TIRE CONDITION (AXLE - 1)
21	TCAXLE2	NUM	2	54	TIRE CONDITION (AXLE - 2)
22	TCAXLE3	NUM	2	56	TIRE CONDITION (AXLE - 3)
23	TCAXLE4	NUM	2	58	TIRE CONDITION (AXLE - 4)
28	TCCOND1	NUM	2	68	TIRE CONDITION (CONDITION - 1)
29	TCCOND2	NUM	2	70	TIRE CONDITION (CONDITION - 2)
30	TCCOND3	NUM	2	72	TIRE CONDITION (CONDITION - 3)
31	TCCOND4	NUM	2	74	TIRE CONDITION (CONDITION - 4)
24	TCTIRE1	NUM	2	60	TIRE CONDITION (TIRE - 1)
25	TCTIRE2	NUM	2	62	TIRE CONDITION (TIRE - 2)
26	TCTIRE3	NUM	2	64	TIRE CONDITION (TIRE - 3)
27	TCTIRE4	NUM	2	66	TIRE CONDITION (TIRE - 4)
60	TDD1	NUM	2	126	TYPE OF DAMAGE DISTRIBUTION (HIGHEST)
61	TDD2	CHAR	1	127	TYPE OF DAMAGE DISTRIBUTION(2ND HIGHEST)
11	TOWAWAY	CHAR	1	26	MANNER OF LEAVING SCENE
18	TOWHITCH	NUM	2	48	TOWED TRAILING UNIT
41	TRAILER1	NUM	2	94	LENGTH OF TRAILER - 1

42	TRAILER2	NUM	2	96		LENGTH OF TRAILER - 2
43	TRAILER3	NUM	2	98		LENGTH OF TRAILER - 3
110	TRAVELSP	NUM	2	244		TRAVEL SPEED
118	VAIS	NUM	2	261		MAXIMUM KNOWN AIS IN THIS VEHICLE
7	VEHNO	NUM	2	18		VEHICLE NUMBER
10	VEHROLE	NUM	2	24		VEHICLE ROLE
48	VEHSEQ1	NUM	2	108		EVENT NUMBER THIS VEHICLE (HIGHEST)
49	VEHSEQ2	NUM	2	110		EVENT NUMBER THIS VEHICLE (2ND HIGHEST)
6	VERSION	NUM	2	16		VERSION NUMBER
16	VIN	CHAR	10	36		VEHICLE IDENTIFICATION NUMBER
112	VINJSER	NUM	2	248		NUMBER SERIOUSLY INJURED IN THIS VEHICLE
113	VINJURED	NUM	2	250		NUMBER INJURED IN THIS VEHICLE
111	VINLNGTH	NUM	2	246		VIN LENGTH
114	VTREAT	NUM	2	252		MAXIMUM TREATMENT(THIS VEH)
120	WHEELLNG	NUM	8	271	5.1	WHEELBASE LONG
119	WHEELSHT	NUM	8	263	5.1	WHEELBASE SHORT

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
41	ACCESS	NUM	2	89			ACCESS CONTROL
21	ACCTYPE	NUM	2	48			ACCIDENT TYPE
8	ALCTEST	NUM	2	20			ALCOHOL TEST RESULT
45	ALIGNMNT	NUM	2	97			ROADWAY ALIGNMENT
22	AVOIDMAN	NUM	2	50			ATTEMPTED AVOIDANCE MANEUVER
19	BMCSREG	NUM	2	44			FEDERAL SAFETY REGULATED
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	NUM	4	10			SEQUENCE NUMBER
35	CLASTRAF	NUM	2	76			CLASS TRAFFICWAY
48	CURVE	NUM	2	104			DEGREE OF CURVATURE
20	DRCLASS	NUM	2	46			DRIVER'S CLASSIFICATION
7	DRINKING	NUM	2	18			ALCOHOL PRESENCE
11	DRPRES	NUM	2	26			DRIVER PRESENCE IN VEHICLE
15	DRTRAIN	NUM	2	36			DRIVER EDUCATION
58	ENVRF	NUM	2	126			ENVIRONMENTAL RELATED FACTORS
34	FEDAID	NUM	2	74			FEDERAL AID SYSTEM
17	FREQDRIV	NUM	2	40			FREQUENCY DRIVING ROAD
49	GRADE	NUM	2	107			GRADE MEASUREMENT
37	LANES	NUM	2	80			NUMBER OF TRAVEL LANES
38	LANEWIDT	NUM	3	82			LANE WIDTH
16	LASTRAIN	NUM	2	38			TIME SINCE LAST DRIVER EDUCATION
28	LREST	NUM	2	62			LICENSE RESTRICTION
26	LSTATUS	NUM	2	58			DRIVER LICENSE STATUS
27	LTYPCOMP	NUM	2	60			LICENSE TYPE COMPLIANCE
39	MEDIANT	NUM	2	85			MEDIAN TYPE
40	MEDIANW	NUM	2	87			MEDIAN WIDTH
14	MILETOT	NUM	3	33			TOTAL MILEAGE ALL VEHICLES
13	MILEVEH	NUM	3	30			ESTIMATED MILEAGE THIS VEHICLE
12	MONDRIVE	NUM	2	28			MONTHS DRIVING EXP. THIS VEHICLE
10	OCCUPANTS	NUM	2	24			NUMBER OF OCCUPANTS THIS MOTOR VEHICLE
33	PREVACC	NUM	2	72			PREVIOUS ACCIDENTS
31	PREVDWI	NUM	2	68			PREVIOUS D.W.I. CONVICTIONS
30	PREVOTH	NUM	2	66			PREVIOUS MOVING VIOLATIONS CONVICTIONS
29	PREVSPD	NUM	2	64			PREVIOUS SPEEDING CONVICTIONS
32	PREVSUS	NUM	2	70			PREVIOUS SUSPENSIONS AND REVOCATIONS
50	PRORILE	NUM	2	110			ROADWAY PROFILE
1	PSU	NUM	2	4			PSU NUMBER
5	RECNO	NUM	2	14			RECORD NUMBER
23	RELFACT	NUM	2	52			DRIVER RELATED FACTORS
54	RESTRICT	NUM	2	118			RESTRICTION OF ROADWAY AT SCENE
36	ROADFUNC	NUM	2	78			ROADWAY FUNCTION CLASS
43	SHOULDLT	NUM	2	93			LEFT SHOULDER TYPE
44	SHOULDRT	NUM	2	95			RIGHT SHOULDER TYPE
46	SLOPE	NUM	2	99			CROSS SLOPE
53	SPLIMIT	NUM	2	116			SPEED LIMIT
4	STRATIF	CHAR	1	13			INITIAL STRATIFICATION
47	SUPELEV	NUM	3	101			SUPERELEVATION
52	SURCOND	NUM	2	114			ROADWAY SURFACE CONDITION

27

51	SURTYPE	NUM	2	112	ROADWAY SURFACE TYPE
55	TRAFCONT	NUM	2	120	TRAFFIC CONTROL DEVICE
42	TRAFFLOW	NUM	2	91	TRAFFICWAY FLOW
56	TRCTLFCT	NUM	2	122	TRAFFIC CONTROL DEVICE FUNCTIONING
57	TRUCKSYS	NUM	2	124	DESIGNATED TRUCK SYSTEM
18	TYPEOP	NUM	2	42	TYPE OF OPERATION OR CARRIER
9	VEHNO	NUM	2	22	VEHICLE NUMBER
6	VERSION	NUM	2	16	VERSION NUMBER
24	VIOCHAR1	NUM	2	54	VIOLATION CHARGED (FIRST)
25	VIOCHAR2	NUM	2	56	VIOLATION CHARGED (SECOND)

28

CONTENTS OF SAS DATA SET NASSANL.OCCUPANT

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
7	AGE	NUM	2	18			AGE OF PERSON
38	AIS1	NUM	2	56			AIS SEVERITY (FIRST)
39	AIS2	NUM	2	58			AIS SEVERITY (SECOND)
40	AIS3	NUM	2	60			AIS SEVERITY (THIRD)
41	AIS4	NUM	2	62			AIS SEVERITY (FOURTH)
42	AIS5	NUM	2	64			AIS SEVERITY (FIFTH)
43	AIS6	NUM	2	66			AIS SEVERITY (SIXTH)
20	ASPECT1	CHAR	1	38			ASPECT (FIRST)
21	ASPECT2	CHAR	1	39			ASPECT (SECOND)
22	ASPECT3	CHAR	1	40			ASPECT (THIRD)
23	ASPECT4	CHAR	1	41			ASPECT (FOURTH)
24	ASPECT5	CHAR	1	42			ASPECT (FIFTH)
25	ASPECT6	CHAR	1	43			ASPECT (SIXTH)
81	AUTAVAIL	NUM	2	142			PASSIVE RESTRAINT SYSTEM - AVAILABILITY
82	AUTFNCT	NUM	2	144			PASSIVE RESTRAINT SYSTEM - FUNCTION
14	BODYREG1	CHAR	1	32			OIC BODY REGION (FIRST)
15	BODYREG2	CHAR	1	33			OIC BODY REGION (SECOND)
16	BODYREG3	CHAR	1	34			OIC BODY REGION (THIRD)
17	BODYREG4	CHAR	1	35			OIC BODY REGION (FOURTH)
18	BODYREG5	CHAR	1	36			OIC BODY REGION (FIFTH)
19	BODYREG6	CHAR	1	37			OIC BODY REGION (SIXTH)
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	NUM	3	10			SEQUENCE NUMBER
63	DEATH	NUM	2	106			TIME TO DEATH
56	DIRINJ1	NUM	2	92			DIRECT/INDIRECT INJURY (FIRST)
57	DIRINJ2	NUM	2	94			DIRECT/INDIRECT INJURY (SECOND)
58	DIRINJ3	NUM	2	96			DIRECT/INDIRECT INJURY (THIRD)
59	DIRINJ4	NUM	2	98			DIRECT/INDIRECT INJURY (FOURTH)
60	DIRINJ5	NUM	2	100			DIRECT/INDIRECT INJURY (FIFTH)
61	DIRINJ6	NUM	2	102			DIRECT/INDIRECT INJURY (SIXTH)
72	EJCTAREA	NUM	2	124			EJECTION AREA
73	EJCTMED	NUM	2	126			EJECTION MEDIUM
71	EJECTION	NUM	2	122			EJECTION
70	ENTRAP	NUM	2	120			ENTRAPMENT
9	HEIGHT	NUM	2	22			HEIGHT OF PERSON
12	HOSPSTAY	NUM	2	28			HOSPITAL STAY
78	INFSEAT	NUM	2	134			INFANT SEAT ORIENTATION
77	INFUSAGE	NUM	2	136			INFANT RESTRAINT USAGE
62	INJSEV	NUM	2	104			INJURY SEVERITY (POLICE RATING)
44	INJSOU1	NUM	2	68			INJURY SOURCE (FIRST)
45	INJSOU2	NUM	2	70			INJURY SOURCE (SECOND)
46	INJSOU3	NUM	2	72			INJURY SOURCE (THIRD)
47	INJSOU4	NUM	2	74			INJURY SOURCE (FOURTH)
48	INJSOU5	NUM	2	76			INJURY SOURCE (FIFTH)
49	INJSOU6	NUM	2	78			INJURY SOURCE (SIXTH)
65	ISS	NUM	2	110			ISS
26	LESION1	CHAR	1	44			LESION (FIRST)
27	LESION2	CHAR	1	45			LESION (SECOND)

#	NAME	TYPE	LEN	POS	LABEL
28	LESION3	CHAR	1	46	LESION (THIRD)
29	LESION4	CHAR	1	47	LESION (FOURTH)
30	LESION5	CHAR	1	48	LESION (FIFTH)
31	LESION6	CHAR	1	49	LESION (SIXTH)
64	MAIS	NUM	2	108	MAXIMUM KNOWN OCC/PED/NM AIS
79	MANAVAIL	NUM	2	138	ACTIVE RESTRAINT SYSTEM - AVAILABILITY
80	MANUSE	NUM	2	140	ACTIVE RESTRAINT SYSTEM - USE
74	MEDSTA	NUM	2	128	MEDIUM STATUS
67	OCCNO	NUM	2	114	OCCUPANT NUMBER
1	PSU	NUM	2	4	PSU NUMBER
5	RECNO	NUM	2	14	RECORD NUMBER
75	RESTMAKE	NUM	2	130	CHILD RESTRAINT MAKE/MODEL
68	ROLE	NUM	2	116	OCCUPANT'S ROLE
69	SEATPOS	NUM	2	118	OCCUPANT'S SEAT POSITION
8	SEX	NUM	2	20	SEX OF PERSON
50	SOUDAT1	NUM	2	80	SOURCE OF DATA (FIRST)
51	SOUDAT2	NUM	2	82	SOURCE OF DATA (SECOND)
52	SOUDAT3	NUM	2	84	SOURCE OF DATA (THIRD)
53	SOUDAT4	NUM	2	86	SOURCE OF DATA (FOURTH)
54	SOUDAT5	NUM	2	88	SOURCE OF DATA (FIFTH)
55	SOUDAT6	NUM	2	90	SOURCE OF DATA (SIXTH)
4	STRATIF	CHAR	1	13	INITIAL STRATIFICATION
32	SYSORG1	CHAR	1	50	SYSTEM/ORGAN (FIRST)
33	SYSORG2	CHAR	1	51	SYSTEM/ORGAN (SECOND)
34	SYSORG3	CHAR	1	52	SYSTEM/ORGAN (THIRD)
35	SYSORG4	CHAR	1	53	SYSTEM/ORGAN (FOURTH)
36	SYSORG5	CHAR	1	54	SYSTEM/ORGAN (FIFTH)
37	SYSORG6	CHAR	1	55	SYSTEM/ORGAN (SIXTH)
11	TREATMNT	NUM	2	26	TREATMENT - MORTALITY
76	TYPEREST	NUM	2	132	TYPE CHILD RESTRAINT
66	VEHNO	NUM	2	112	VEHICLE NUMBER
6	VERSION	NUM	2	16	VERSION NUMBER
10	WEIGHT	NUM	2	24	WEIGHT OF PERSON
13	WORKDAYS	NUM	2	30	WORKING DAYS LOST

APPENDIX A

DATA COLLECTION FORMS

1 Primary Sampling Unit Number $\overline{1}$ $\overline{2}$

2 Case Number-Stratification $\overline{3}$ $\overline{4}$ $\overline{5}$ $\overline{6}$

3. Record Number $\dfrac{1}{7}$

4. Transaction Code $\overline{8}$

5 Version Number $\dfrac{0}{9}$

6 Investigator I D Number $\overline{10}$

IDENTIFICATION

7 Type of Case
____ (1) Full data collection
____ (2) Nontowaway (Stratum E)
     (Reduced data collection)
____ (3) Source document only

$\overline{11}$

8 Date (Month. Day Year) $\overline{12}$ $\overline{13}$ $\overline{14}$ $\overline{15}$ $\dfrac{8}{16}$ $\dfrac{7}{17}$

9 Blank (This variable is left blank so that numbering consistency can be maintained with the 1986 CSS)

$\dfrac{X}{18}$

10 Number of Vehicle Forms Submitted
_____ Code the number of motor vehicles in transport for which a VEHICLE FORM was submitted $\overline{19}$ $\overline{20}$

11 Number of Pedestrian & Nonmotorist Forms Submitted
_____ Code the number of pedestrians and or nonmotorists for which a PEDESTRIAN & NON-MOTORIST FORM was submitted $\overline{21}$ $\overline{22}$

12. First Harmful Event
    Non-collision
____ (01) Fire or explosion
____ (02) Immersion
____ (03) Gas inhalation
____ (04) Fell from vehicle
____ (05) Injured in vehicle
____ (06) Other noncollision (specify).
_____
____ (07) Overturn
____ (08) Jackknife with intraunit damage
    Collision With.
____ (09) Pedestrian
____ (10) Pedalcyclist
____ (11) Railway train
____ (12) Animal
____ (13) Motor vehicle in transport (same roadway)
____ (14) Motor vehicle in transport (other roadway)
____ (15) Parked motor vehicle
____ (16) Other type nonmotorist (specify)
_____
____ (17) Thrown or falling object
____ (18) Boulder
____ (19) Other object (not fixed) (specify)
    Collision with Fixed Object
____ (20) Building
____ (21) Impact attenuator/crash cushion
____ (22) Bridge pier or abutment
____ (23) Bridge parapet end
____ (24) Bridge rail
____ (25) Guardrail
____ (26) Concrete traffic barrier
____ (27) Median barrier
____ (28) Other longitudinal barrier (specify)
_____
____ (29) Highway/Traffic sign post
____ (30) Overhead sign support
____ (31) Luminaire/Light support
____ (32) Utility pole
____ (33) Other post. pole, or support (specify).
_____
____ (34) Culvert
____ (35) Curb
____ (36) Ditch
____ (37) Embankment-earth
____ (38) Embankment-rock. stone or concrete
____ (39) Fence (wooden. wire. chain link. etc)
____ (40) Wall (stone. rock. metal. etc)
____ (41) Fire hydrant
____ (42) Shrubbery
____ (43) Tree
____ (44) Other fixed object (specify)
_____
____ (45) Pavement surface irregularity (pothole, grooved. grates)
____ (99) Unknown

$\overline{23}$ $\overline{24}$

13 Manner of Collision (Based on First Harmful Event)
____ (0) Not collision with vehicle in transport
____ (1) Rear-end
____ (2) Head-on
____ (3) Rear-to-rear
____ (4) Angle
____ (5) Sideswipe, same-direction
____ (6) Sideswipe, opposite direction
____ (9) Unknown
<div align="right">25</div>

14 Relation to Roadway (location of first harmful event)
____ (1) On roadway
____ (2) On shoulder
____ (3) In median
____ (4) On roadside
____ (5) Outside right-of-way
____ (6) Off roadway location unknown
____ (7) In parking lane
____ (8) Gore or channel island
____ (9) Unknown
<div align="right">26</div>

AMBIENT CONDITIONS

15. Time
___:___ Code reported military time of accident
       (NOTE midnight = 2400)
____ (9999) Unknown
<div align="right">27 28 29 30</div>

16 Light Conditions
____ (1) Daylight
____ (2) Dark
____ (3) Dark, but lighted
____ (4) Dawn
____ (5) Dusk
____ (9) Unknown
<div align="right">31</div>

17 Atmospheric Conditions
____ (1) No adverse atmosphere related driving
        conditions
____ (2) Rain
____ (3) Sleet
____ (4) Snow
____ (5) Fog
____ (6) Rain and fog
____ (7) Sleet and fog
____ (8) Other (e g , smog, smoke, blowing sand or
        dust, etc) (specify) _____
____ (9) Unknown
<div align="right">32</div>

ADMINISTRATIVE ITEMS

18. Relation to Junction
____ (01) Non-junction
____ (02) Three leg intersection
____ (03) Four leg intersection
____ (04) More than four leg intersection
____ (05) Rotary or traffic circle
____ (06) Intersection related
____ (07) Channel
____ (08) Area of mergence related
____ (09) Area of divergence related
____ (10) Entrance ramp
____ (11) Exit ramp
____ (12) Driveway, alley access related
____ (13) Railroad grade crossing related
____ (14) Crossover related
____ (99) Unknown
<div align="right">33 34</div>

19 Interchange Geometry
____ (0) No interchange
____ (1) Full diamond
____ (2) Partial diamond
____ (3) Full cloverleaf
____ (4) Partial cloverleaf
____ (5) Trumpet
____ (6) Directional
____ (8) Other (specify)._____
____ (9) Unknown
<div align="right">35</div>

20 Accident Occurrence in School Zone
____ (0) No
____ (1) Yes
____ (9) Unknown
<div align="right">36</div>

21 School Bus Related
____ (0) No
____ (1) Yes
<div align="right">37</div>

22 Right or Left Turn on Red Related
____ (0) No

Right turn related
____ (1) Yes - turn permitted
____ (2) Yes - turn prohibited
Left turn related
____ (3) Yes - turn permitted
____ (4) Yes - turn prohibited
____ (9) Unknown
<div align="right">38</div>

ENVIRONMENTAL DATA	SPECIAL STUDIES - INDICATORS
23 Driver Level Environmental Data That Is Most Representative of this Accident Location _____ Code the driver level number (the vehicle number coded in variable D07) that best describes the accident's environmental conditions $\overline{39}$ $\overline{40}$	Information Collected From This Accident As A Part of the Special Studies Subsystem ◯ NO – Code 0 for each of questions 24 through 29 If YES – Check (✔) each of the studies from the list below that were indicated. code 1 for the checked studies and 0 for the studies not checked 24 __ SS8-Longitudinal Barrier $\overline{41}$ 25 __ SS9-Crash Cushion $\overline{42}$ 26 __ SS12 $\overline{43}$ 27. __ SS13 $\overline{44}$ 28 __ SS14 $\overline{45}$ 29 __ SS15 $\overline{46}$

Form Approve
O M B No. 2127-0021

US Department of Transportation
National Highway Traffic Safety
Administration

PEDESTRIAN AND NONMOTORIST

NATIONAL ACCIDENT SAMPLING SYSTEM
CONTINUOUS SAMPLING SUBSYSTEM

1. Primary Sampling Unit Number   — —
   $\overline{1}$ $\overline{2}$

2. Case Number – Stratification   — — — —
   $\overline{3}$ $\overline{4}$ $\overline{5}$ $\overline{6}$

3. Record Number $\frac{2}{7}$

4. Transaction Code $\overline{8}$

5. Version Number $\frac{0}{9}$

6. Investigator I.D. Number $\overline{10}$

IDENTIFICATION

7. Pedestrian or Nonmotorist's Number   — —
   $\overline{11}$ $\overline{12}$

8. Pedestrian or Nonmotorist's Type

   — (1) Pedestrian
   — (2) Bicyclist
   . (3) Other cyclist (specify)

   _____

   — (4) Occupant of vehicle not in transport
   — (8) Other nonmotorist (specify)

   _____
   _____

   — (9) Unknown $\overline{13}$

PEDESTRIAN OR NONMOTORIST INTERVIEW

9. Pedestrian or Nonmotorist's Age

   _____ year(s) – Code actual age at time of
        accident
   — (00) Less than one year old
   — (97) 97 years and older
   — (99) Unknown   — —
   $\overline{14}$ $\overline{15}$

10. Pedestrian or Nonmotorist's Sex

   — (1) Male
   — (2) Female
   — (9) Unknown $\overline{16}$

11. Pedestrian or Nonmotorist's Height

   _____ inches – Code actual height to the nearest
        inch.
   — (99) Unknown   — —
   $\overline{17}$. $\overline{18}$

12. Pedestrian or Nonmotorist's Weight

   _____ pounds – Code actual weight to the nearest
        pound.
   — (999) Unknown   — — —
   $\overline{19}$ $\overline{20}$ $\overline{21}$

13. Pedestrian or Nonmotorist's Location

   — (01) Intersection related – in crosswalk
   — (02) Intersection related – on roadway, not
        in crosswalk
   — (03) Intersection related – on roadway,
        crosswalk not available
   — (04) Intersection related – on roadway,
        crosswalk availability unknown
   — (05) Intersection related – on sidewalk
   — (06) Intersection related – not on roadway or
        sidewalk
   — (09) Intersection related – unknown
   — (10) Nonintersection – in crosswalk
   — (11) Nonintersection – on roadway,
        not in crosswalk
   — (12) Nonintersection – on roadway,
        crosswalk not available
   — (13) Nonintersection – on roadway,
        crosswalk availability unknown
   — (14) Nonintersection – in parking lane
   — (15) Nonintersection – on road shoulder
   — (16) Nonintersection – on sidewalk
   — (17) Nonintersection – bike path
   — (18) Nonintersection – other, not on
        roadway (specify):

   _____

   — (19) Nonintersection – outside trafficway
   — (20) Nonintersection – unknown

   — (99) Unknown   — —
   $\overline{22}$ $\overline{23}$

14. Distance From Intersection

   — (0) Not on roadway

   On roadway
   — (1) Impact within 50 feet of intersection
   — (2) Impact between 51 and 500 feet of intersection
   — (3) Impact more than 500 feet from intersection
   — (9) Unknown $\overline{24}$

35

15. Pedestrian Activity

___ (00) Not a pedestrian
___ (01) Near a motor vehicle *(specify)*
_____
___ (02) Near a bus stop or mass transit entrance
      (specify):_____
___ (03) Near a mobile vendor *(specify)*·
_____
___ (04) Near an entrance *(specify)*
_____
___ (05) Darting or running into roadway
___ (06) Crossing or attempting to cross roadway
___ (07) Walking in the same direction as traffic
___ (08) Walking in the opposite direction of traffic
___ (09) Walking, direction unknown
___ (10) Jogging or running in the same direction as traffic
___ (11) Jogging or running in the opposite direction of traffic
___ (12) Jogging or running, direction unknown
___ (13) Playing
___ (14) Working
___ (15) Stationary *(specify)* _____
___ (98) Other *(specify)* _____
___ (99) Unknown

                    ‾‾25‾ ‾‾26‾

16.–19. Omitted *(These variables are omitted so that numbering consistency can be maintained with compatible variables on the Occupant Data Form)*

INTERVIEW AND OFFICIAL SOURCES

Inter-viewee	Official Sources
20. Treatment — Mortality	
___(0) No treatment	___
___(1) Fatal	___
___(2) Fatal — ruled disease	___
Nonfatal	
___(3) Hospitalization	___
___(4) Transported and released	___
___(5) Treatment at scene — nontransported	___
___(6) Treatment later	___
___(8) Treatment — Other *(specify)*·	___
___(9) Unknown	___
	‾‾27‾

Inter-viewee	Official Sources
21. Hospital Stay	
___ (00) Not hospitalized	___
____ day(s) — Code the number of days (up through 60) that the pedestrian nonmotorist stayed in hospital.	___.
___ (61) 61 days or more	___
___ (99) Unknown	___
	‾‾28‾ ‾‾29‾
22. Working Days Lost	
___ (00) No working days lost	
____ day(s) — Code the number of days (up through 60) that the pedestrian, nonmotorist lost from work due to the accident	
___ (61) 61 days or more	
___ (62) Fatally injured	
___ (97) Not working prior to accident	
___ (99) Unknown	
	‾‾30‾ ‾‾31‾

23. Vehicle Which Contacted Pedestrian or Nonmotorist

___ (0) No injury
___ (1) Vehicle number 01
___ (2) Vehicle number 02
___ (3) Vehicle number 03
___ (4) Vehicle number 04
___ (5) Vehicle number 05
___ (6) Vehicle number 06
___ (7) Multivehicle contact
___ (8) Other vehicle number *(specify)*·_____
___ (9) Unknown

                    ‾‾32‾

24.–30. Omitted *(These variables are omitted so that numbering consistency can be maintained with compatible variables on the Occupant Data Form.)*

OCCUPANT INJURY CLASSIFICATION
(FOR PEDESTRIAN AND NONMOTORIST)

Consider all injuries which are reported from both *unofficial* and *official* sources. The information from official sources takes precedence over similar injuries reported by any other source. In other words, do not list the same injury twice, supercede the interview data with official data in the case of similar injuries. List all injuries by official medical sources first. Police reported injuries may be used, but only when *no* other source of injury information is available.

Were more than ten (10) injuries sustained? _____ Unknown, _____ No, _____ Yes – If more than ten dissimilar injuries were identified during the interview, from collection of official data, and from other unofficial sources *(excluding police)*, list those from the official records first, exhausting that level of data before listing those from the interviewee or other sources.

	I.S.S. Body Region	O.I.C. Body Region	Aspect	Lesion	System/ Organ	A.I.S. Severity	Injury Source	Direct/ Indirect Injury	Source of Data
1	—	—	—	—	—	—	— —	—	— —
2	—	—	—	—	—	—	— —	—	— —
3	—	—	—	—	—	—	— —	—	— —
4	—	—	—	—	—	—	— —	—	— —
5	—	—	—	—	—	—	— —	—	— —
6	—	—	—	—	—	—	— —	—	— —
7	—	—	—	—	—	—	— —	—	— —
8	—	—	—	—	—	—	— —	—	— —
9	—	—	—	—	—	—	— —	—	— —
10	—	—	—	—	—	—	— —	—	— —

Reduction Section

Source of Data

Official
(01) Autopsy records with or without hospital/medical records
(02) Hospital medical records other than emergency room (e.g., discharge summary)
(03) Emergency room records only (including associated x-rays or other lab reports)
(04) Private physician, walk-in or emergency clinic

Unofficial
(05) Lay coroner report
(06) E.M.S personnel
(07) Interviewee
(08) Other source·

(09) Police
(99) Unknown if injured
(00) Not injured

I.S.S. Body Region

(1) Head or neck
(2) Face
(3) Chest
(4) Abdominal or pelvic contents
(5) Extremities or pelvic girdle
(6) General *(external)*
(0) Not injured
(9) Unknown

O.I.C. Body Region

(M) Abdomen
(Q) Ankle-foot
(A) Arm (upper)
(B) Back – thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head – skull
(U) Injured, unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limb(s) (whole or unknown part)
(N) Neck – cervical spine
(P) Pelvic – hip
(S) Shoulder
(T) Thigh
(X) Upper limb(s) (whole or unknown part)

(O) Whole body
(W) Wrist – hand
(0) Not injured
(9) Unknown if injured

Aspect of Injury

(A) Anterior – front
(C) Central
(I) Inferior – lower
(U) Injured, unknown aspect
(L) Left
(P) Posterior – back
(R) Right
(S) Superior – upper
(W) Whole region
(0) Not injured
(9) Unknown if injured

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment, separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured, unknown lesion
(L) Laceration
(O) Other
(P) Perforation, puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severence, transection
(0) Not injured
(9) Unknown if injured

System/Organ

(W) All systems in region
(A) Arteries – veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured, unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary – lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae
(0) Not injured
(9) Unknown if injured

Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum *(untreatable)*
(7) Injured, unknown severity
(0) Not injured
(9) Unknown if injured

Injury Source
(00)   No injury

FRONT
(01)   Windshield
(02)   Mirror
(03)   Sunvisor
(04)   Steering wheel rim
(05)   Steering wheel hub/spoke
(06)   Steering wheel (combination
         of codes 04 and 05)
(07)   Steering column, transmission
         selector lever, other attachment
(08)   Add on equipment (e g CB
         tape deck air conditioner)
(09)   Left instrument panel and below
(10)   Center instrument panel and below
(11)   Right instrument panel and below
(12)   Other front object (specify)

SIDE
(13)   Side interior surface, excluding
         hardware or armrests
(14)   Side hardware or armrest
(15)   A pillar
(16)   B pillar
(17)   Other pillar (specify)

(18)   Window glass or frame
(19)   Other side object (specify)

INTERIOR
(21)   Seat back support
(22)   Belt restraint system
(23)   Head restraint system
(24)   Air cushion
(25)   Other occupants (specify)

(26)   Interior loose objects
(29)   Other interior object (specify)

ROOF
(31)   Front header
(32)   Rear header
(33)   Roof side rails
(34)   Roof or convertible top

FLOOR
(41)   Floor
(42)   Floor or console mounted trans-
         mission lever, including console
(43)   Parking brake handle
(44)   Foot controls including parking
         brake

REAR
(45)   Backlight (rear window)
(46)   Backlight storage rack, door, etc
(49)   Other rear object (specify)

EXTERIOR of NONMOTORIST S VEHICLE
Noncycle
(51)   Hood
(52)   Outside hardware (e.g., outside
         mirror, antenna)
(53)   Other exterior surface or tires
         (specify) _____
(59)   Unknown exterior objects

Cycle
(61)   Handle bars or attachments
(62)   Frame or suspension component or
         fender
(63)   Seat
(64)   Foot pedal, foot rest, foot pegs
(65)   Wheel or tire
(66)   Engine or transmission
(67)   Gas tank, gas tank filler cap
         or neck
(69)   Other cycle part (specify)

EXTERIOR of STRIKING MOTOR VEHICLE
(71)   Front bumper
(72)   Hood edge
(73)   Other front of vehicle (specify)

(74)   Hood
(75)   Hood ornament
(76)   Windshield roof rail, A-pillar
(77)   Side surface
(78)   Side mirrors
(79)   Other side protrusions (specify)

(80)   Rear surface
(81)   Undercarriage
(82)   Tires and wheels
(83)   Other exterior of striking
         motor vehicle (specify)

(84)   Unknown exterior of striking
         motor vehicle

OTHER VEHICLE or OBJECT in the
ENVIRONMENT
(86)   Ground
(87)   Other vehicle or object (specify)

(89)   Unknown vehicle or object

NONCONTACT INJURY
(90)   Noncontact injury source
(97)   Injured, unknown source
(99)   Unknown if injured

DIRECT/INDIRECT INJURY
(0)   No injury
(1)   Direct contact injury
(2)   Indirect contact injury
(3)   Noncontact injury
(7)   Injured, unknown source
(9)   Unknown if injured

OCCUPANT INJURY CLASSIFICATION
(FOR PEDESTRIAN AND NONMOTORIST)

If there are six or less injuries listed in the O I C reduction section, code all of the injuries ordered by Source of Data (1st-autopsy, 2nd-hospital/medical, 3rd-emergency room, 4th-private physician, or 5th-unofficial sources) and by A I S severity within source

If there are more than six injuries order the injuries by source and by A I S severity within source Code this ordering, injury by injury If a group of ordered injuries has the same source the same A I S , and the group includes at least the sixth and seventh injuries in the ordering, then a choice must be made as to which injury or injuries to code

Choose the injury or injuries that will enable the maximum number of different I S S body regions to be represented in the coded data. If no new I.S.S. body region can be added then simply code in accordance with the original ordering.

If the pedestrian or nonmotorist has less than six injuries, then the number of rows required to be completed is equal to the number of injuries plus one (e g , no injuries requires one row i e columns 33 to 42) In the additional row "No Injury" will be coded for all variables, including A I S severity

If you cannot increase the number of different I S S body regions or if you can choose between two or more injuries of the same source and A.I.S. severity any of which would constitute an additional I S S. region, then choose the injury that has a known injury source.

Update Candidate   ◯ Yes   ◯ No

	I.S.S. Body Region	O I C. Body Region		Aspect		Lesion		System/Organ		A.I.S. Severity		Injury Source			Direct/ Indirect Injury		Source of Data	
1st	___	31.	33	32.	34	33.	35	34.	36	35.	37	36.	38	39	37.	40	38.	41	42
2nd	___	39.	43	40.	44	41.	45	42.	46	43.	47	44.	48	49	45.	50	46.	51	52
3rd	___	47.	53	48.	54	49	55	50.	56	51.	57	52.	58	59	53.	60	54.	61	62
4th	___	55	63	56.	64	57	65	58.	66	59.	67	60.	68	69	61.	70	62.	71	72
5th	___	63.	73	64	74	65.	75	66.	76	67,	77	68.	78	79	69.	80	70.	81	82
6th	___	71	83	72	84	73.	85	74.	86	75.	87	76.	88	89	77.	90	78	81	82

Coding Section

38

OFFICIAL RECORDS	INVESTIGATOR DETERMINED

OFFICIAL RECORDS

9. Injury Severity *(Police Rating)*   MAX AIS
- __ (0) No injury *(O)*
- __ (1) Possible injury *(C)*
- __ (2) Nonincapacitating injury *(B)*
- __ (3) Incapacitating injury *(A)*
- __ (4) Killed *(K)*
- __ (5) Injury, severity unknown
- __ (6) Died prior to accident
- __ (9) Unknown   __ 93

80. Time to Death
- __ (00) Not fatal
- ____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. *(Note 1 day = 31, 2 days = 32,.   n days = 30 +n up through 30 days = 60)*
- __ (96) Fatal – ruled disease
- __ (99) Unknown   __ __ 94 95

81. Traffic Violation Charged Against This Pedestrian or Nonmotorist
- __ (0) No
- __ (1) Yes *(specify)* _____
- __ (9) Unknown   __ 96

82. Police Reported Alcohol Presence
- __ (0) No *(alcohol not present)*
- __ (1) Yes *(alcohol present)*
- __ (8) Not reported
- __ (9) Unknown   __ 97

83. Alcohol Test Result

- ____ Actual value *(decimal implied before first digit) (0.xx)*
- __ (95) Test refused
- __ (96) None given
- __ (97) AC test performed, results unknown
- __ (99) Unknown   __ __ 98 99

INVESTIGATOR DETERMINED

84. Pedestrian/Nonmotorist Related Factors
- __ (00) No pedestrian/nonmotorist related factors
- __ (01) Non-physical *(i.e., mental or emotional factor)*

Physical impairments
- __ (02) Blind
- __ (03) Restricted sight
- __ (04) Walking cane/crutches required
- __ (05) Deaf
- __ (06) Restricted to wheelchair
- __ (07) Paraplegic
- __ (08) Previous injury
- __ (09) Other physical impairments *(specify)*:
  _____

Drug Impairments
- __ (10) Drugs – medication *(prescription, over-the-counter)*
- __ (11) Other drugs *(excludes alcohol, includes uncontrolled substances) (specify)*:
  _____

Pedalcyclist Related *(Includes Animal Related)*
- __ (12) Inattention
- __ (13) Interference with operator by other passenger
- __ (14) Operator inexperience
- __ (15) Erratic lane changing – cutting in and out of traffic
- __ (16) Not yielding right-of-way
- __ (17) Failure to yield to an emergency vehicle
- __ (18) Disobeying stop sign
- __ (19) Disobeying traffic signal
- __ (20) Failure to obey other traffic sign or signal *(specify)*:_____
- __ (21) Riding over or on the centerline
- __ (22) Riding over or on the median
- __ (23) Riding wrong way on 1-way street or entrance/exit ramp
- __ (24) Pulling in front of traffic from a roadway or driveway
- __ (25) Turning left or U-turning in front of oncoming traffic
- __ (26) Making right turn from left lane, or left turn from right lane
- __ (27) Making other improper turn *(specify)*:
  _____
- __ (28) Proceeding despite view obstruction
- __ (29) Wrong signal given for manuever executed
- __ (30) Turning without giving a turn signal
- __ (31) Hazard lights not used when appropriate or required
- __ (32) Operator unfamiliar with roadway
- __ (33) Overloading or improper loading of passengers and/or cargo
- __ (38) Other pedalcyclist related factors *(specify)*:
  _____
- __ (99) Unknown   __ __ 100 101

39

S Department of Transportation
National Highway Traffic Safety
Administration

Vehicle Data

NATIONAL ACCIDENT SAMPLING SYSTEM
CONTINUOUS SAMPLING SUBSYSTEM

1 Primary Sampling Unit Number $\overline{1}$ $\overline{2}$

2 Case Number-Stratification $\overline{3}$ $\overline{4}$ $\overline{5}$ $\overline{6}$

3 Record Number $\dfrac{3}{7}$

4 Transaction Code $\overline{8}$

5 Version Number $\dfrac{0}{9}$

6 Investigator I D Number $\overline{10}$

IDENTIFICATION

7 Vehicle Number $\overline{11}$ $\overline{12}$

8 Number of Occupant Forms Submitted
___ Code only the number of occupants in this
vehicle for which an OCCUPANT FORM
was submitted
___ (97) 97 or more $\overline{13}$ $\overline{14}$

9 Vehicle Role
___ (0) Noncollision
___ (1) Striking unit
___ (2) Struck unit
___ (3) Both striking and struck
___ (9) Unknown $\overline{15}$

10 Manner of Leaving Scene (Determined by Investigator)
___ (1) Driven
___ (2) Towed - due to vehicle damage
___ (3) Towed - not due to vehicle damage
___ (4) Towed - details unknown
___ (5) Abandoned
___ (9) Unknown $\overline{16}$

16 Vehicle Identification Number
___ No VIN - Code all Zeros
___ Unknown - Code all nines

Left justify
Slash zeros 0

11 Hit and Run Involvement
___ (0) No hit-and-run
___ (1) Yes - hit-and-run involved vehicle $\overline{17}$

EXTERIOR ITEMS

12 Vehicle Model Year
_____ Code the last two digits of the model year
___ (99) Unknown $\overline{18}$ $\overline{19}$

13 Vehicle Make (specify)
_____
Applicable codes are found in your NASS Data
Collection. Coding and Editing Manual
___ (99) Unknown $\overline{20}$ $\overline{21}$

14 Vehicle Model (specify)
_____
Applicable codes are found in your NASS Data
Collection. Coding and Editing Manual
___ (99) Unknown $\overline{22}$ $\overline{23}$

15 Registration of Vehicle
___ (0) Not registered
___ (1) In-state (at least)
___ (2) Out-of-state (only)
___ (8) Other registration (e g , federal, foreign,
military) (specify)
_____
___ (9) Unknown $\overline{24}$

$\overline{25}$ $\overline{26}$ $\overline{27}$ $\overline{28}$ $\overline{29}$ $\overline{30}$ $\overline{31}$ $\overline{32}$ $\overline{33}$ $\overline{34}$ $\overline{35}$ $\overline{36}$ $\overline{37}$ $\overline{38}$ $\overline{39}$ $\overline{40}$ $\overline{41}$

Delete sequen' production number
portion of VII   r case review

17 Body Type

Automobiles
____ (01) Convertible (excludes sun roof, t-bar)
____ (02) 2-door sedan, hardtop, coupe
____ (03) 3-door 2-door hatchback
____ (04) 4-door sedan, hardtop
____ (05) 5-door 4-door hatchback
____ (06) Station wagon (excluding van and truck based)
____ (08) Other automobile type (specify)

_____

____ (09) Unknown automobile type

Automobile Derivatives and Short Utility Vehicles
____ (10) Auto based pickup (includes El Camino Caballero Ranchero and Brat)
____ (11) Auto based panel (cargo station wagon includes auto based ambulance hearse)
____ (12) Short utility - not truck based (includes Jeep CJ-5 Jeep CJ-7, Renegade Landrover Pre-78 Bronco Landcruiser Thing)
____ (13) Large limousine - more than four side doors or stretched chassis

Motorcycles
____ (20) Motorcycle
____ (21) Mopeds (motorized bicycles)
____ (28) Other motorcycle (minibikes motorscooters) (specify)

_____

____ (29) Unknown motorcycle type

Bus (excludes van based)
____ (30) School bus (designed to carry students not cross country or transit)
____ (31) Cross country intercity (designed for long distance)
____ (32) Transit bus (includes short ride city bus and medium range suburban bus)
____ (38) Other bus (e g bus based motorhome) (specify) _____
____ (39) Unknown bus type

Van Based Light Truck (≤ 10,000 lbs GVWR)
____ (40) Van (includes VW bus, Vanagon Kombi, Beauville, Chateau Club Wagon, Sportsman, excludes moving van)
____ (41) Van-commercial cutaway (includes box van multi stop parcel van pickups)
____ (42) Van based motorhome
____ (48) Other van type (specify)

_____

____ (49) Unknown van type

Light Conventional Truck (Pickup style cab, ≤ 10 000 lbs GVWR)
____ (50) Pickup (includes open box and caps)
____ (51) Pickup with slide-in camper
____ (52) Pickup based motorhome (chassis mounted)
____ (53) Cab chassis based (includes rescue vehicles, light stake, dump, and tow trucks)
____ (54) Truck based panel
____ (55) Truck based station wagon (4-door, includes Suburban, Travelall, Wagoneer)
____ (56) Truck based utility (2-door, includes Blazer, Bronco - 78 on, Jimmy, Ramcharger, Cherokee, Trailduster, Scout)
____ (58) Other light conventional truck (e g, stretched Suburban limousine) (specify)

_____

____ (59) Unknown light conventional truck
____ (69) Unknown light truck (van or pickup)

Medium Heavy Truck (> 10,000 lbs GVWR)
____ (70) Step vans
____ (71) Single unit straight truck (10,000 lbs < GVWR ≤ 26,000 lbs)
____ (72) Single unit straight truck (> 26,000 lbs GVWR)
____ (73) Medium heavy truck based motorhome
____ (74) Truck-tractor with no cargo trailer
____ (75) Truck-tractor pulling one or more trailers
____ (77) Truck-tractor (unknown if pulling trailer)
____ (78) Unknown medium heavy truck type
____ (79) Unknown truck type (light medium heavy)

Other Vehicles
____ (80) Snowmobile
____ (81) Farm equipment other than trucks
____ (82) ATV, all terrain vehicle (e g, dune/swamp buggy)
____ (83) Construction equipment other than trucks (e g, grader, off road)
____ (88) Other (e g, go-cart, fork lift, city street sweeper) (specify)

_____

____ (89) Unknown other vehicle (specify)

_____

____ (99) Unknown body type

42 43

41

18 Towed Trailing Unit
____ (0) No towed unit

Yes.
towed trailing unit hitch type
____ (1) Clamp on (temporary)
____ (2) Bumper hitch (bolted)
____ (3) Frame
____ (4) Fifth wheel
____ (5) Converter dolly - with 1 towbar
____ (6) Converter dolly - with 2 towbars
____ (8) Other (specify) _____ ____
____ (9) Unknown hitch type   ‾44‾

19 Seating Capacity Truck Vocation

Passenger Vehicle by Designated Seating Capacity
_____

Motorcycle Automobile Van Bus (exclude pickups)
____ (01) One seat position
____ (02) Two seat positions
____ (03) Three seat positions
____ (04) Four seat positions
____ (05) Five seat positions
____ (06) Six seat positions
____ (07) Seven seat positions
____ (08) Eight seat positions
____ (09) Nine seat positions
____ (10) 10 to 19 seat positions
____ (11) 20 to 49 seat positions
____ (12) 50 or more seat positions
____ (13) Motorhome (any light or medium truck based)
____ (14) Ambulance EMS (any auto or truck based)
____ (19) Unknown passenger vehicle seating capacity

Cargo Vehicle by Vocation (Cargo Configuration)
_____

Platform
____ (20) Platform flatbed
____ (21) Platform with device (e g self-loader, spreader)
____ (22) Stake
____ (23) Drop frame low bed lowboy
____ (24) Livestock carrier
____ (28) Other platform (specify)

Open
____ (30) Pickup box (non-dump, includes open box and caps)
____ (31) Pickup with slide-in camper
____ (32) Dump (any light, medium, or heavy truck based)
____ (33) Dump with blade (front or undercarriage)
____ (34) Hopper (grain)
____ (35) Auto carrier/transport (includes boat)
____ (36) Van - open top
____ (38) Other open (specify)
_____

Closed
____ (40) Van - closed top (any light medium or heavy truck based, e g , multi-stop)
____ (41) Low bed van (e g , moving van)
____ (42) Refrigerated or insulated
____ (43) Mobile home
____ (44) Beverage, bottler
____ (45) Container (e g , piggy back)
____ (46) Tank - liquid and gaseous
____ (47) Tank - dry bulk
____ (48) Other closed (specify)
_____

Services Utility
____ (50) Garbage refuse (including dumpster)
____ (51) Fire apparatus
____ (52) Concrete mixer
____ (53) Wrecker, tow
____ (54) Crane, aerial basket
____ (55) Service, mobile repair (e g phone line truck)
____ (56) Pole (e g , pipe or log)
____ (57) Armored truck
____ (58) Other service/utility (specify)
_____

____ (71) Truck-tractor - no trailer
____ (72) Chassis, incomplete vehicle
____ (88) Other cargo vehicle (specify)
_____

____ (97) Other nontruck (e g , construction paver, farm tractor) (specify)
_____

____ (98) Unknown cargo configuration
____ (99) Unknown if passenger or cargo vehicle   ‾45‾ ‾46‾

Vehicle No ___ __

National Accident Sampling System — Continuous Sampling Subsystem. Vehicle Data   Page 4

20 21 22 23 Tire Condition (at time of or
resulting from accident)
Code up to four tires - front to rear, left to
right See manual for tire numbering scheme

AXLE
____ (0) No abnormal tire condition
____ (1-7) Code actual axle number
____ (8) Axle number eight or greater (specify)

_____

____ (9) Unknown axle

TIRE
____ (0) No abnormal tire condition
____ (1) Left outermost tire
____ (2) Left inner tire (if present)
____ (3) Right inner tire (if present)
____ (4) Right outermost tire
____ (9) Unknown tire position

CONDITION
____ (0) No abnormal tire condition
____ (1) Evidence of tread separation (with no
        sign of collision damage)
____ (2) Carcass failure
____ (3) Wear bars exposed
____ (4) Damaged as a result of the accident
____ (9) Unknown tire condition

	Ax	Tr	Cn
(20)	47	48	49
(21)	50	51	52
(22)	53	54	55
(23)	56	57	58

24 25 Type of Outside Mirror
L   R

____ ____ (0) Mirror not present
____ ____ (1) Plane mirror
____ ____ (2) Convex mirror
____ ____ (3) Plane plus stick-on convex mirror
____ ____ (4) Plane plus separate convex mirror
____ ____ (8) Other type mirror (specify)   24   25

_____

                                                 L   R

____ ____ (9) Unknown
                                                 59   60

26 Override/Underride (this vehicle)
____ (0) No override underride or not applicable
        to CDC/TDC or a side impact.

Override (see specific CDC/TDC)
____ (1) 1st CDC
____ (2) 2nd CDC
____ (3) Other not automated CDC (specify)

_____

Underride (see specific CDC/TDC)
____ (4) 1st CDC
____ (5) 2nd CDC
____ (6) Other not automated CDC (specify)

_____

____ (7) Medium/heavy truck override/underride
____ (9) Unknown
                                                    61

27 Rear Turn Signal Color
____ (0) No turn signals
____ (1) Red
____ (2) Amber
____ (8) Other (specify)

_____

____ (9) Unknown
                                                    62

43

MEDIUM/HEAVY TRUCK AND BUS DATA (V17 = 30-39 OR 70-78)

28 Cab Configuration
____ (0) Not a medium heavy truck or bus
        (V17 ≠ 30-39 or 70-78)

Cab Over Engine (COE)
____ (1) COE high entry
____ (2) COE low entry
____ (3) COE, unknown entry

Conventional (CBE-Cab Behind Engine)
____ (4) 2-door (standard)
____ (5) 2 door extended cab 4 door crew cab
____ (6) Unknown number of doors
____ (7) Cab alongside engine (CAE)
____ (8) Other (specify) _____
____ (9) Unknown   ‾63‾

29 30 31 32 Number of Axles

Power   Trailer
Unit 1st 2nd 3rd
‾‾   ‾‾   ‾‾   ‾‾

____ ____ ____ ____ (0) Not a medium heavy truck or
                        bus (V17 ≠ 30-39 or 70-78)
____ ____ ____ ____ (1) One
____ ____ ____ ____ (2) Two
____ ____ ____ ____ (3) Three
____ ____ ____ ____ (4) Four
____ ____ ____ ____ (5) Five
____ ____ ____ ____ (6) Six
____ ____ ____ ____ (7) Seven   P 1 2 3
                        or more   ‾‾ ‾‾ ‾‾ ‾‾
____ ____ ____ ____ (8) No trailer
____ ____ ____ ____ (9) Unknown
                                       ‾‾ ‾65‾ ‾‾ ‾67‾

33 34 35 Length of Trailing Units

       Trailer
1st   2nd   3rd
‾‾   ‾‾   ‾‾

____ ____ ____ (0) Not a medium heavy truck or bus
                   (V17 ≠ 30-39 or 70-78)
____ ____ ____ (1) Less than 26 feet
____ ____ ____ (2) 26 - 28 feet
____ ____ ____ (3) 29 - 31 feet
____ ____ ____ (4) 32 - 40 feet
____ ____ ____ (5) 41 - 45 feet
____ ____ ____ (6) 46 - 48 feet
____ ____ ____ (7) More than 48 feet   1st 2nd 3rd
____ ____ ____ (8) No trailer
____ ____ ____ (9) Unknown
                                         ‾68‾ ‾69‾ ‾70‾

36 Maximum Overall Width
____ (000) Not a medium heavy truck or bus
          (V17 ≠ 30-39 or 70-78)
_____ Code the actual value to the nearest inch
____ (998) 998 inches or more
____ (999) Unknown
                                    ‾71‾ ‾72‾ ‾73‾

37 Maximum Overall Length
    (Includes the power unit and all trailers)
____ (000) Not a medium heavy truck or bus
          (V17 ≠ 30-39 or 70-78)
_____ Code the actual value to the nearest foot
____ (998) 998 feet or more
____ (999) Unknown
                                    ‾74‾ ‾75‾ ‾76‾

38 Type of Brake Actuation
____ (0) Not a medium heavy truck or bus
          (V17 ≠ 30-39 or 70-78)
____ (1) Air
____ (2) Hydraulic
____ (8) Other (specify)
    _____
____ (9) Unknown
                                         ‾77‾

39 Gross Vehicle Weight Rating (GVWR)
____ (0) Not a medium heavy truck or bus
          (V17 ≠ 30-39 or 70-78)
____ (1) 10 001 - 14 000 lbs
____ (2) 14 001 - 16 000 lbs
____ (3) 16 001 - 19 500 lbs
____ (4) 19 501 - 26 000 lbs
____ (5) 26 001 - 33 000 lbs
____ (6) 33 001 lbs and above
____ (9) Unknown
                                         ‾78‾

       Specify GVWR _____

National Accident Sampling System – Continuous Sampling Subsystem: Vehicle Data

NC1

OBJECT CONTACTED

(00) Noncollision

(01) through (30)
If the object contacted by the vehicle under consideration was a motor vehicle in transport, code the Vehicle Number assigned to that vehicle

Collision with Stationary Object

(31) Motor vehicle not in transport*

(32) Tree (≤6 inches in diameter)

(33) Tree (>6 inches in diameter)

Highway Traffic Supports

(34) Luminaire - breakaway

(35) Luminaire - nonbreakaway

(36) Large sign - breakaway

(37) Large sign - nonbreakaway

(38) Small sign - breakaway

(39) Small sign - nonbreakaway

(40) Utility pole

(41) Traffic signal pole

(42) Delineator

(43) Other post, pole or support
(specify) _____

(44) Fence

(45) Mail box

(46) Other movable object (specify) _____

(47) Culvert

(48) Railroad tracks

(49) Curb

(50) Abutment

(51) Wall (stone, rock, metal, etc.)

(52) Embankment - earth

(53) Embankment - rock, stone or concrete

(54) Building - rigid

(55) Building - nonrigid

(56) Bridge pier or abutment

(57) Bridge rail

(58) Bridge parapet end

(59) Guardrail - bridge rail transition

(60) Guardrail end (non median)

(61) Guardrail end (median)

(62) Guardrail (non median)

(63) Guardrail (median)

(64) Concrete barrier (non median)

(65) Concrete barrier (median)

(66) Other median barrier (specify) _____

(67) Other longitudinal barrier
(non median) (specify)

(68) Impact attenuator/Crash cushion

(69) Ground

(70) Train

(71) Ditch

(72) Other stationary fixed object
(specify) _____

Collision with Nonstationary Objects

(73) Animal

(74) Trailer - disconnected in transport

(75) Train

(76) Other nonstationary objects (specify)

(81) through (95)
If the object contacted by the vehicle under consideration was pedestrian or nonmotorist, add eighty (80) to the assigned Pedestrian & Nonmotorist Number, and code the resultant sum

(96) Vehicle occupant

(97) Other object (specify) _____

(99) Unknown

---

*NOTE For coding CDC or TDC investigators must refer to appropriate reference documents for accurate coding. If this vehicle impacted a vehicle not in transport, fill in the information for that vehicle at the end of the CRASH Program Summary

---

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Event Number (this vehicle)	Object Contacted	(1)(2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(19) Deformation Extent Guide	Event Number (in accident)
1	— —	— —	— —	—	—	—	—	— —	—
2	— —	— —	— —	—	—	—	—	— —	—
3	— —	— —	— —	—	—	—	—	— —	—
4	— —	— —	— —	—	—	—	—	— —	—
5	— —	— —	— —	—	—	—	—	— —	—
6	— —	— —	— —	—	—	—	—	— —	—
7	— —	— —	— —	—	—	—	—	— —	—

DEFORMATION CLASSIFICATION

HIGHEST DELTA V

Event Number (this vehicle)	Object Contacted	(1)(2) Direction of Force	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent Guide	Event Number (in accident)
40 __ 79	41 __ __ 80 81	42 __ __ 82 83	43 __ 84	44 __ 85	45 __ 86	46 __ 87	47 __ __ 88 89	48 __ 90

Second Highest Delta V

49 __	50 __ __	51 __ __	52 __	53 __	54 __	55 __	56 __ __	57 __
_	91 92	93 94	95	96	97	98	99 100 101	102

CRUSH PROFILE

(The crush profile for the damage described in the CDC/TDC
above should be documented in the appropriate space below)

Highest

58	59						60
L	C1	C2	C3	C4	C5	C6	± D

103 104 105 106	107 108 109	110 111 112	113 114 115	116 117 118	119 120 121	122 123 124	125 126 127 128

Second Highest

61	62						63
L	C1	C2	C3	C4	C5	C6	± D

129 130 131 132	133 134 135	136 137 138	139 140 141	142 143 144	145 146 147	148 149 150	151 152 153 154

46

CODES FOR FRONT OCCUPANT AREA INTRUSION

Magnitude of Intrusion
____ (0) No passenger compartment or no
intrusion
____ (1) Less than 2 inches
____ (2) ≥ 2 inches but < 6 inches
____ (3) ≥ 6 inches but < 12 inches
____ (4) ≥ 12 inches
____ (9) Unknown

Intruding Component
    Primary
____ (00) No passenger compartment or no
intrusion
____ (01) Steering column
____ (02) Instrument panel left
____ (03) Instrument panel center
____ (04) Instrument panel right
____ (05) A-pillar
____ (06) B-pillar
____ (07) Door panel or side panel kick panel
____ (08) Roof
____ (09) Roof side rail
____ (10) Windshield header
____ (11) No intrusion of primary component

    Other
____ (20) Steering column and instrument panel
____ (21) Steering column, instrument panel, and
A-pillar
____ (22) Instrument panel and A-pillar
____ (23) A-pillar and roof
____ (24) A-pillar and any of the following door
panel, side panel, or B-pillar
____ (25) A-pillar, roof, and windshield header
____ (26) Roof and any of the following door
panel, side panel, or B-pillar
____ (27) Roof and windshield header

____ (97) Other combination of the above components (specify)
_____

____ (98) Intrusion of unlisted component(s)
(specify) _____
____ (99) Unknown

47

64 Documentation of More Than Two CDC TDC s
____ (1) Two or less coded CDC TDC s
____ (2) More than two coded CDC TDC s
                                                              155

65 Vehicle Special Use (this trip)
____ (0) No special use
____ (1) Taxi
____ (2) Vehicle used as school bus
____ (3) Vehicle used as other bus
____ (4) Military
____ (5) Police
____ (6) Ambulance
____ (7) Fire
____ (9) Unknown
                                                              156

66 Odometer Reading
_____ miles Code mileage to the nearest 1 000 miles
____ (000) No odometer
____ (001) Less than 1 500 miles
____ (997) 996 500 miles or more
____ (999) Unknown   ___ ___ ___   0 0 0
                             157 158 159

67 Passenger Compartment Integrity
____ (0) No passenger compartment
____ (1) No integrity loss

Yes integrity was lost through
____ (2) Windshield
____ (3) Door (side)
____ (4) Door (rear)
____ (5) Roof
____ (6) Windshield and door (side)
____ (7) Side or rear window breakage
____ (8) Other combination of above (specify)
        _____
____ (9) Unknown
                                                              160

FRONT OCCUPANT AREA INTRUSION
(See reverse of preceding page for list of codes)

	Intruding Component		Magnitude of Intrusion	
Driver Area Primary	68	___ ___	69	___
		161 162		163
Driver Area Other	70	___ ___	71	___
		164 165		166
Passenger Area Primary	72	___ ___	73	___
		167 168		169
Passenger Area Other	74	___ ___	75	___
		170 171		172

76 Steering Column Separation
____ (0) No steering column
____ (1) No steering column did not separate
____ (2) Yes steering column separated
____ (9) Unknown
                                                              173

77 Steering Rim Deformation
____ (0) No steering rim deformation
____ (1) Yes steering rim deformation
____ (9) Unknown
                                                              174

78 Fire Occurrence
____ (0) No fire

Yes, fire occurred
____ (1) Started in vehicle minor
____ (2) Started in vehicle major
____ (3) Started external to vehicle minor
____ (4) Started external to vehicle major
____ (5) Origin unknown
____ (9) Unknown
                                                              175

79 Type of Most Severe Impact This Vehicle
    This Vehicle's Role
____ (0) Nonimpact
____ (1) Front of this vehicle
____ (2) Left side of this vehicle
____ (3) Right side of this vehicle
____ (4) Rear of this vehicle
____ (5) Other impact location (specify)
        _____
____ (9) Unknown impact type
                                                              176

80 Role of Other Contacted Vehicle, Object or
    Person (for same impact as above)
____ (0) Nonimpact
____ (1) Front of other vehicle
____ (2) Side of other vehicle
____ (3) Rear of other vehicle
____ (4) Intraunit damage
____ (5) Other location on other vehicle (specify)
        _____
____ (6) Object (stationary or nonstationary)
____ (7) Pedestrian or nonmotorist
____ (8) Motorcycle or moped
____ (9) Unknown impact type
                                                              177

81 Rollover

____ (0) No rollover (no overturning)

Rollover primarily about the longitudinal axis

____ (1) Rollover. 1 quarter turn only

____ (2) Rollover. 2 quarter turns

____ (3) Rollover. 3 quarter turns

____ (4) Rollover. 4 or more quarter turns
      (specify) _____

____ (5) Rollover primarily about the lateral axis

____ (9) Rollover (Overturn). details unknown $\overline{178}$

82 Jackknife

____ (0) Not an articulated vehicle

____ (1) No jackknife

____ (2) Yes - prior to first impact for this
      vehicle

____ (3) Yes - after first impact but prior to last
      impact for this vehicle

____ (4) Yes - details unknown $\overline{179}$

83 Hazardous Cargo

____ (0) No hazardous cargo

____ (1) Load of hazardous materials only
      (specify) _____

____ (2) Load of hazardous and nonhazardous
      materials (specify)
      _____

____ (9) Unknown $\overline{180}$

NOTE (See coding manual for definitions and
       examples of hazardous materials)

VEHICLE WEIGHT ITEMS

84 Vehicle Curb Weight

_____ pounds - Code weight to nearest 100 pounds

____ (001) Less than 150 pounds

____ (997) 99.650 lbs or more

____ (999) Unknown $\overline{181}$ $\overline{182}$. $\overline{183}$ 0⁻ 0

      Source _____

85 Vehicle Cargo Weight

_____ pounds - Code weight to nearest 100 pounds

____ (000) Less than 50 pounds

____ (997) 99.650 lbs or more

____ (999) Unknown $\overline{184}$ $\overline{185}$. $\overline{186}$ 0 0

86 Investigator Reported Source of Cargo Weight

____ (0) No cargo

____ (1) Measured

____ (2) Estimated

____ (3) Rated capacity

____ (9) Unknown source or weight $\overline{187}$

      Source _____

Vehicle No _____

National Accident Sampling System — Continuous Sampling Subsystem. Vehicle Data   Page 13

RECONSTRUCTION RESULTS

87 Basis for Total Delta V (highest)

Delta V Calculated

____ (1) CRASH program - damage only routine

____ (2) CRASH program - damage and trajec-
        tory routine

____ (3) Missing vehicle algorithm

____ (4) Yielding object algorithm

____ (5) Other technique used (specify)

_____

Delta V Not Calculated

____ (6) At least one vehicle (which may be this
        vehicle) is beyond the scope of an ac
        ceptable reconstruction program
        regardless of collision conditions

____ (7) All vehicles within scope (CDC ap
        plicable) of CRASH program but one of
        the collision conditions is beyond the
        scope of the CRASH program or other
        acceptable reconstruction technique
        regardless of adequacy of damage data

____ (8) All vehicle and collision conditions are
        within scope of one of the acceptable
        reconstruction programs but there is in
        sufficient data available
                                    ‾‾‾ 188

_____

HIGHEST	Secondary	HIGHEST

88 Total Delta V

_____ nearest m p h   _____

(NOTE 00 means less than
    0 5 m p h)

____ (97) 96 5 m p h and above

____ (99) Unknown
                                    ‾‾‾ 189 ‾‾‾ 190

89. Longitudinal Component of Delta V

_____ nearest m p h   _____

(NOTE 00 means greater than
-0 5 and less than 0 5 m p h)

____ (97) 96 5 m p h and above

____ (99) Unknown
                             +
                          ‾‾‾ 191 ‾‾‾ 192 ‾‾‾ 193

90 Lateral Component of Delta V

_____ nearest m p h   _____

(NOTE 00 means greater than
-0 5 and less than 0 5 m p h)

____ (97) 96 5 m p h and above

____ (99) Unknown
                             +
                          ‾‾‾ 194 ‾‾‾ 195 ‾‾‾ 196

91 Energy Absorption

_____ nearest 100 foot-lbs   _____

(NOTE 0000 means less than
50 foot-lbs)

____ (9997) 999 650 foot-lbs or more

____ (9999) Unknown
                          0 0
            ‾‾‾ 197 ‾‾‾ 198 ‾‾‾ 199 ‾‾‾ 200

POLICE REPORT

92 Police Reported Travel Speed

_____ nearest m p h

(NOTE 00 means less than
0 5 m p h)

____ (97) 96 5 m p h and above

____ (99) Unknown
                          ‾‾‾ 201 ‾‾‾ 202

US Department of Transportation
National Highway Traffic Safety Administration

1. Primary Sampling Unit Number $\overline{\;1\;}\;\overline{\;2\;}$

   Case Number-Stratification $\overline{\;3\;}\;\overline{\;4\;}\;\overline{\;5\;}\;\overline{\;6\;}$

3. Record Number $\dfrac{4}{7}$

4. Transaction Code $\overline{\;8\;}$

5. Version Number $\dfrac{0}{9}$

6. Investigator I.D. Number $\overline{\;10\;}$

IDENTIFICATION

7. Vehicle Number $\overline{\;11\;}\;\overline{\;12\;}$

8. Number of Occupants This Vehicle

   _____ occupant(s) – Code the actual number
   of persons (including the driver if
   present) that were occupants of this
   vehicle The number of OCCUPANT
   FORMS does not have to equal this
   value
   ____ (97) 97 or more
   ____ (99) Unknown $\overline{\;13\;}\;\overline{\;14\;}$

. Driver Presence In Vehicle
   ____ (1) Driver present
   ____ (2) Driver not present $\overline{\;15\;}$

(NOTE If no driver was present in this vehicle,
indicate and subsequently leave blank the remain-
ing nonenvironmental questions (variables
D10-D33) on this form Do code the environmen-
tal elements No OCCUPANT FORM for the
driver is required Remember, if the person who
had been driving this motor vehicle prior to the
accident was injured outside of this vehicle, that
person is handled on the PEDESTRIAN & NON-
MOTORIST FORM.)

DRIVER INTERVIEW

10. Months Driving Experience This Class of
    Vehicle (e.g., passenger car, light truck,
    motorcycle, etc.)
    _____ months – Code actual months of
    previous driving experience up to 60.
    (NOTE: 44 days or less equals 1
    month, a month and a half equals 2
    months)
    ____ (61) Greater than five years
    ____ (99) Unknown $\overline{\;16\;}\;\overline{\;17\;}$

11. Estimated Mileage This Vehicle
    (Estimated total mileage that driver has
    driven in this specific accident involved
    vehicle.)
    _____ miles to the nearest 100
    ____ (001) Less than 150 miles
    ____ (997) 99,650 miles or more
    ____ (999) Unknown $\overline{\;18\;}\;\overline{\;19\;}\;{}_{\boldsymbol{\cdot}}\;\overline{\;20\;}$ **0 0**

12. Total Mileage All Vehicles
    (Past Twelve Months)
    _____ miles to the nearest 100
    ____ (001) Less than 150 miles
    ____ (997) 99,650 miles or more
    ____ (999) Unknown $\overline{\;21\;}\;\overline{\;22\;}\;{}_{\boldsymbol{\cdot}}\;\overline{\;23\;}$ **0 0**

13. Driver Education
Automobile or Light Truck Driver Training
    ____ (0) No formal driver training
    ____ (1) High school driver training
    ____ (2) Commercial driver training
    ____ (8) Other formal driver training
         (e.g., college, military, etc.) (specify):
    _____
    ____ (9) Unknown

Motorcycle Driver Training
    ____ (0) No formal driver training
    ____ (5) Motorcycle driver training
    ____ (8) Other formal driver training
         (e.g., college, military, etc.) (specify)
    _____
    ____ (9) Unknown

Medium/Heavy Vehicle Driver Training (>10,000 lbs.
GVWR)
    ____ (0) No formal driver training
    ____ (1) High school driver training
    ____ (2) Commercial driver training
    ____ (3) Motor carrier program –
         On-the-Job-Training
    ____ (4) Vocational training (CETA, Job Corps
         other government sponsored training,
         etc.)
    ____ (8) Other formal driver training
         (e.g., college, military, etc.) (specify):
    _____
    ____ (9) Unknown $\overline{\;24\;}$

51

HS Form 429
(Rev 1/87)

This report is authorized by P L 89-563 Title I Section 106 108 and 112 While you are not required to respond
your cooperation is needed to make the results of this data collection effort comprehensive accurate and timely

Category	Configuration	ACCIDENT TYPES (Includes Intent)					
I. Single Driver	A. Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN	
	B Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED , ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN	
	C Forward Impact	11 PARKED VEH	12 STA OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D Rear-End	20, 22, 21, 23 STOPPED 21, 22, 23	24, 26, 25, 27 SLOWER 25, 26, 27	28, 30, 29, 31 DECEL. 29, 30, 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN	
	E Forward Impact	34, 35 CONTROL/ TRACTION LOSS	36, 37 CONTROL/ TRACTION LOSS	38, 39 AVOID COLLISION WITH VEH.	40, 41 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	44, 45	(EACH • 46) SPECIFICS OTHER	(EACH • 47) SPECIFICS UNKNOWN			
III. Same Trafficway Opposite Direction	G Head-On	50, 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN			
	H Forward Impact	54, 55 CONTROL/ TRACTION LOSS	56, 57 CONTROL/ TRACTION LOSS	58, 59 AVOID COLLISION WITH VEH	60, 61 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	64, 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN			
IV Change Trafficway Vehicle Turning	J Turn Across Path	68, 69 INITIAL OPPOSITE DIRECTIONS	71, 70, 73, 72 INITIAL SAME DIRECTIONS		(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN	
	K Turn Into Path	76, 77, 79, 78 TURN INTO SAME DIRECTION	80, 81, 83, 82 TURN INTO OPPOSITE DIRECTIONS		(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN	
V Intersecting Paths (Vehicle Damage)	L. Straight Paths	86, 87	88	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN		
Miscellaneous	M Backing Etc	92 BACKING VEH	.3 OTHER VEH OR OBJECT	98 Other Accident Type	99 Unknown Accident Type	00 No Impact	

52

14. Time Since Last Driver Training
___ (0) No formal driver training
___ (1) In training at time of accident
___ (2) Less than five years
___ (3) Five to ten years
___ (4) More than ten years
___ (9) Unknown   25

15. Frequency Driving Road

Familiar with Road
___ (1) Daily
___ (2) Weekly
___ (3) Monthly
___ (4) Less than once a month

___ (5) Unfamiliar with road

___ (9) Unknown   26

TRUCK/BUS OPERATIONS

16. Type of Operation or Carrier
___ (0) Noncommercial or automobile. motorcy-
        cle. or other vehicle (V17 = 01-29.
        80-89)
___ (1) For hire/common carrier
___ (2) For hire/contract carrier
___ (3) Private carrier of property or passengers
___ (4) Carrier of ICC exempt commodities
___ (5) U.S mail carrier
___ (8) Other (specify). _____
___ (9) Unknown   27

17. Federal Safety Regulated
___ (0) Noncommercial or automobile, motor-
        cycle, or other vehicle (V17 = 01-29,
        80-89)

___ (1) Motor carrier not subject to U.S DOT
        (BMCS) regulations

Motor Carrier Subject to U.S. DOT (BMCS) regulations
___ (2) Intercity operations
___ (3) Local pickup or delivery

___ (9) Unknown   28

18. Driver's Classification
___ (0) Noncommercial or automobile, motorcy-
        cle, other vehicle (V17 = 01-29, 80-89)
___ (1) Full time employee
___ (2) Part time employee
___ (3) Owner operator
___ (4) Leased (from labor contractor)
___ (8) Other (specify) _____
___ (9) Unknown   29

ACCIDENT PRE-CRASH INFORMATION

Inter-viewee	Inves-tigator

19. Accident Type
___ (00) No impact   —
___ Code the number of the diagram that ___   ·
        best describes the accident cir-
        cumstance (See reverse of preceding
        page for diagrams)
___ (98) Other accident type (specify):   —
_____
___ (99) Unknown   —   30 31

20. Attempted Avoidance Maneuver
___ (00) No impact   —
___ (01) No avoidance actions   —
___ (02) Braking (no lockup)   —
___ (03) Braking (lockup)   —
___ (04) Braking (lockup unknown)   —
___ (05) Releasing brakes   —
___ (06) Steering left   —
___ (07) Steering right   —
___ (08) Braking and steering left   —
___ (09) Braking and steering right   —
___ (10) Accelerating   —
___ (11) Accelerating and steering left   —
___ (12) Accelerating and steering right   —
___ (98) Other action (specify):   —
_____
___ (99) Unknown   —   32 33

53

INVESTIGATOR DETERMINED	OFFICIAL RECORDS

INVESTIGATOR DETERMINED

21 Driver Related Factors

____ (00) No impact
____ (01) No driver related factors - inappropriate
____ (02) Being pursued by police - police chase
____ (03) Over speed limit
____ (04) Too fast for conditions
____ (05) Excessive or erratic acceleration
____ (06) Erratic lane changing - cutting in and
      out of traffic
____ (07) Following too closely (tailgating)
____ (08) Passing in no-passing zone
____ (09) Not yielding right-of-way
____ (10) Failure to yield to an emergency vehicle
____ (11) Disobeying stop sign
____ (12) Disobeying traffic signal
____ (13) Failure to obey other traffic sign or
      signal (specify)
_____

____ (14) Driving over or on the centerline
____ (15) Driving over or on the median
____ (16) Driving on road shoulder
____ (17) Driving wrong way on 1-way street or
      entrance exit ramp
____ (18) Driving in parking lane
____ (19) Pulling in front of traffic from a road-
      way or driveway
____ (20) Turning left or U-turning in front of on-
      coming traffic
____ (21) Improper lane change - cutting into
      another vehicle's path
____ (22) Making right turn from left lane, or left
      turn from right lane
____ (23) Making other improper turn (specify)
_____

____ (24) Passing with close oncoming traffic
____ (25) Proceeding despite view obstruction
____ (26) Passing on blind curve or hill
____ (27) Passing on wrong side of vehicle being
      overtaken
____ (28) Illegally parked
____ (29) Driving too slow or less than minimum
      speed
____ (30) Braking rapidly and unnecessarily (slow-
      ing but not to stop)
____ (31) An abrupt stop without warning
____ (32) Wrong signal given for maneuver
      executed
____ (33) Turning without giving a turn signal
____ (34) Headlights not used when required
____ (35) Hazard lights not used when appropriate
      or required
____ (36) Failure to dim lights for oncoming
      traffic
____ (37) Operator inexperience with vehicle
____ (38) Operator unfamiliar with roadway
____ (39) Overloading or improper loading of
      passengers and/or cargo
____ (98) Other driver related factor (specify)
_____

____ (99) Unknown $\overline{34}$ $\overline{35}$

OFFICIAL RECORDS

22. 23. Traffic Violation Charged Against This Driver

1st 2nd
__ __ (00) No violation charged
__ __ (01) Speeding
__ __ (02) Driving while intoxicated (or
      DUIL)
__ __ (03) Reckless driving
__ __ (04) Driving with suspended or
      revoked license
__ __ (05) Failure to yield right-of-way
__ __ (06) Following too closely
__ __ (07) Running a traffic signal or
      stop sign
__ __ (08) License restriction not com-
      plied with
__ __ (98) Other violation charged
      (specify): _____
__ __ (99) Unknown   (1st) $\overline{36}$ $\overline{37}$

                          (2nd) $\overline{38}$ $\overline{39}$

24 Police Reported Alcohol Presence
____ (0) No (alcohol not present)
____ (1) Yes (alcohol present)
____ (8) Not reported
____ (9) Unknown $\overline{40}$

25 Alcohol Test Result
_____ Actual value (decimal implied before first
      digital - 0 xx)
____ (95) Test refused
____ (96) None given
____ (97) AC test performed, results unknown
____ (99) Unknown $\overline{41}$ $\overline{42}$

26 Driver License Status (Irrespective of Vehicle
      being Driven)
No Valid License
____ (0) Not licensed
____ (1) Suspended
____ (2) Revoked
____ (3) Expired
____ (4) Canceled or denied

Valid License
____ (5) Single class license (specify):
_____
____ (6) Multiple class license (specify).
_____
____ (7) Learner's permit
____ (8) Temporary
____ (9) Unknown $\overline{43}$

27. Driver License Type Compliance (For This
    Class Vehicle)
    __ (0) Not licensed
    __ (1) No license required for this class vehicle
    ___ (2) No valid license for this class vehicle
    ___ (3) Valid license for this class vehicle
    ___ (9) Unknown   44

28. Driver License Restriction
    ___ (0) No license restrictions
    ___ (1) Corrective (or contact) lenses only
    ___ (2) Corrective lenses and outside mirror
    ___ (3) Corrective lenses and limited to daylight
    ___ (4) Corrective lenses and other (specify):
        _____ _____
    ___ (5) Outside mirror only
    ___ (6) Limited to daylight only
    ___ (7) Limited to employment only
    ___ (8) Other (specify) _____
    ___ (9) Unknown   45

Code in the space provided the actual number of
recorded convictions/suspensions/accidents that oc-
·urred within the last three (3) years (as measured
  om the date of the accident) If 8 or more convic-
tions/suspensions or accidents, then code 8. Be sure
that the actual value is recorded in the space pro-
vided near the question number If unknown, code
9 for each of questions 29 through 33

29. __ Previous Speeding Convictions   46

30 __ Previous Other Harmful Moving Viola-
       tions or Convictions (specify)

       _____   47

31. __ Previous Driving While Intoxicated Con-
       victions (or DUIL)
                                                   48

32 __ Previous Recorded Suspensions and
      Revocations
                                                   49

33. __ Previous Recorded Accidents
                                                   50

ADMINISTRATIVE ITEMS

34. Federal Aid System
    ___ (1) Interstate
    ___ (2) Federal-aid primary (other than
            interstate)
    ___ (3) Federal-aid urban
    ___ (4) Federal-aid secondary (rural only)
    ___ (5) Nonfederal-aid
    ___ (9) Unknown   51

35. Class Trafficway
    ___ (1) Interstate
    ___ (2) U.S. Highway
    ___ (3) State Highway
    ___ (4) County road

Local Street
    ___ (5) Township
    ___ (6) Municipality

    ___ (8) Other (specify): _____
    ___ (9) Unknown   52

36. Roadway Function Class
Rural
    ___ (01) Principal arterial-interstate
    ___ (02) Principal arterial-other
    ___ (03) Minor arterial
    ___ (04) Major collector
    ___ (05) Minor collector
    ___ (06) Local road or street
    ___ (09) Unknown rural

Urban
    ___ (11) Principal arterial-interstate
    ___ (12) Principal arterial-other freeways or
             expressways
    ___ (13) Other principal arterial
    ___ (14) Minor arterial
    ___ (15) Collector
    ___ (16) Local road or street
    ___ (19) Unknown urban

    ___ (99) Unknown   53 54

WAS THE DRIVER'S VEHICLE IN A SCHOOL ZONE?
(FOR USE IN CODING A20)

Yes ___
No ___

ENVIRONMENTAL DATA

37. Number of Travel Lanes
____ (1) One   ____ (5) Five
____ (2) Two   ____ (6) Six
____ (3) Three   ____ (7) Seven or more
____ (4) Four   ____ (9) Unknown
$\overline{55}$

38. Lane Width
____.__ Code actual measured value to nearest
          tenth of a foot
____ (999) Unknown
$\overline{56}$ $\overline{57}$ $\overline{58}$

39. Median Type
____ (0) No median
____ (1) Curbed with positive barrier
____ (2) Positive barrier
____ (3) Curbed
____ (4) Unprotected
____ (9) Unknown
$\overline{59}$

40. Median Width
____ (00) No median
_____ Code actual measured value up to
          96 feet
____ (97) 96.5 feet or above
____ (99) Unknown
$\overline{60}$ $\overline{61}$

41. Access Control
____ (1) Full
____ (2) Partial
____ (3) Uncontrolled
____ (9) Unknown
$\overline{62}$

42. Trafficway Flow
____ (0) Not physically divided (two way traffic)
____ (1) Divided trafficway - median strip
          without positive barrier
____ (2) Divided trafficway - median strip with
          positive barrier
____ (3) One way trafficway
____ (9) Unknown
$\overline{63}$

43. 44. Shoulder Type
L R
__ __ (0) No shoulder
__ __ (1) Surfaced 2-6 feet
__ __ (2) Surfaced > 6 feet
__ __ (3) Gravel or other granular material
           2-6 feet
__ __ (4) Gravel or other granular material
           > 6 feet
__ __ (5) Natural earth, with or without turf
           2-6 feet
__ __ (6) Natural earth, with or without turf   L R
           > 6 feet
__ __ (9) Unknown
$\overline{64}$ $\overline{65}$

45 Roadway Alignment
____ (1) Straight
____ (2) Curve right
____ (3) Curve left
____ (9) Unknown
$\overline{66}$

46 Cross Slope
____ (1) Flat
____ (2) Normal crown
____ (3) Superelevation
____ (4) Negative superelevation
____ (8) Other (specify). _____
____ (9) Unknown
$\overline{67}$

47 Superelevation
____ (+00) Normal crown/flat
_____ Code actual value to the nearest hundredth
____ (_98) Not a curve   +
____ (_99) Unknown $\overline{=}$.$\overline{68}$ $\overline{69}$ $\overline{70}$

48 Degree of Curvature
____ (000) Not curved - straight

_____ Code calculated value to nearest tenth of a
         degree (See coding manual for
         formula)
____ (997) 99 65 degrees or more
____ (999) Unknown   **0**
                                  $\overline{71}$ $\overline{72}$ $\overline{73}$

Length of chord· _____ ft

Middle ordinate· ____ __ inches

49. Grade Measurement
____ (+00) No grade - level
____ Code actual value to the nearest hundredth +
____ (_99) Unknown $\overline{74}$ $\overline{75}$ $\overline{76}$

slope
measurement: (v=____)/(h=____)

50. Roadway Profile
____ (1) Level
____ (2) Grade (≥ 2%)
____ (3) Hillcrest
____ (4) Sag
____ (9) Unknown $\overline{77}$

51. Roadway Surface Type
____ (1) Concrete
____ (2) Bituminous
____ (3) Brick or block
____ (4) Slag, gravel or stone
____ (5) Dirt
____ (8) Other (specify) _____
____ (9) Unknown $\overline{78}$

52. Roadway Surface Condition
____ (1) Dry
____ (2) Wet
____ (3) Snow or slush
____ (4) Ice
____ (5) Sand, dirt or oil
____ (8) Other (specify):_____
____ (9) Unknown $\overline{79}$

53. Speed Limit
____ (00) No statutory limit
____ m.p h. - Code actual posted or
          statutory speed limit
____ (99) Unknown $\overline{80}$ $\overline{81}$

54 Restriction of Roadway at Scene (NOTE The
   restriction must have existed prior to this acci-
   dent)
____ (0) No restrictions
____ (1) Narrow bridge (as defined)
____ (2) Previous accident on roadway
____ (3) Maintenance, repair or construction ac-
          tivity on roadway.
____ (4) Roadway immersion (e.g., standing
          water)
____ (5) Vehicle stopped on roadway
____ (6) Snow
____ (8) Other roadway obstruction (specify):

_____

____ (9) Unknown $\overline{82}$

(NOTE. If more than one restriction exists, choose
the restriction in the order in which they are
numbered)

55 Traffic Control Device
___ (00) No controls

Not at railroad grade crossing
  Highway traffic signals (Active)
___ (01) Traffic control signal (on colors)
        without pedestrian signal
___ (02) Traffic control signal (on colors) with
        pedestrian signal
___ (03) Traffic control signal (on colors) not
        known whether or not pedestrian signal
___ (04) Flashing traffic control signal
___ (05) Flashing beacon
___ (06) Flashing highway traffic signal, type
        unknown or other than traffic control or
        beacon
___ (07) Lane use control signal
___ (08) Other highway traffic signal (specify)
        _____

  Regulatory signs (Passive)
___ (20) Stop sign
___ (21) Yield sign
___ (28) Other regulatory sign (specify)
        _____

___ (29) Unknown type regulatory sign

  School zone signs (Passive)
___ (30) School speed limit sign
___ (31) School advance or crossing sign
___ (38) Other school related sign (specify)
        _____

___ (39) Unknown type school zone sign

  Warning signs (Passive)
___ (40) Construction warning sign
___ (41) Other warning sign (specify)
        _____

  Miscellaneous (Active)
___ (50) Officer, crossing guard, flagman etc

At railroad grade crossing
  Active Devices
___ (60) Gates
___ (61) Flashing lights
___ (62) Traffic control signal
___ (63) Wigwags
___ (64) Bells
___ (65) Special warning device - watchman,
        flagged by crew
___ (68) Other active device (specify)
        _____

___ (69) Active device, type unknown

  Passive Devices
___ (70) Crossbucks
___ (71) Stop sign
___ (72) Other railroad crossing sign (specify)
        _____

___ (78) Other passive device (specify)
        _____

___ (79) Passive device, type unknown

  Miscellaneous controls
___ (80) Grade crossing control type unknown

Whether or Not at Railroad Grade Crossing
  Pavement marking (Passive)
___ (90) Lane line
___ (91) Center line
___ (92) No passing line
___ (93) Edge line
___ (94) Other pavement marking (specify)
        _____

___ (95) Unknown pavement marking type

___ (98) Other
___ (99) Unknown
                                        83 84

56 Traffic Control Device Functioning
Active Device (D55 = 01-08, 50-69)
___ (0) No traffic control
___ (1) Traffic control not functioning
___ (2) Traffic control functioning - functioning
        improperly
___ (3) Traffic control functioning properly

Passive Device (D55 = 20-41, 70-95)
___ (4) Traffic control device defaced, badly
        worn, etc.
___ (5) Traffic control device obscured (e g,
        covered with snow)
___ (6) No abnormal condition of traffic control
        device
___ (9) Unknown
                                        85

57. Designated Truck System
___ (0) No
___ (1) Yes
___ (9) Unknown
                                        86

INVESTIGATOR DETERMINED

8. Environmental Related Factors

____ (00) No environmental related factors

Vision Obscured By

____ (01) Rain, snow, fog. smoke, sand. dust

____ (02) Reflected glare, bright sunlight, headlights

____ (03) Curve, hill or other design features (including traffic signs, embankment)

____ (04) Building, billboard, etc.

____ (05) Trees, crops, vegetation

____ (06) Moving vehicle (including load)

____ (07) Splash or spray of passing vehicle

____ (08) Parked vehicle

____ (09) Other object not classifiable above (specify). _____

Swerving or Loss of Control Due to

____ (20) Severe crosswind

____ (21) Wind from passing truck

____ (22) Slippery surface

____ (23) Avoiding debris or objects in roadway

____ (24) Ruts, holes, bumps in roadway

____ (25) Avoiding animal(s) in roadway

____ (26) Avoiding vehicle in roadway

____ (27) Avoiding pedestrian, pedalcyclist, or other nonmotorist in roadway

____ (28) Avoiding standing water, snow, oilslick or ice patch on roadway

Roadway Features

____ (30) Inadequate warning of exits, lanes narrowing, traffic controls, etc

____ (31) Pavement marking obscured or absent

____ (32) Surface washed out (caved in, road slippage)

____ (33) Shoulder too low or high

____ (34) Inadequate construction or poor design of roadway, bridge, etc

____ (35) Vehicle unattended in roadway

____ (98) Other (specify) _____

____ (99) Unknown

87 88

National Highway Traffic Safety
Administration

Occupant Data

1 Primary Sampling Unit Number ___ ___
  1   2

2 Case Number-Stratification ___ ___ ___ ___
  3   4   5   6

3 Record Number **5**
  7

4 Transaction Code ___
  8

5 Version Number **0**
  9

6 Investigator I D Number ___
  10

IDENTIFICATION

7 Vehicle Number ___ ___
  11   12

8 Occupant Number ___ ___
  13   14

OCCUPANT INTERVIEW

9 Occupant's Age
___ year(s) - Code actual age at time of accident
___ (00) Less than one year old
___ (97) 97 years and older
___ (99) Unknown ___ ___
  15   16

10 Occupant's Sex
___ (1) Male
___ (2) Female
___ (9) Unknown ___
  17

11 Occupant's Height
___ inches - Code actual height to the nearest inch
___ (99) Unknown ___ ___
  18   19

12 Occupant's Weight
___ pounds - Code actual weight to the nearest pound
___ (999) Unknown ___ ___ ___
  20   21   22

13 Occupant's Role
___ (1) Driver
___ (2) Passenger
___ (9) Unknown ___
  23

14 Occupant's Seat Position
___ (01) Front seat - left side
___ (02) Front seat - middle
___ (03) Front seat - right side
___ (04) Second seat - left side
___ (05) Second seat - middle
___ (06) Second seat - right side
___ (07) Third seat - left side
___ (08) Third seat - middle
___ (09) Third seat - right side
___ (10) Front seat - additional passenger
___ (11) Second seat or beyond - additional
         passenger
___ (12) Truck-tractor sleeping section
___ (13) Other enclosed area (specify)

_____
___ (14) In or on unenclosed area (specify
         area type) _____
___ (15) In or on trailing unit (specify
         unit type) _____
___ (99) Unknown ___ ___
  24   25

INVESTIGATOR DETERMINED

(NOTE INVESTIGATOR as used below refers to
the product of individual observation. police reports.
and any other sources used that culminated in the
assessment which represents the final opinion of the
investigator)

Inter   Invest
viewee   igator

15 Entrapment

(NOTE Entrapped means that part of the occupant
was in the vehicle and mechanically restrained
jammed doors and immobilizing injuries by
themselves are not sufficient to constitute
entrapment)

___ (0) Not entrapped   —
___ (1) Entrapped   —
___ (9) Unknown   —   ___
                                            26

(9
168
thru
75)

Inter-viewee	Inves-tigator

16. Ejection

V9
(67)
- ____ (0) None —
- ____ (1) Complete ejection —
- ____ (2) Partial ejection —

V10
- ____ (3) Ejection. unknown degree —
- ____ (9) Unknown —   27

17. Ejection Area
- ____ (0) No ejection —
- ____ (1) Windshield —
- ____ (2) Left front —
- ____ (3) Right front —
- ____ (4) Left rear —
- ____ (5) Right rear —
- ____ (6) Rear —
- ____ (7) Roof —
- ____ (8) Other area (e g sidecar. back —
         pickup. etc) (specify)
- ____ (9) Unknown —   28

18. Ejection Medium
- ____ (0) No ejection —
- ____ (1) Door —
- ____ (2) Open roof structure —
- ____ (3) Fixed windows —

Operable windows
V10
- ____ (4) Roll down type —
- ____ (5) Hinged type —
- ____ (6) Sliding type —
- ____ (7) Other type (specify) —
- ____ (8) Other medium (specify) —
- ____ (9) Unknown —   29

19 Medium Status
- ____ (0) No ejection —
- ____ (1) Open —
V10
- ____ (2) Separation —
- ____ (3) Closed. closed when damaged —
- ____ (4) Integral structure ripped open —
- ____ (9) Unknown —   30

INTERVIEW AND OFFICIAL SOURCES

Inter-viewee	Official Sources

20 Treatment – Mortality
- ____ (0) No treatment —
- ____ (1) Fatal —
- ____ (2) Fatal – ruled disease —

Nonfatal
- ____ (3) Hospitalization —
- ____ (4) Transported and released —
- ____ (5) Treatment at scene – non-transported —
- ____ (6) Treatment later —
- ____ (8) Treatment – other (specify) —
- ____ (9) Unknown —   31

21 Hospital Stay
- ____ (00) Not hospitalized —
- _____ day(s) – Code the number of —
         days (up through 60) that the
         occupant stayed in hospital
- ____ (61) 61 days or more —
- __ __ (99) Unknown —   32 33

22 Working Days Lost
- ____ (00) No working days lost
- _____ day(s) – Code the number of
         days (up through 60) that the
         occupant lost from work due
         to the accident
- ____ (61) 61 days or more
- ____ (62) Fatally injured
- ____ (97) Not working prior to accident
- ____ (99) Unknown   34 35

INVESTIGATOR DETERMINED

Inter-viewee	Inves-tigator

23 Infant or Child Restraint Make/Model
- ____ (00) No infant or child restraint —   V10

Applicable codes are found in your
NASS Data Collection. Coding and
Editing Manual
- ____ (97) Other make/model (specify) —
- ____ (98) Unknown make/model —
- ____ (99) Unknown if restraint available —   36 37

61

	Inter-viewee	Inves-tigator

24 Type of Infant or Child Restraint
____ (0) No infant or child restraint   —
____ (1) Infant seat   —
√10 ____ (2) Child seat   —
____ (3) Convertible seat   —
____ (4) Booster seat   —
____ (7) Other type seat (specify)   —

_____

____ (8) Unknown type restraint   —
____ (9) Unknown if restraint available   — $\overline{38}$

25 Infant or Child Seat Orientation
____ (0) No infant or child seat   —
√10 ____ (1) Rear facing   —
____ (2) Forward facing   —
____ (7) Other orientation (specify)   —

_____

____ (8) Unknown orientation   —
____ (9) Unknown if restraint available   — $\overline{39}$

26 Infant or Child Restraint Harness Shield Usage
____ (0) No infant or child restraint   —
√10 ____ (1) Harness shield used   —
____ (2) Harness shield not used   —
____ (8) Unknown harness shield usage   —
____ (9) Unknown if restraint available   — $\overline{40}$

27 Manual (Active) Restraint System Availability
____ (0) None available   —
____ (1) Shoulder belt   —
____ (2) Lap belt   —
____ (3) Lap and shoulder belt   —
____ (4) Motorcycle helmet   —
√10 ____ (5) Child safety seat (designed without tether or unknown design)   —
____ (6) Child safety seat (designed with tether - tether not used) (specify reason not used - i e defeated or destroyed)   —

_____

____ (7) Child safety seat (designed with tether - tether used)   —
____ (8) Restraint available - type unknown or other (specify)   —

_____

____ (9) Unknown   — $\overline{41}$

	Inter-viewee	Police	Inves-tigator

28 Manual (Active) Restraint System Use
____ (0) None used   —   —
____ (1) Shoulder belt   —   —
____ (2) Lap belt   —   —   √10
____ (3) Lap and shoulder belt   —   —
____ (4) Motorcycle helmet   —   —
____ (5) Child safety seat - car lap belt used properly   —   —
____ (6) Child safety seat - car lap belt used improperly (specify how used improperly)   —   —

_____

____ (7) Child safety seat - unknown if car lap belt used properly   —   —
____ (8) Restraint used - type unknown or other (specify)   —   —

_____

____ (9) Unknown   —   — $\overline{42}$

29 Automatic (Passive) Restraint System Availability
____ (0) Not equipped   —   √10
____ (1) Airbag   —
____ (2) Airbag disconnected   —
____ (3) Airbag not reinstalled   —
____ (4) 2 point automatic belts   —
____ (5) 3 point automatic belts   —
____ (6) Automatic belts destroyed or rendered inoperable   —
____ (9) Unknown   — $\overline{43}$

30 Automatic (Passive) Restraint Function
____ (0) Not equipped   —
____ (1) Automatic belt in use   —   √10
____ (2) Automatic belt not in use   —
____ (3) Deployed airbag   —
____ (4) Nondeployed airbag   —
____ (9) Unknown   — $\overline{44}$

NCI

OCCUPANT INJURY CLASSIFICATION

Consider all injuries which are reported from both unofficial and official sources. The information from official sources takes precedence over similar injuries reported by any other source. In other words, do not list the same injury twice, supersede the interview data with official data in the case of similar injuries. List all injuries by official medical sources first. Police reported injuries may be used, but only when no other source of injury information is available

Were more than ten (10) injuries sustained? ____ Unknown. ____ No. ____ Yes — If more than ten dissimilar injuries were identified during the interview, from collection of official data, and from other unofficial sources (excluding police), list those from the official records first, exhausting that level of data before listing those from the interviewee or other sources

	ISS Body Region	OIC Body Region	Aspect	Lesion	System Organ	AIS Severity	Injury Source	Direct Indirect Injury	Source of Data
1	—	—	—	—	—	—	— —	—	— —
2	—	—	—	—	—	—	— —	—	— —
3	—	—	—	—	—	—	— —	—	— —
4	—	—	—	—	—	—	— —	—	— —
5	—	—	—	—	—	—	— —	—	— —
6	—	—	—	—	—	—	— —	—	— —
7	—	—	—	—	—	—	— —	—	— —
8	—	—	—	—	—	—	— —	—	— —
9	—	—	—	—	—	—	— —	—	— —
10	—	—	—	—	—	—	— —	—	— —

Source of Data

Official
(01) Autopsy records with or without hospital medical records
(02) Hospital medical records other than emergency room (e g discharge summary)
(03) Emergency room records only (including associated x-rays or other lab reports)
(04) Private physician walk-in or emergency clinic

Unofficial
(05) Lay coroner report
(06) E M S personnel
(07) Interviewee
(08) Other source

(09) Police
(99) Unknown if injured
(00) Not injured

ISS Body Region

(1) Head or neck
(2) Face
(3) Chest
(4) Abdominal or pelvic contents
(5) Extremities or pelvic girdle
(6) General (external)
(0) Not injured
(9) Unknown

OIC Body Region

(M) Abdomen
(Q) Ankle foot
(A) Arm (upper)
(B) Back thoracolumbar spine
(C) Chest
(E) Elbow
(F) Face
(R) Forearm
(H) Head skull
(L) Injured unknown region
(K) Knee
(L) Leg (lower)
(Y) Lower limbs (whole or unknown part)
(N) Neck cervical spine
(P) Pelvic hip
(S) Shoulder
(T) Thigh
(X) Upper limbs (whole or unknown part)
(O) Whole body
(W) Wrist hand
(0) Not injured
(9) Unknown if injured

Aspect of Injury

(A) Anterior front
(C) Central
(I) Interior lower
(U) Injured unknown aspect
(L) Left
(P) Posterior back
(R) Right
(S) Superior upper
(W) Whole region
(0) Not injured
(9) Unknown if injured

Lesion

(A) Abrasion
(M) Amputation
(V) Avulsion
(B) Burn
(K) Concussion
(C) Contusion
(N) Crush
(G) Detachment separation
(D) Dislocation
(F) Fracture
(Z) Fracture and dislocation
(U) Injured unknown lesion
(L) Laceration
(O) Other
(P) Perforation puncture
(R) Rupture
(S) Sprain
(T) Strain
(E) Total severance transection
(0) Not injured
(9) Unknown if injured

System Organ

(W) All systems in region
(A) Arteries veins
(B) Brain
(D) Digestive
(E) Ears
(O) Eye
(H) Heart
(U) Injured unknown system
(I) Integumentary
(J) Joints
(K) Kidneys
(L) Liver
(M) Muscles
(N) Nervous system
(P) Pulmonary · lungs
(R) Respiratory
(S) Skeletal
(C) Spinal cord
(Q) Spleen
(T) Thyroid, other endocrine gland
(G) Urogenital
(V) Vertebrae
(0) Not injured
(9) Unknown if injured

Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured unknown severity
(0) Not injured
(9) Unknown if injured

Injury Source
(00) No injury

FRONT
(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub spoke
(06) Steering wheel (combination of codes (04) and (05))
(07) Steering column, transmission selector lever, other attachment
(08) Add-on equipment (e.g. CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Other front object (specify)

SIDE
(13) Side interior surface, excluding hardware or armrest
(14) Side hardware or armrest
(15) A pillar
(16) B pillar
(17) Other pillar (specify)

(18) Window glass of lite
(19) Other side object (specify)

INTERIOR
(21) Seat, back support
(22) Belt restraint system
(23) Head restraint
(24) Air cushion
(25) Other occupant (specify)

(26) Interior loose object
(29) Other interior object (specify)

ROOF
(31) Front header
(32) Rear header
(33) Roof side rails
(34) Roof of convertible top

FLOOR
(41) Floor
(42) Floor or console mounted transmission lever, including console
(43) Parking brake handle
(44) Foot controls including parking brake

REAR
(45) Backlight (rear window)
(46) Backlight storage rack, door, etc.
(49) Other rear object (specify)

EXTERIOR of NONMOTORIST'S VEHICLE
No injury
(51) Head
(52) Outside hardware (e.g. outside mirror, antenna)
(53) Other exterior surface or tire (specify)
(54) Unknown exterior of objects

Cycle
(61) Handle bars or attachments
(62) Frame or suspension component or fender
(63) Seat
(64) Foot pedal, foot rest, foot pegs
(65) Wheel
(66) Engine or transmission
(67) Gas tank, gas tank filler cap or neck
(69) Other cycle part (specify)

EXTERIOR of STRIKING MOTOR VEHICLE
(71) Front bumper
(72) Hood edge
(73) Other front of vehicle (specify)

(74) Hood
(75) Hood ornament
(76) Windshield, roof rail, A pillar
(77) Side surface
(78) Side mirrors
(79) Other side protrusions (specify)

(80) Rear surface
(81) Undercarriage
(82) Tires and wheels
(83) Other exterior of striking motor vehicle (specify)

(84) Unknown exterior of striking motor vehicle

OTHER VEHICLE or OBJECT in the ENVIRONMENT
(86) Ground
(87) Other vehicle or object (specify)

(89) Unknown vehicle or object

NONCONTACT INJURY
(90) Noncontact injury source
(97) Injured, unknown source
(99) Unknown if injured

DIRECT/INDIRECT INJURY
(0) No injury
(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source
(9) Unknown if injured

OCCUPANT INJURY CLASSIFICATION

If there are six or fewer injuries, use the OIC code to classify individual injuries; order the injuries by Source of Data, 1st autopsy, 2nd hospital medical, 3rd emergency room, 4th private physician or 5th other data sources, and by A.I.S. severity within source.

If there are more than six injuries, order the injuries by source and by A.I.S. severity within source. Code this ordering, injury by injury. If a group of ordered injuries has the same source, the same A.I.S. and the group includes at least the sixth and seventh injuries in the ordering, then a choice must be made as to which injury or injuries to code.

Choose the injury or injuries that will enable the maximum number of different I.S.S. body regions to be represented in the coded data. If no new I.S.S. body region can be added, then simply code in accordance with the original ordering.

If the occupant has less than six injuries, then the number of rows required to be completed is equal to the number of injuries plus one (e.g. no injuries requires one row, i.e. columns 45 to 54). In the additional row, "No Injury" will be coded for all variables, including A.I.S. severity.

If you cannot increase the number of different I.S.S. body regions or if you can choose between two or more injuries of the same source and A.I.S. severity, any of which would constitute an additional I.S.S. region, then choose the injury that has a known injury source.

Update Candidate ___ Yes ___ No

	ISS Body Region	OIC Body Region		Aspect		Lesion		System Organ		AIS Severity		Injury Source			Direct Indirect Injury		Source of Data	
1st ___		31 ___ 45	32 ___ 46		33 ___ 47		34 ___ 48		35 ___ 49		36 ___ 50 51		37 ___ 52		38 ___ 53 54
2nd ___		39 ___ 55	40 ___ 56		41 ___ 57		42 ___ 58		43 ___ 59		44 ___ 60 61		45 ___ 62		46 ___ 63 64
3rd ___		47 ___ 65	48 ___ 66		49 ___ 67		50 ___ 68		51 ___ 69		52 ___ 70 71		53 ___ 72		54 ___ 73 74
4th ___		55 ___ 75	56 ___ 76		57 ___ 77		58 ___ 78		59 ___ 79		___ 80 81		61 ___ 82		62 ___ 83 84
5th ___		___ 85	___ 86		___ 87		___ 88		___ 89		___ 90 91		___ 92		___ 93 94
6th ___		___ 95	___ 96		___ 97		___ 98		___ 99		___ X Y		___ 102		___ 103 104

CODING SECTION

OFFICIAL RECORDS

79. Injury Severity (Police Rating)
___ (0) No injury (O)
___ (1) Possible injury (C)
___ (2) Nonincapacitating injury (B)
___ (3) Incapacitating injury (A)
___ (4) Killed (K)
___ (5) Injury, severity unknown
___ (6) Died prior to accident
___ (9) Unknown
<div style="text-align:right">105</div>

80 Time to Death
___ (00) Not fatal

_____ Code number of hours from time of
accident to time of death up through 24
hours If time of death is greater than 24
hours, code number of days (Note
1 day = 31, 2 days = 32,
   n days = 30 + n up through
30 days = 60)
___ (96) Fatal - ruled disease
___ (99) Unknown
<div style="text-align:right">106 107</div>

APPENDIX B

CODING INFORMATION FOR VEHICLE MAKE/MODEL

The primary source of information on vehicle make and model is vehicle inspection; the VIN provides vehicle make data. Secondary sources include the police report and interviewees.

If the make of the vehicle is known, but if the model is not known, then Vehicle Model is coded as "99" (Unknown).

If the make of the vehicle is not known but the body type is known (e.g., a hit-and-run vehicle), then Vehicle Make and Vehicle Model are coded "99" (Unknown), and the body type is coded with the appropriate value.

If no information is available for a vehicle, then Vehicle Make, Vehicle Model and Body Type are all coded "99" (Unknown).

Vehicle models are organized into general groups. These groups are:

    01-28, 99 - domestic passenger car (automobile)
    31-59, 99 - foreign passenger car (automobile)
    60-69, 99 - motored cycles (including motorcycles,
                mini-bikes, motor scooters, dirt bikes,
                and mo-peds)
    70-73, 99 - light trucks (including truck based
                utility vehicles, light duty pickup
                trucks, standard pickup trucks, vans,
                van based station wagons, van based
                buses, van derivatives, and truck based
                station wagons)
    80-90, 99 - trucks and buses [includes all trucks over
                10,000 lbs. GVWR except those pickup type
                trucks mentioned under Body Type code
                "50" (Pickup), and all buses except those that
                are van based]

Within these groups, the model codes for automobiles and light
trucks generally are not ordered to give any indication of
vehicle size or type. However, the model codes for motored
cycles, trucks/buses, other and unknown have specific definition.
These definitions are:

Motored Cycles
----

61   0-50cc
62   51-124cc
63   125-349cc
64   350-449cc
65   450-749cc
66   750cc or over
99   Unknown

Trucks/Buses
----

80   Motor Home
81   Medium/Heavy: CBE
82   Medium/Heavy: COE, low entry
93   Medium/Heavy: COE, high entry
84   Medium/Heavy: unknown engine location
+85 Bus: Conventional (engine out front)
86   Bus: flat front, front engine
87   Bus: flat front, rear engine
89   Other (truck)
90   Medium/Heavy: COE, unk. entry position
99   unknown

+use code "85" (Bus) if the frontal plane or the engine location
is unknown.

Other make (98)
----

28   Other domestic automobile
58   Other foreign automobile
78   Other light truck
99   Other truck
97   Other (e.g., snowmobile, gocart)

Other make (99)
----

99   Unknown*

*Use this code even if you know more detail about the model than
this code indicates (e.g., unknown pickup truck, unknown CBE
tractor semtrailer, unknown bus, or unknown car pickup body).
Body Type, is available to code the additional information.

Vehicle Make, Vehicle Model and Body Type, have to be
used in conjunction; therefore refer to Remarks under the
data elements Vehicle Make and Body Type in the NASS Coding
and Editing Manual.

Variable Name: Vehicle Model

Format: 2 columns – numeric   Beginning
                                                column   22

Element Values:

Model Code	Vehicle Line	Includes	Model Years

American Motors (01)

Model Code	Vehicle Line	Includes	Model Years
01	Rambler/American	Rogue, 220, 440, Scrambler	
02	Rebel/Matador	550,770,660, Classic, Brougham, Barcelona X,Marlin	
03	Ambassador	880,990, SSt, DPL, Brougham	
04	Pacer	DL, Limited	
05	AMX	DL, Limited	68-70
06	Javelin	SST, AMX (1971-1974)	
07	Hornet/Concord	SST, Sportabout, AMX (1975-1978), Limited DL, SC 360	
08	Spirit/Gremlin	Limited, DL, Custom, AMX (1979 On), GT (1982 on)	
09	Eagle	DL, Limited	80 on
10	SX4/Kammback	DL, Limited	81 on
*	Alliance/Encore		
28	Other (domestic automobile)		
72	Espace (Mini-Van)		
99	Unknown		

Jeep (02)

Model Code	Vehicle Line	Includes	Model Years
01	CJ-2/CJ-3/CJ-4	Military	
02	CJ-5/CJ-6/CJ-7/ CJ-8	Scrambler,Golden Eagle,Renegade, Laredo	thru 86
03	Wrangler (YJ)		87 on
71	Cherokee	Wide Track Chief, Commando, Jeepster	
73	Pick-up	J-10, J-20, Honcho	
76	Wagoneer	Custom, Brougham Limited	
77	Comanche		86 on
78	Other (light truck)		
28	Other (domestic automobile)		
99	Unknown		

*See Renault

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

AM General (03)

01	Dispatcher	Post Office (Jeep)	
75	Dispatcher	DJ-Series, Post Office Delivery (Van)	
87	Bus (rear engine)	Transit	
88	Other (truck)	Military off-road	
28	Other (domestic automobile)		
99	Unknown		

Chrysler (06)

07	LeBaron	S, Medallion, Salon,	77 on
09	Cordoba	Crown, 300, LS	
10	Newport	Custom	thru 81
		Royal, 300	thru 71
	New Yorker,		thru 82
		Imperial	81-83
	Fifth Avenue		83 on
		Town and Country, Brougham	
14	E-Class	New Yorker, Grand Lebaron, GTS	83 on
15	Laser	Turbo, XE, XT	84-86
16	Lebaron		85 on
28	Other (domestic automobile)		
31	Maserati Sport		87 on
99	Unknown		

Dodge (07)

01	Dart	170,270, Custom, GT, Swinger, Sport, Demon, 340,360, Special, Special Edition	
02	Coronet/Charger/ Magnum	Brougham, Custom, Super Bee, Crestwood, Deluxe, XE, R/T, 440,500	
03	Polara/Monaco	Custom, Special, Police, Taxi, Crestwood, Brougham	
04	Royal Monaco		
05	Challenger	R/T, T/A, Rallye	70-74
06	Aspen	Custom, Special Edition, Police	
07	Diplomat	Medallion, "S", Salon	
08	Omni	024, De Tomaso, Miser, Charger 2.2, Custom, Shelby, GLH, America, Expo	

69

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Dodge (07) (cont'd.)			
09	Mirada		
10	St. Regis		
11	Aries (K)	Custom, SE	
12	400	LS	
13	Rampage (car based pick-up)	2.2	
14	600	ES	83 on
15	Daytona	Turbo, Z, Shelby, Pacifica	84 on
16	Lancer	Pacifica	
17	Shadow	ES	86 on
33	Challenger-foreign		78 on
34	Colt	GT, Custom, Carousel, RS	
35	Conquest		86 on
43	Colt Pickup, Vista Van	Power Ram, Ram 50, D50, W50	
70	Raider		87 on
71	Ramcharger	Ram	
72	Caravan	S-Van,	84 on
73	D, W-Series Pickup	Ram, Custom, Royal, Miser	
74	Van (B Series)	Sportsman Van, Royal, Maxiwagon, Ram Mini Ram Van	
75	Van Derivative	Karivan	
77	Dakota	4 x 4	
81	Medium/Heavy: CBE		
82	Medium/Heavy: COE, low entry		
83	Medium/Heavy: COE, high entry		
84	Medium/Heavy: unk. engine location		
85	Medium: Bus (not van based)		
88	Other (truck)		
28	Other (domestic automobile)		
90	Medium/Heavy: COE, unk. entry position		
99	Unknown		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Imperial (08)			
10	Imperial	Imperial LeBaron, Crown	thru 75
28	Other (domestic automobile)		
99	Unknown		
Plymouth (09)			
01	Valiant/Duster/ Scamp	100,200, Taxi, Brougham, Signet, Custom, Special 340, Special 360 340, 360	thru 76
02	Satellite/ Belvedere	Belvedere I, II, GTX, Road Runner (thru 1974), Brougham, Sebring, Sebring Plus, Superbird	
03	Fury	I, II, III, Road Runner (1975), Suburban, Salon, VIP, Sport	
04	Gran Fury	Sedan, Brougham, Custom, Sport, Suburban	
05	Barracuda	Formula "S", 340, Gran Coupe, AAR Cuda	
06	Volare	Custom, Premier, Road Runner (1976 on), Police	
07	Caravelle		
08	Horizon	TC-3, Turismo, Miser, Turismo 2.2, Custom, SE, Duster, America, Expo	
11	Reliant (K)	Custom, SE	
13	Scamp (car based pick-up)	GT	82 on
17	Sundance		86 on
31	Cricket		
32	Arrow	GS, GT, Fire Arrow	
33	Sapporo		
34	Champ/Colt	Custom	
35	Conquest	TSI	
71	Trailduster		
72	Voyager	S-Van	84 on
74	Van (Voyager)	Sport, Premier	
77	Arrow pickup (foreign)		
78	Other (light truck)		
28	Other (domestic automobile)		
99	Unknown		

Variable Name· Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Ford (12)

01	Falcon	Falcon-Futura (through 1969)	thru 70
02	Fairlane	500, 500 XL, Fairlane-Torino (1968-70)	thru 70
03	Mustang/Mustang II	Mach I, Boss, Grande, Cobra, Cobra II, Ghia, SVO, GT	
04	Thunderbird	All sizes, Town Landau, Heritage, Elan, Fila, Turbo Coupe Sport, LX	
05	LTD II	Squire, Brougham	77-79
06	LTD/Galaxy/ Custom	XL, Landau, Ranch Wagon, County Squire, S, 500, 500 XL, Brougham, Crown Victoria (81 and 82)	
07	Ranchero (car based pick-up)	500, GT, Squire, Custom	
08	Maverick	Grabber	70-77
09	Pinto	MPG, Pony, ESS	71-80
10	Torino/Gran Torino	Elite, GT, Cobra, Sport, Squire, Brougham	71-76
11	Granada	Ghia, L, GL, GLX	75 on
12	Fairmont	Fairmont-Futura (1978-1981)	78 on
13	Escort	L, GL, GLX, SS, GT	81 on
14	EXP	Turbo	82 on
15	Tempo	L, GL, GLX, Sport, 4x4	83 on
16	Crown Victoria		83 on
17	Taurus	LX, MT5	86 on
31	English Ford	(e.g., Cortina)	
32	Fiesta		78-80
33	Laser	GL Ghia, GL Sport	83 on
34	Festivia	KIA/Mazda	87 on
70	Bronco II	Ranger based	83 on
71	Bronco	Full size truck based	
72	Aerostar		
73	F-Series Pickup	F-100 to F-350	
74	Van	E-Series, Econoline, Club Wagon, Chateau, Cutaway based (e.g., box van, van bus/RV)	
75	Van derivative	Parcel	
77	Ranger	Super Cab, Courier (Import), STX	82 on
78	Other (light truck)		
81	Medium/Heavy: CBE	F-500 through F-800, L/LN/LNT/LT/LS/LTS-series, FT8000, FT800D, FT800	
82	Medium/Heavy: COE low entry	C/CT-series	
83	Medium/Heavy: COE, high entry	C/CLT-series	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Ford (12) (cont'd.)			
84	Medium/Heavy: unk. engine location		
85	Medium Bus	B-series (not van based)	
88	Other (truck)		
90	Medium/Heavy: COE, unk. entry position		
28	Other (domestic automobile)		
99	Unknown		
Lincoln (13)			
01	Lincoln	Lincoln Continental (thru 81), Town Car (82 on)	
02	Mark	I, II, III, IV, V, VI, VII, LSC	
05	Continental		82 on
11	Versailles		77-80
28	Other (domestic automobile)		
99	Unknown		
Mercury (14)			
02	Cyclone	GT, CJ, Spoiler	thru 71
03	Capri-Domestic		79-86
04	Cougar	Villager, Brougham, XR7 (thru 80)	67 on
05	Cougar XR7		81 on
06	Marquis/Monterey	Marauder, X-100, Parklane, Colony Park, S-55, Custom, Brougham, Grand (thru 82), Montclair	67 on
08	Comet	Caliente, Capri (1966-1967), GT, Voyager, 202	
09	Bobcat		75-80
10	Montego	GT, MX, Villager, Brougham	67-76
11	Monarch	Ghia	75-81
12	Zephyr	Z7, GS	78 on
13	Lynx	L, LS, GS, RS, XR3	81 on
14	LN7		82-83
15	Topaz	L, LS, GS, 4 x 4	83 on
16	Grand Marquis		83 on
17	Sable		86 on

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Mercury (14) (cont'd.)			
31	Capri-foreign	Capri (1970-1978), Capri II	70-78
33	Pantera		
34	Merkur	XR4Ti	
35	Scorpio		87 on
36	Tracer	Mazda	
28	Other (domestic automobile)		
99	Unknown		
Buick (18)			
01	Regal/Century/Special	GS, GS350, GS400, GS455, Luxus, Skylark, (thru 1972), Sportswagon, Wagon, Custom Special, Sport Coupe, Limited	thru 81
02	LeSabre/Wildcat/Centurion	Estate Wagon, Custom, Luxus, Sport Coupe, Wagon, Limited, Invicta, T-Type	
03	Electra/Electra 225	Custom, Limited, Park Avenue, Wagon	
05	Riviera	"S" Type, "T" Type	
08	Apollo	S/R, Skylark (1975)	73-75
10	Regal	G-car, "T" Type, Grand National	82 on
12	Skyhawk	"S" Type, Road Hawk	75-81
15	Skylark	Limited, Sport, S/R, "S", Custom (see code 01), "T" Type, "T" Type Custom	76 on
16	Skyhawk	J-car, "T" Type	82 on
17	Century	A-car, "T" Type	82 on
18	Somerset	N-car, Regal	85 on
31	Opel Kadett		thru 75
32	Opel Manta/1900	Luxus, Rallye, Sports Coupe	thru 75
33	Opel GT		thru 75
34	Opel Isuzu	Deluxe, Sport	76-79
28	Other (domestic automobile)		
99	Unknown		
Cadillac (19)			
03	DeVille/Brougham	Calais, Fleetwood 60-Special, Coupe, Sedan	
04	Limousine	Fleetwood 75, Formal	
05	Eldorado	Touring Coupe, Biarritz	
09	Allante		87 on

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Cadillac (19) (cont'd.)			
06	Commercial Series	(e.g., ambulance, hearse)	thru 81
14	Seville	Elegante	76 on
16	Cimarron	J-car, D'oro	82 on
28	Other (domestic automobile)		
99	Unknown		
Chevrolet (20)			
01	Malibu/Chevelle	Classic, Councours, Laguna, S-3, Nomad Greenbriar, Estate, 300, SS-396/454, Deluxe	64 on
02	Caprice/Impala	Classic, Classic Brougham, Kingswood, Townsman, Estate, Brookwood, Super Sport, Bel Air, Biscayne	
04	Corvette	Stingray	53 on
06	Corvair	Corvair Monza,500,Corvair Spyder,Corsa	thru 69
07	El Camino	Royal Knight	59 on
08	Nova	Chevy II, Chevy Nova, LN, LE, Concours	thru 79
09	Camaro	SS, LT, Z-28, Berlinetta, Iroc-Z	67 on
10	Monte Carlo	G-car, SS, LS, Aerocoupe	70 on
11	Vega	GT, Cosworth, Kammback	71-77
12	Monza	2 + 2, Spyder, Sport, Towne Coupe	75-80
13	Chevette	Scooter	76 on
15	Citation	X-car, X-11	80 on
16	Cavalier	J-car, CS, RS, Z24	82 on
17	Celebrity	A-car, Wagon, Eurosport	82 on
19	Baretta/Corsica		87 on
31	Spectrum (Isuzu made)		
32	Nova (Toyota)		85 on
33	Sprint		
70	Blazer	S-10 based	83 on
71	Blazer	Full size truck based	
72	Astro Van		
73	C, K-Series Pickup		
74	G-Series Van	Beauville, Chevy Van, Sport Van	
75	Van Derivatives	P-Series, Parcel Van	
76	Suburban		
77	S-10	Luv Pickup	82 on
78	Other (light truck)		
81	Medium/Heavy: CBE	C50, C60 and C65 series, M60 and M65 series, H70, H80 and H90 series, J70, J80 and J90 series, Bison 90	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Chevrolet (20) (cont'd.)			
82	Medium/Heavy: COE low entry	T60 and T65 series	
83	Medium/Heavy: COE high entry	Titan 90	
84	Medium/Heavy: unk engine location	PS6500, P6T042	
85	Bus	S60 series	
88	Other (truck)		
90	Medium/Heavy: COE unk. entry position		
28	Other (domestic automobile)		
99	Unknown		
Oldsmobile (21)			
01	Cutlass	Supreme, Calais, Cruiser,"S","LS", Salon, Brougham, Vista Cruiser, 442, F-85 (thru 1972), Rallye 350, Hurst Olds	
02	Delta 88	Royale, Custom, Custom Cruiser, Jetstar 88, Delmont 88, Delta, Starfire (thru 1966)	
03	Ninety-Eight	Regency, Luxury	
05	Toronado	Brougham, XSR, Custom, Trofed	
06	Commercial Series	Chassis Cowl, CKD Chassis	
12	Starfire	"SX"	75-80
15	Omega	Brougham, Salon, F-87, F-85 (1975 on), X-car (1980 on)	73 on
16	Firenza	J-car	82 on
17	Ciera	A-car, Cutlass Ciera, ES, Brougham	82 on
18	Calais	N-car, GT	85 on
28	Other (domestic automobile)		
99	Unknown		
Pontiac (22)			
01	LeMans/Tempest	Grand Am, Safari, T-37, Grand Sport, Luxury, Custom, GTO (thru 1973), Judge, GT-37, Sprint, Daewoo (1987 on)	
02	Bonneville/ Catalina/Parisienne	Brougham, Grand Safari, Safari, GrandVille, Executive, 2 + 2, Starchief	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Pontiac (22) (cont'd.)			
05	Fiero	P-car, 2M4	84 on
08	Ventura	SJ, Custom, II, Sprint, GTO (1974 on)	71-77
09	Firebird/Trans Am	Esprit, Formula, Skybird, Redbird, Yellowbird, Spring, GTA	68 on
10	Grand Prix	LJ, SJ, Brougham, G-car	
11	Astre	Safari, Wagon, SJ, Custom	75-77
12	Sunbird	Sport, Safari, Wagon	76-80
13	T-1000/1000		81 on
15	Phoenix	LJ, SJ, X-car, (1980 on)	78 on
16	J-2000/2000	J-car, Sunbird, Convertible, LE, SE, GT	82 on
17	6000	A-car, STE	82 on
18	Grand Am	N-car, SE	85 on
28	Other (domestic automobile)		
99	Unknown		
GMC (23)			
07	Caballero/Sprint		
70	Jimmy	S-15 based	83 on
71	Jimmy	Full sized truck based	
72	Safari (Mini-Van)		
73	C, K-Series Pickup		
74	G Van/Vandura, Rally Van		
75	Van Derivatives	P-series, Value Van, Magnavan	
76	Suburban		
77	S-15		82 on
78	Other (light truck)		
81	Medium/Heavy: CBE	C-5000, C-6000, C-7000 series, Brigadier 8000, Brigadier 9500, General 9500	
82	Medium/Heavy: COE low entry	W-6000, W-7000	
83	Medium/Heavy: COE high entry	Astro 95	
84	Medium/Heavy: unk. engine location	P5G500, P68042	
85	Bus	B-6000	
88	Other (truck)		
90	Medium/Heavy: COE unk. entry position		

V14

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
GMC (23) (cont'd.)			
28	Other (domestic automobile)		
99	Unknown		
Other domestic (29)			
01	Studebaker/Avanti		
02	Checker		
28	Other (domestic automobile (e.g., Desoto)		
Volkswagen (30)			
31	Karmann Ghia		
32	Beetle		
33	Super Beetle		
34	411/412	Squareback, Fastback	
35	Squareback/ Fastback	Type 3, 1600	
36	Rabbit	L, GTI Sport, LS Custom, GL Deluxe	thru 84
37	Dasher		
38	Scirocco		
39	The Thing		
40	Jetta		
41	Quantum		
42	Golf	Syncro, GTI, Cabriolet	85 on
43	Rabbit Pickup		
44	Fox		87 on
74	Van/Vanagon/Camper		
78	Other (light truck)		
58	Other (foreign automobile)		
99	Unknown		
Alfa Romero (31)			
31	Spider	Veloce, 2000/1750, all roadsters	
32	Sports Sedan	Alfetta, Berlina, 2000/1750, Giulia Super, 4 door sedans, Milano (86 on)	
33	Sprint Veloce	Alfetta GT 2000 GTV, 1750 GTV, Giulia Sprint GT, all 2 door coupes	
34	GTV-6		
58	Other (foreign automobile)		
99	Unknown		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Audi (32)			
31	Super 90		
32	100	LS, GL	
33	Fox		
34	4000	Coupe GT	
35	5000	Coupe	
36	Quattro		82 on
58	Other (foreign automobile)		
99	Unknown		
Austin/Austin Healey (33)			
31	Marina	GT	
32	America		
33	Healey Sprite		
34	Healey 3000	Healey 100	
35	Mini		
58	Other (foreign automobile)		
99	Unknown		
BMW (34)			
31	1600, 2002	Tii	
32	Coupe	3.0CS, 2800 CS	
33	Bavaria Sedan	2500, 2800	
34	630, 633, 635	CSI	
35	320i, 318i, 325E		
36	524i, 528i, 530i 533i, 535i	TD, Automatic	83 on
37	733i, 735i		
61	0- 50 cc		
62	51-124 cc		
63	125-349 cc		
64	350-449 cc		
65	450-749 cc		
66	750 cc or over		
58	Other (foreign automobile)		
99	Unknown		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Datsun/Nissan (35)			
31	F-10		
32	200 SX		
33	B210/210/1200	Honeybee	
34	240/260/280/300	Z, ZX, 2 + 2	
35	310		
36	510	PL	
37	610	PL	
38	710	PL	
39	810/Maxima	Maxima	
40	Roadster (SPL 311/ SRL 311)	1600/2000 Convertible	thru 70
41	PL 411/RL 411		
42	Stanza	XE	82 on
43	Sentra		83 or
44	Pulsar	NX, EXA (86 on)	83 on
70	MPV		86 on
77	Pickup		
78	Other (light truck)		
58	Other (foreign automobile)		
83	Medium/Heavy COE high entry		86 on
99	Unknown		
Fiat (36)			
31	124 (Coupe/Sedan)	Sport	
32	124 (Spider)	Spider 2000	
33	Brava/131		
34	850 (Coupe & Spyder)		
35	128		
36	X-1/9		
37	Strada		
58	Other (foreign automobile)		
99	Unknown		
Honda (37)			
31	Civic	1300, 1500, CVCC	
32	Accord	LX, CVCC	

80

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Honda (37) (cont'd.)			
33	Prelude		
34	600	Coupe, Sedan	
35	Civic-CRX	2 seater	
36	Acura	HX, Integra, Climax, Legend	86 on
61	0- 50 cc		
62	51-124 cc		
63	125-349 cc		
64	350-449 cc		
65	450-749 cc		
66	750 cc or over		
58	Other (foreign automobile)		
99	Unknown		
Isuzu (38)			
31	I Mark	Gemini	
32	Impulse		83 on
33	Aska		87 on
70	Trooper II		84 on
77	P'up (Pick-up)	Rodeo, Space Cab	
78	Other (light truck)		
58	Other (foreign automobile)		
99	Unknown		
Jaguar (39)			
31	XJ-S Coupe		
32	XJ6/XJ12 Sedan/Coupe L, XJ, C, 420/340 Sedans		
33	XK-E	2 + 2, V-12 Roadster, 120	
58	Other (foreign automobile)		
99	Unknown		
Lancia (40)			
31	Beta Sedan /HPE		
32	Beta Coupe/Zagato		
33	Scorpion		
58	Other (foreign automobile)		
99	Unknown		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Mazda (41)			
31	RX2		
32	RX3		
33	RX4		
34	RX7	GLE, SE	
35	GLC/323		
36	Cosmo		
37	626		
38	808		thru 76
39	Mizer		thru 72
40	R-100		
41	618/616		
42	1800		86 on
43	929		
77	Pick-up	B-2200, B-2000, SE5, Cab Plus, LX	
78	Other (light truck)		
58	Other (foreign automobile)		
99	Unknown		
Mercedes-Benz (42)			
31	200/220/230/240/ 250/280/300/260 (Sedan and 5 passenger "C" only)	SE,CD,D,SD,TD,CE,E [excludes 280 S, 280 SE (1975 on), 300 SD Sedan (see Code 37]	
32	230 SL/280 SL (2 passenger)		
33	350 SL/450 SL/ 380 SL/560 SL		
34	350 SLC/450 SLC/ 380 SLC/420 SLC/ 560 SLC		
35	300 SEL/280 SEL	TD-T, TD, CDT	
36	450 SEL/380 SEL/ 500 SEL/500 SEC/ 420 SEL/560 SEL/ 560 SEC		
37	450 SE/380 SE/ 280S/280 SE (1975 on)/300 SD		
38	600/6.9 Sedan	Pullman	
39	190		82 on
75	Van Derivative	Kurbstar	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Mercedes-Benz (42) (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
81	Medium/Heavy: CBE		
82	Medium/Heavy: COE low entry		
83	Medium/Heavy: COE high entry		
84	Medium/Heavy: unk. engine location		
85	Medium: Bus		
88	Other (truck)		
90	Medium/Heavy: COE unk. entry position		
58	Other (foreign automobile)		
99	Unknown		

MG (43)

Model Code	Vehicle Line	Includes	Model Years
31	MG Midget		
32	MGB		
33	MGB GT		
34	MGA		
35	TA/TC/TD/TF		
36	MGC	MGC/GT	
58	Other (foreign automobile)		
99	Unknown		

Mitsubishi   See V14 Code (52) listed after Volvo

Opel   See Buick--(18)

Peugeot (44)

Model Code	Vehicle Line	Includes	Model Years
31	304		
32	403		
33	404		
34	505/504	STI	
35	604	SL, D	
58	Other (foreign automobile)		
61	0-50 cc		
62	51-124 cc		
99	Unknown		

83

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Porsche (45)			
31	911	S, E, T, SC, Carrera	
32	912/912E		
33	914	914/S	
34	924	Turbo, S	
35	928	S	
36	930/Turbo		82 on
37	944	Turbo, S	
38	959		86 on
58	Other (foreign automobile)		
99	Unknown		
Renault (46)			
31	LeCar	5	
32	10/Dauphine/ Caravelle/R-8		
33	12	R12	
34	15	R15TL	
35	16		
36	17	R17, Gordini Coupe	
37	R18i		
38	Fuego	TL, TS, GTL, GTS	
39	Alliance	L, DL, Limited	83 on
40	Encore	X-37	
41	Alpine GT		87 on
44	Medallion		87 on
58	Other (foreign automobile)		
99	Unknown		
Saab (47)			
31	99/99E/900/9000	Turbo	
32	Sonnet	Sonnet III, Sonnet 97	
33	95/96/97		
58	Other (foreign automobile)		
99	Unknown		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Subaru (48)			
31	FE/GF/DL/STD/GL/G/ GLF	4 wheel drive, Turbo 4x4	
32	Star		
33	360		
43	Brat	DL, GL	
78	Other (light truck)		
58	Other (foreign automobile)		
99	Unknown		
Toyota (49)			
31	Corona	Custom, Deluxe, Mark II, 1900, 2000	
32	Corolla	1100,1200,1600, Deluxe, Custom, SR 5, LE	
33	Celica	1900, 2000, GTS	
34	Celica Supra	Soarer	
35	Cressida		
36	Crown	2300, 2600	
37	Carina	2000	
38	Tercel	4WD Wagon, Corolla-Tercel	
39	Starlet		
40	Camry		
41	MR2	(2-seater)	85 on
*	Nova	See Chevrolet	
70	4-Runner		
71	Landcruiser		
72	Mini-Van		
77	Pickup	Chinook, LN44, Wonder Wagon, SR5, Extra Cab Sport	
78	Other (light truck)		
58	Other (foreign automobile)		
99	Unknown		
Triumph (50)			
31	Spitfire	I, II, III, IV, 1500	
32	GT6		
33	TR4	TR3, TR2, TR4A	
34	TR6		
35	TR7/TR8		
36	Herald	Vitesse	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Triumph (50) (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
37	Stag		
61	0- 50 cc		
62	51-124 cc		
63	125-349 cc		
64	350-449 cc		
65	450-749 cc		
66	750 cc or more		
58	Other (foreign automobile)		
99	Unknown		

Volvo (51)

Model Code	Vehicle Line	Includes	Model Years
31	122	S	
32	142/144/145	S, Deluxe, GL, GLS, E	
33	164	S, E	
34	242/244/245	Deluxe, DL, GLE, GLT, GL	
35	262/264/265	GL	
36	1800	E, S, ES	
37	P-544		83 on
38	760/780		
39	740	GLE	
81	Medium/Heavy: CBE		
82	Medium/Heavy: COE, low entry		
83	Medium/Heavy: COE, high entry		
84	Medium/Heavy: unk. engine location		
85	Medium: Bus		
88	Other (truck)		
90	Medium/Heavy: COE, unk. entry position		
58	Other (foreign automobile)		
99	Unknown		

Mitsubishi (52)

Model Code	Vehicle Line	Includes	Model Years
			83 on
31	Starion	2 + 2	83 on
32	Tredia		83 on
33	Cordia		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Mitsubishi (52) (cont'd.)

34	Galant		
35	Mirage		
70	Montero		
72	Mini-Van		83 on
77	Pickup	Mighty, Max, SPX	
58	Other (foreign automobile)		
99	Unknown		

Suzuki (53)

31	SA310	GLX
61	0-50 cc	
62	51-124 cc	
63	125-349 cc	
64	350-449 cc	
65	450-749 cc	
66	750 cc or over	
70	SJ - 410	Samurai SJ-413
99	Unknown	

Other Import (59)

31	Aston Martin
32	Bricklin
33	Citroen
34	Delorean
35	Ferrari
36	Hillman
37	Jensen
38	Lamborghini
39	Lotus
40	Maserati
41	Morris
42	Rolls Royce/Bentley
43	Rover
44	Simca
45	Sunbeam
46	TVR
47	Daihatsu
48	Desta (APV-utility)

87

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Other Import (59) (cont'd.)

49	Reliant (British)
50	Yugo
51	Hyundai
58	Other (foreign automobile) [e.g., Morgan, Singer]

MOTORED CYCLE (60-69)

V13

BMW (34)
BSA (60)
Ducati (61)
Harley-Davidson (62)
Honda (37)
Kawasaki (63)
Moto-Guzzi (64)
Norton (65)
Suzuki (53)
Triumph (50)
Yamaha (67)
Other Motored Cycle (69)

V14

61	0- 50 cc
62	51-124 cc
63	125-349 cc
64	350-449 cc
65	450-749 cc
66	750 cc or over
99	Unknown

V13

Mo-ped (70)

V14

61	0- 50 cc
62	51-124 cc
99	Unknown

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

TRUCKS AND BUSES (80-83, 85-88)

V13

Brockway (80)
Diamond Reo or Reo (81)
Freightliner or White Freightliner (82)
FWD (83)
Kenworth (85
Mack (86)
Peterbilt (87)
White (88)

    V14

80	Motor Home	
81	Medium/Heavy: CBE	
82	Medium/Heavy: COE, low entry	
83	Medium/Heavy: COE, high entry	
84	Medium/Heavy: unk. engine location	
+85	Bus: conventional (engine out front)	
86	Bus: flat front, front engine	
87	Bus: flat front, rear engine	
88	Other (truck)	
90	Medium/Heavy: COE, unk. entry position	
99	(Unknown Model)	

+Use code "85" (Bus) if the frontal plane or the engine location is unknown.

International Harvester (84)

71	Scout	Scout II, Utility Pickup, SS-2, Roadstar, Terra Traveltop, 800 Series, Traveler
73	Pickup/Panel	R100, 900A-1500C, 1000D-1500D, 1010-1510, 100-500
75	Multistop	Metro RM 120-160, MS1210, MS1510
76	Travellall	1010-1210, 100-200
78	Other (light truck)	
80	Motor Home	1310 MHC, 1500 MHC
81	Medium/Heavy: CBE	Loadstar/Fleetstar, Paystar, CBE Transstar (4200), S-Series, Mixer
82	Medium/Heavy: COE, low entry	CO, VCO, DCO (190-1950), Cargostar, LFM 5370 (Garbage)
83	Medium/Heavy: COE, high entry	DCO, DCOT, UCO, VCOT, (405 Series), COE Transstar, Unistar, Conco 707B, 9600 Series
84	Medium/Heavy: unk. engine location	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

International Harvester (84) (cont'd.)

85	Bus: Conventional	R153-1853, Loadstar 1603-1853	
86	Bus: flat front, front engine	173 FC, 183 FC	
87	Bus: flat front, rear engine	183RE, 193RE, (transit)	
88	Other (truck)	Fire Truck - R140-R306, CO 8190	
90	Medium/Heavy: COE, unk. entry position		
99	Unknown		

Other (Truck or Bus) (95)

01	Autocar
02	Auto-Union-DKW
03	Divco
04	Western Star
05	IVECO/MAGIRUS
78	Other (light truck)*
88	Other (truck+) (e.g., Oshkosh, Grumman)

Other make (98)

97	Other (e.g., snowmobile, go-cart)
99	Unknown**

*   Use code "88" (other (truck)) if the vehicle's GVWR is unknown.
**   Occurs when make is not explicitly listed and it is unknown whether make is domestic or import.
\+   Truck as used here includes (1) any truck of unknown GVWR, (2) medium or heavy trucks, and (3) buses.
\+\+   Farm tractors must be coded as make "98" and model "97" regardless of whether the model is known

ACCIDENT FORM

Variable	Flat File	SAS File
A16 - A17	"9"	".N"
A18	"99"	".N"
A19 - A20	"9"	".N"
A22	"9"	".N"
A23	"01"	".N"

FEDESTRIAN AND NONMOTORIST FORM

Variable	Flat File	SAS File
P09	"99"	".N"
P10	"9"	".N"
P11	"99"	".N"
P12	"999"	".N"
P13	"99"	".N"
P14	"9"	".N"
P15	"00"	"00"
	"99"	".N"
P20	"9"	".N"
P21 - P22	"90"	".N"
P23	"0"	".N"
P31 - P35	"0"	"0"
P36	"00"	"00"
P37	"0"	"0"
P38	"00"	"00"
P39 - P78	"Blank"	"." or "Blank"
P79	"9"	".N"
P80	"00"	"00"
P81 - P82	"9"	".N"
P83 - P94	"99"	".N"
MAIS, ISS	"0"	"0"

APPENDIX C

FILE ADJUSTMENTS

Number of Teams and Data Collection Period:

A total of 31 PSU's investigated cases and collected data
during 1987. Six of them collected 1987 data for nine months,
eight collected data for eight months, eight collected for seven
months and nine for three months. The remainder of the time was
spent in training for the 1988 system, testing forms and procedures
and investigating cases according to the 1988 protocol.

Data Elements not Encoded in 1987:

The 1987 Crashworthiness Data Subsystem used forms from
the 1986 Continuous Sampling Subsystem on which only the date
had been changed. However, due to the change in focus under
the new system, many existing variables were no longer collected.
These included environmental variables on the accident form,
almost all variables on the pedestrian-nonmotorist form, all
variables on the vehicle form dealing with vehicle types other
than passenger cars, light trucks or vans and almost all variables
on the driver form. In most cases the investigators were
instructed to code a "9" in these variables and a "0" in the
pedestrian injury (OIC) variables. The numeric variables which
were coded "9" were recoded as ".N" (Not Collected) on the SAS
file. Coding conventions for all "Not Collected" or partially
collected variables are included on the following pages:

91

VEHICLE FORM

Variable	Flat File	SAS File
V15	"9"	".N"
V19	"71"	"71"
	"99"	".N"
V20 - V23	"0"	".N"
	"9"	".N"
V24, V25, V27	"9"	".N"
V28	"0"	"0"
	"8"	"8"
	"9"	".N"
V29 - V35	"0"	"0"
	"9"	".N"
V36, V37	"000"	"000"
	"999"	".N"
V38, V39	"0"	"0"
	"9"	".N"
V65, V83	"9"	".N"

DRIVER FORM

Variable	Flat File	SAS File
D10	"Blank"	"."
	"99"	".N"
D11, D12	"Blank"	"."
	"990"	".N"
D13 - D18	"Blank"	"."
	"9"	".N"
D21 - D23	"Blank"	"."
	"99"	".N"
D26 - D33	"Blank"	"."
	"9"	".N"
D34, D35	"0"	".N"
D36	"99"	".N"
D37	"9"	".N"
D38	"999"	".N"
D39	"9"	".N"
D40	"99"	".N"
D41 - D46	"9"	".N"
D47	"_99"	".N"
D48	"999"	".N"
D49	"_99"	".N"
D50 - D52	"9"	".N"
D54	"9"	".N"
D55	"99"	".N"
D56, D57	"9"	".N"
D58	"99"	".N"

CDC/TDC AND DELTA-V

This section gives an overview of the Collision Deformation Classification (C.D.C.) for cars, vans, and light trucks, per SAE J224 MAR 84 in the 1987 NASS. The C.D.C. codes contain eight characters. If there is no C.D.C., these codes are left blank. If there is a C.D.C., these codes are as follows:

Direction of Force (2-character numeric). Sum of Clock Direction and Incremental Value of Shift if both are known. If either is unknown, direction of force is coded "99".

Clock Direction is coded as follows:

00	Non-horizontal force	07	7 o'clock
01	1 o'clock	08	8 o'clock
02	2 o'clock	09	9 o'clock
03	3 o'clock	10	10 o'clock
04	4 o'clock	11	11 o'clock
05	5 o'clock	12	12 o'clock
06	6 o'clock	99	Unknown

Incremental Value of Shift i.e., change in direction of the structure as opposed to crushing of the structure. It is coded as follows:

00	No shift
20	End shift vertical--up: top shift forward
40	End shift vertical--down: top shift rearward
60	End or top shift lateral--right
80	End or top shift lateral--left
99	Unknown

Deformation Location (1 character alphanumeric) is coded as follows:

    F   Front
    R   Right side
    L   Left side
    B   Back (rear)
    T   Top
    U   Undercarriage
    9   Unknown

Specific Longitudinal or Lateral Location (1 character alphanumeric) is coded as follows:

    D   Distributed--side or end
    L   Left--front or rear
    C   Center--front or rear
    R   Right--front or rear
    F   Side front--left or right
    P   Side center section--L or R
    B   Side rear--left or right
    Y   Side (F + P) or end (L + C)
    Z   Side (P + B) or end (C + R)
    9   Unknown

Specific Vertical or Lateral Location (1 character alphanumeric) is coded as follows:

                Vertical - Front. Rear. or Side Impacts
                ===

    A   All
    H   Top of frame to top
    E   Everything below belt line
    G   Belt line and above
    M   Middle--top of frame to belt line or hood
    L   Frame--top of frame, frame, bottom of frame (including
        undercarriage)
    W   Below undercarriage level (wheel and tires only)
    9   Unknown

                Lateral - top and Undercarriage Impacts
                ===

    D   Distributed
    L   Left
    C   Center
    R   Right
    Y   Left and Center (L + C)
    Z   Right and Center (R + C)
    9   Unknown

Type of Damage Distribution (1 character alphanumeric) is coded as
follows:

W Wide impact area   E Corner
N Narrow impact area   K Conversion in impact type·
S Sideswipe   U No residual deformation
O Rollover (including side   R Override
A Overhanging structure   9 Unknown

Deformation Extent Guide (2 character alphanumeric) is coded as
follows:

01 One   06 Six
02 Two   07 Seven
03 Three   08 Eight
04 Four   09 Nine
05 Five   99 Unknown

Delta V.

     Delta-V is defined as the vector velocity change during the
collision phase of an accident, or in a simple accident, as
separation velocity minus approach velocity:

$$DELTA-V = V\ separation - V\ approach$$

The direction of the vector is determined by the investigator as the
direction of principal force. For each vehicle, the components of
its Delta-V are obtained by projecting on the longitudinal and
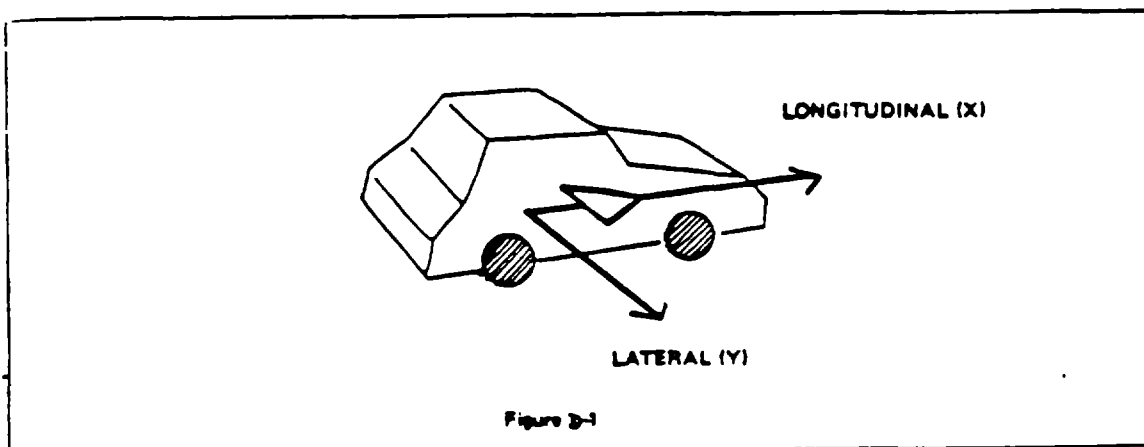lateral axis of that vehicle.

Figure D-1

     Figure D-1 shows the positive direction of the longitudinal and
lateral components of Delta-V. For example, in a head-on collision, a
vehicle is decelerated and the initial high positive longitudinal
velocity is reduced; thus it will have a negative longitudinal Delta-V.

APPENDIX E

SELECTED COUNTS

Users of the NASS Analysis file occasionally have requested that the manual include total counts for certain NASS statistics. These counts may help assure that the users are accessing the desired NASS tape. Further, such counts help to identify the source of apparent anomalies.

For this edition of the User's Manual, the following counts have been identified as potentially the most useful:

. Total Number of Accident Records   — 2,706
. Total Number of Pedestrian Records —   26
. Total Number of Vehicle Records   — 4,633
. Total Number of Driver Records   — 4,633
. Total Number of Occupant Records   — 7,430
. Total Number of Accident Records with neither Occupants nor Pedestrians —
. Total Number of Accident Records with at least One Pedestrian but no Occupants —
. Total Number of Vehicle Records with at least One Occupant but no Driver —   12
. Total Number of Vehicle records with no Occupant Record —

APPENDIX F - PSU DEMOGRAPHIC DATA

(1).   PSU Codes
(2).   PSU Description
(3).   Population (1980 & 1970)
(4).   Land Area(Square Miles)
(5).   Population (by Age Group)
(6).   Means of Transportation to Work
(7).   Travel Time to Work

        Demographics data on the 31 PSU's are included to give
researchers supplementary information on the nature of the PSU's
when analyzing NASS data.   The 1980 and 1970 population figures
are from the decennial censuses.   The land area figures are from
the County and City Data Book 1977.   The figures on age
distribution of the population in 1980 are from Tables 115 and
171, entitled "General Social and Economic Characteristics".   The
figures pertaining to means of transportation and travel time to
work are from Tables 119 and 174 of the same report.

PRIMARY SAMPLING UNIT (PSU) CODES AND DESCRIPTION

VALUES	STRATA	DESCRIPTION
01, 31, 34	1	Central City, one of the 10 largest 1970 SMSA's
51, 63, 78, 85	2	Central city, one of the 11th – 60th largest 1970 SMSA's
09, 28, 32, 79	3	Suburban, one of the 17 largest 1970 SMSA's; low gas sales
06, 37, 33, 61	4	Suburban, one of the 17 largest 1970 SMSA's; high gas sales
10, 33, 52, 56, 80	5	Suburban, one of the 18th – 60th largest 1970 SMSA's, or PSU within 61st – 119th largest SMSA's not containing a central city
04, 57, 87	6	PSU within 61st – 119th largest SMSA's containing a central city
02, 30, 55, 58	7	PSU containing towns with 1977 population over 19,718: low gas sales
11, 28, 81	8	PSU containing towns with 1977 population over 19,718: high gas sales
54	9	PSU with no town with 1977 population over 19,718: low gas sales

POPULATION

PSU	1980	1970	LAND AREA
P01	3005078	3369357	223
P02	157589	157426	501
P04	450449	445589	642
P06	522965	546253	513
P09	1134552	1156305	467
P10	280326	231335	554
P11	264748	234103	771
P25	158158	141241	1141
P28	555007	603456	184
P30	227908	243131	454
P31	1688210	1949996	129
P32	1026147	1085044	673
P33	81974	83120	197
P34	2230916	2602012	70
P37	643621	624080	496
P38	737822	708760	944
P51	274602	246463	56
P52	107503	65993	1438
P54	137222	119893	1031
P55	137541	116029	1333
P56	1278916	932933	2008
P57	319694	276293	508
P58	301727	229006	858
P61	652316	483294	589
P63	904074	844401	270
P78	397039	389455	335
P79	656280	555805	775
P80	374194	226572	931
P81	90554	60827	9983
P85	493846	530831	84
P87	531443	351667	9240

POPULATION BY AGE GROUP (1980)

PSU	UNDER 5	5 TO 9	10 TO 14	15 TO 19	20 TO 24
P01	231181	224889	237173	268201	294060
P02	12460	12664	13504	15949	13839
P04	35990	37931	41977	45907	43818
P06	44372	43382	45081	51082	48654
P09	76380	83347	94403	107570	105764
P10	20048	22879	27981	29561	20640
P11	17143	17053	18338	27587	43336
P26	9584	10276	13384	14979	13805
P28	32902	33554	42946	53879	51317
P30	13169	14188	16910	19730	18592
P31	107673	109479	131006	151503	162120
P32	56862	62913	78991	88524	84170
P33	4550	5638	7153	7232	4974
P34	174080	161804	175955	192855	192876
P37	36177	40527	50219	58755	54051
P38	52204	55492	67716	76732	79478
P51	12615	13539	16056	19154	22455
P52	8981	9298	9332	9976	9298
P54	9484	10719	12117	12653	10672
P55	9729	10599	10137	15116	18277
P56	74216	87200	91897	109826	104576
P57	19651	21140	27551	30217	35757
P58	18599	20931	23829	30119	35003
P61	52279	56302	59510	61574	59057
P67	66645	64556	67227	77012	102616
P78	30863	30083	32184	37568	39195
P79	44078	45079	54279	60086	52500
P80	26465	29978	33718	35310	30815
P81	8158	7779	7980	8235	9023
P85	24139	21106	24208	35215	59233
P87	37773	37586	39853	48720	56920

PSU	25 TO 29	30 TO 44	45 TO 64	65 & OVER
P01	276035	542471	589789	341279
P02	12982	27824	31523	16844
P04	37978	86480	84554	35814
P06	43884	93060	107884	45556
P09	98794	213262	250933	104079
P10	20151	63151	55008	20907
P11	32757	53693	38149	16692
P26	12569	31325	31739	20497
P28	44024	94170	130934	71231
P30	16138	37177	54780	37224
P31	141378	284943	363157	236951
P32	82229	187079	253672	131748
P33	5772	16325	20461	10269
P34	186722	415705	452338	278601
P37	50129	122915	149962	80926
P38	72495	169743	123628	40734
P51	21679	47637	61779	59638
P52	9210	23139	18801	9468
P54	10705	26654	28330	16288
P55	10174	23615	24540	13354
P56	99885	246046	273887	195383
P57	28818	62342	62441	35777
P58	30744	67390	52626	22086
P61	67129	157083	108001	35382
P62	99279	175177	166351	85211
P78	37978	74655	73099	41408
P79	53584	148563	137244	60542
P80	36124	93142	66794	22246
P81	7332	15451	16772	9824
P85	59383	96696	97326	76040
P87	49894	97917	100880	61894

MEANS OF TRANSPORTATION TO WORK

PSU	PRIVATE CAR	TRUCK OR VAN	MOTOR-CYCLE	PUBLIC TRANSIT	BI-CYCLE	WALKING	OTHER	WORK AT HOME
P01	661571	30691	492	385792	2114	93590	6067	11037
P02	45826	9209	176	542	158	2013	295	908
P04	131665	24404	202	1781	137	4258	610	1502
P06	163295	21959	205	6506	261	8499	731	1709
P09	394306	46325	228	9937	993	11630	1661	3443
P10	110643	12811	330	1246	428	4732	544	2737
P11	89936	11546	195	4848	1127	13732	673	2890
P26	48344	7289	218	1305	236	5090	669	2007
P29	176075	14386	320	31823	662	13537	1153	3358
P30	69585	6576	46	3375	43	7909	398	1384
P31	327866	19725	693	183432	2531	64005	2840	7294
P32	317743	37129	360	51635	237	21941	1791	4730
P33	29419	3385	107	9188	139	1051	84	499
P34	212075	10761	440	493236	1894	72149	3702	7997
P37	240110	20784	545	19097	1080	15560	1191	5959
P38	281626	31894	1263	36697	1035	12007	1726	4286
P51	93207	12015	920	3782	1420	4853	1184	1950
P52	31266	9469	149	147	21	1129	250	453
P54	45568	11119	100	278	18	1845	430	820
P55	79462	9920	160	423	183	1892	284	444
P56	463193	47749	3108	27127	4236	17699	3195	6916
P57	107340	18351	405	4742	167	5045	538	1745
P58	122422	15836	587	4044	582	5330	984	2409
P61	261114	55952	2304	3870	507	5390	1730	4186
P67	149802	46521	1468	37771	688	10846	2232	5739
P78	141623	19250	520	11255	268	8050	660	3137
P79	217141	35731	1294	25794	1625	6851	3684	5634
P80	141541	27475	723	7909	537	4380	1025	3738
P81	19850	8098	851	583	554	2893	582	547
P85	149979	17874	1595	47695	3120	19562	1742	5142
P87	151229	40899	3107	6691	3928	8733	1773	4549

TRAVEL TIME TO WORK (IN MINUTES)

FSU	LESS THAN 10	10 TO 19	20 TO 29	30 TO 44	45 AND OVER
F01	82020	227900	215965	329788	323755
F02	10908	26382	12891	5823	2453
F04	22460	62152	46992	25037	6884
F06	27311	62180	48837	41782	21004
F09	62112	145299	114940	103940	38361
F10	24013	41526	32681	24727	9022
F11	23121	49751	25439	15066	9382
F26	17550	21932	12080	9153	6450
F28	29314	66498	47815	53325	42254
F30	17218	38527	17233	9595	5216
F31	48031	129282	116974	159984	145474
F32	54103	126240	92377	96893	60846
F33	5267	17576	7901	6022	2020
F34	40190	101641	78442	180685	384253
F37	51774	102725	58015	50663	36077
F38	31050	76657	76133	98693	85650
F51	13118	47635	24463	21497	9960
F52	6793	9500	6685	10812	9155
F54	11309	24295	12363	7593	4137
F55	8726	23546	9690	5378	4041
F56	60751	165707	175519	140383	64132
F57	15980	43441	33451	28795	10971
F58	21024	56985	39393	24927	7966
F61	47347	100670	78269	76310	32532
F63	42477	172519	116744	111585	47360
F78	30774	74814	47999	21901	6911
F79	36139	87471	53667	57732	62725
F80	20725	49990	46967	45734	20639
F81	10777	17735	3851	3281	1482
F85	29460	82557	61333	46972	21055
F87	31065	75484	52118	40649	17205