NATIONAL ACCIDENT SAMPLING SYSTEM (NASS)

Analytical User's Manual

1986 File

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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 1986 NASS file contains data from 50 PSU's for the first 9 months and 30 PSU's for the last 3 months. These PSU's are monitored by 4 Zone (Quality Control) Centers. These data are weighted to represent all police reported motor vehicle accidents occurring in the USA during the year.

The structure of a few variables has been changed between the 1985 and 1986 files. Consequently combining the 1986 file with ones from previous years requires extreme care.

The 1986 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 - 1986 Continuous Sampling System 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)

Truck Deformation Classification (SAE J1301)

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 two are 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 NASS are a probability sample of all police-reported accidents in the U.S. A NASS accident must fulfill the following requirements: must be police-reported. must involve a harmful event (property damage and/or personal injury) resulting from an accident, and must involve a motor vehicle in transport on a trafficway. Every accident which meets these conditions has a chance of being selected. This type of sample design makes it possible to compute estimates which are representative of the entire country.

The selection of sample accidents in NASS is accomplished in three stages: (1) selection of PSU's, (2) selection of police jurisdictions, and (3) selection of accidents.

Stage 1 - Select PSU's

For the first stage of selection, the country was divided into 1279 geographic areas called Primary Sampling Units (PSU's). Each PSU consisted either of a large city. a county, a group of contiguous counties. a central city or the balance of a county which was not part of a central city. The PSU's were defined so that their minimum population was approximatly 50,000.

The 1.279 PSU's were grouped into 75 strata based on geographic region. percent of urban population, per capita service station sales. and per capita road miles. The strata were formed to be about equal in population; however. five PSU's had total population approaching or exceeding that of some strata. These were identified as self-representing and included in the sample with certainty. From each of the remaining 70 strata. containing at least two PSU's, one PSU was selected randomly with probability proportional to its 1977 population. The 75 selected sample PSU's are the first stage in the selection of NASS sample accidents and the inverse of the probability of selecting the PSU is the first stage expansion factor for all accidents in that PSU.

The NASS PSU sample also was designed to be implemented in stages: that is, not all 75 PSU's became operational at once. Three probability subsamples of the selected PSU's which would provide valid estimates during a period of staged implementation

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were defined. The stages provided for growth from an original 10 PSU's, to 30 PSU's, to 50 PSU's, and finally to 75 PSU's.

Stage 2 - Select Police Jurisdictions

If every accident in each PSU were investigated, a national estimate could be obtained by weighting each accident by the inverse of the probability of selecting the PSU. Because it is uneconomical and impractical to investigate every accident in each sample PSU, a second and third stage of sampling are performed. Each PSU contains a number of police jurisdictions which process reports of accidents that occur within the PSU's boundaries. These police jurisdictions form the frame of the second stage of sampling. Each jurisdiction is assigned a measure of size based on the number, severity, and type of its accidents. A sample of jurisdictions is selected which oversamples those having a larger measure of size.

Stage 3 - Select Accidents

The final stage of sampling is the selection of accidents which occurred within the sampled jurisdictions. On specified days of the week, the selected police jurisdictions are contacted and all accidents for which a police accident report has been filed since the last date that jurisdiction was contacted are listed. All qualifying accidents are listed, except in a few of the largest police jurisdictions. In these jurisdictions only accidents with either even or odd number police reports are listed.

While being listed, each accident is classified into a stratum based on accident severity. Low severity accidents, accidents resulting in only minor property damage and little or no injury, constitute a large majority of the accident population. Thus, a large proportion of a sample in which each accident had an equal chance of being selected would be low severity and would not be effective in providing detailed and accurate information to help mitigate serious accident consequences. Stratification by severity allows procedures to be used by which more serious accidents are selected for investigation.

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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 motorcycle whose driver was uninjured would be classified as Stratum A.

Under this procedure each team is assigned a fixed sampling interval for each of the five strata. The number of accidents a team selects for investigation is governed by the number of accidents a team lists and the sampling intervals. Sampling intervals for the strata are assigned so that a larger percentage of the higher severity accidents is selected than of the lower severity accidents. Also, accidents in the same stratum have a similar probability of being selected, regardless of their PSU. However, because the number of listed accidents varies greatly between PSU's and because of the operational restrictions of the current investigator assignments, equal probabilities within each stratum could not be achieved and the resulting sampling weights may vary by as much as a factor of three.

To select the sample, each accident is assigned a weight equal to the inverse of the probability of selecting the police jurisdiction in which it was listed. Within each stratum the weighted accidents are sorted by police jurisdiction, accident date and time. A systematic sample then is selected within each stratum. Except for the first contact day when a random number is used, the starting point for each contact day is equal to the carry over from the previous contact day, that is, the sum of the weights of the listed accidents from last selected accident to the end of the previous contact day.

Table 2.1
1986 NASS Accident Strata

	Most Severe Police Reported Injury					
Nonmotorist						
	Fatal	Serious Injury	Minor Injury, Not Injured, or Unknown			
or						
			Trans-ported	Nontransported		
Vehicle						
				Towaway	Nontowaway
Involvement						
All Types	A	B	C	D	E	

Sampling Weights

Because the accidents selected in NASS are a probability sample of all accidents occurring in the survey year, the data from these accidents can be "weighted" to produce either PSU or National Estimates. The weights or "Inflation Factors" result from the stages of selection, reflecting that accident's probability of selection. There are three weights on this analysis file.

PSU Inflation Factor

The PSU Inflation Factor is the within PSU sampling weight for each accident in that PSU's sample and is equal to the inverse of that accident's probability of selection within the PSU. It is equal to the product of the inverse of the probability of selecting that accident from the other accidents in the same accident stratum and police jurisdiction (Stage 3) and the inverse of the probability of selecting the police jurisdiction in which the accident occurred from among all police jurisdictions listed in the PSU (Stage 2).

The sum of the PSU Inflation Factors for all accidents sampled within a PSU is an unbiased estimate of the number of accidents which occurred during the year in that PSU. If restricted to an accident stratum, the sum is an estimate of the number of that type of accident which occurred in that PSU. Unbiased estimates of accident characteristics for a PSU can be obtained by multiplying the value of the characteristic for each accident sampled in the PSU by that accident's PSU Inflation Factor and summing.

National Inflation Factor

The National Inflation Factor is the overall sampling weight for each accident selected in the NASS sample and the inverse of the probability of selection of that accident. It is equal to the product of the PSU Inflation Factor and the inverse of the probability of selection of the PSU (Stage 1).

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The sum of the National Inflation Factors for all sampled NASS accidents in a year is an unbiased estimate of the total number of accidents which occurred during the year in the U.S. If restricted to an accident stratum, the sum is an estimate of the total number of that type of accident which occurred in that year. Unbiased estimates of National totals of accident characteristics can be obtained by multiplying the value of the characteristic for each accident in the NASS sample by the National Inflation Factor for that accident.

Ratio Inflation Factor

The Ratio Inflation Factor is the product of the National Inflation Factor and a ratio which adjusts for differences between actual and estimated totals. This ratio is calculated using accident totals for both sampled and nonsampled police jurisdictions. The totals for the sampled jurisdictions come from the Stage 3 frame. The totals for the nonsampled jurisdictions are collected every six months. The PSU's are grouped into predetermined sets. Ratios are formed by dividing the total accidents in each accident stratum and in each set of PSU's by the estimated total. These estimated totals are sums of the PSU Inflation Factors for each accident in the accident strata and set of PSU's.

Estimates of National totals for accident characteristics can be obtained using the Ratio Inflation Factors as they were obtained using the National Inflation Factors. However, because the Ratio Inflation Factors have been adjusted to actual accident counts, some of the sampling variation has been removed. Therefore, they will produce more precise estimates than the National Inflation Factors.

Special Considerations in the 1986 Sample

During 1986, a decision was made to change the scope and direction of the NASS. As part of the implementation of this decision a new sample of Primary Sampling Units was selected. Thirty of the fifty PSU's operating at the beginning of 1986 were selected as part of this new sample. Due to budget and contractual considerations, operations at most of the remaining twenty PSU's ceased during the month of September 1986. PSU's that were selected in the new sample and were not part of the current sample will begin operations in 1987.

The reduction in the number of operational PSU's affects the statistical validity of the sample of accidents. That is, because the NASS was run for a portion of the year with only part of the original PSU sample in place, the set of traffic accidents for which information was collected in 1986 is not a statistical sample of all traffic accidents for the entire year. The sample is "representative" for the months of January through August, when all 50 PSU's were in operation, but not for the months of September through December.

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The National Inflation Factors (NIF's) will continue to represent
the unbiased probability of selection of all the accidents
selected in the sample. Hence, they are representative of the
entire country for the months of January through August, when all
50 PSU's were in the sample and operational. For the months of
September through December they are representative only of the
portion of the country represented by the PSU's that remained in
operation during this period of time.

The Ratio Inflation Factors (RIF's) are being used to allow users
to produce national estimates for the entire year. This was
possible because, although sampling and case investigation
operations ceased in the closed down PSU's, accident counts were
obtained for the last six months of 1986 in all PSU's, as they
were for the first six months. Ratio adjustments were computed
using these counts and the accidents selected in the operational
PSU's during the months of September through December. The
product of these adjustments and the NIF produces larger ratio
inflation factors which "account" for the missing PSU's.

To compute the 1986 RIF's the selected accidents were divided
into two sets: those accidents selected during the months of
January through August; and, those selected during the
September-December period, when PSU's were closed down. For the
first part of the year RIF's were computed as described in the
previous section, except that the numerator of the ratio
adjustment was the sum of the counts from the first six months of
1986 and one-third of the counts from the July-December period.
The denominator was the sum of the NIF's from all accidents
selected in all PSU's during the months of January through
August. For the September-December period a second ratio was
computed. The numerator was the sum of the remaining two-thirds
of the July-December counts from all PSU's and the denominator
was the sum of the NIF's from accidents selected in the
operational PSU's. Where possible, PSU's were kept in the same
set for computing ratios for both periods.

Since a RIF is the product of a NIF and the appropriate ratio,
the RIF's in the second part of the year reflect an adjustment
for the missing PSU's and can be used to generate national
estimates for the entire year. Keep in mind, however, that as
with any sampling weights which include an adjustment for
nonresponse, estimates derived using these RIF's will be biased,
since a sample was not selected from part of the sampling unit.

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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
PSU INFLATION FACTOR (A47-54)	This eight place numeric value has three implied decimal places. Its purpose and derivation are described in Section 2 of this Manual.
NATIONAL INFLATION FACTOR (A55-62)	This eight place numeric value has three implied decimal places. Its purpose and derivation are described in Section 2 of this Manual.
RATIO INFLATION FACTOR (A63-70)	This eight place numeric value has three implied decimal places. Its purpose and derivation are described in Section 2 of this Manual.

MAXIMUM TREATMENT
(A71)

This single place numeric value indicates the most intensive treatment given to any occupant, pedestrian or other non-motorist 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 and each pedestrian/non-motorist 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, pedestrian or other non-motorist 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, pedestrian or other non-motorist 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 & pedestrian/non-motorist form and the TRAFFIC VIOLATION CHARGED AGAINST THIS DRIVER 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) or either
    TRAFFIC VIOLATION CHARGED AGAINST
    THIS DRIVER equals 02.

(NO) 2 - If POLICE REPORTED ALCOHOL
    PRESENCE equals 0 (NO) and
    ALCOHOL TEST RESULT equals 00
    (NONE) or 96 (NONE GIVEN) and
    both first and second TRAFFIC
    VIOLATION CHARGED AGAINST THIS
    DRIVER are not equal to 02 or 99

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

VARIABLE NAME AND LOCATION	DESCRIPTION

NUMBER OF SERIOUSLY INJURED
PERSONS
(A74-75)

This two place numeric value indicates the total number of fatally and other seriously injured individuals involved in the accident. It is derived by totaling the number of pedestrian/non-motorist and 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 individuals in the accident. It is derived by totaling the number of pedestrian/nonmotorist and occupant records in which either the TREATMENT-MORTALITY value is coded "1" (fatal) or the A.I.S. SEVERITY value is coded "1-7".

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		

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

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

This single place numeric value indicates the single most severe injury level reported for this pedestrian or other non-motorist in the accident. Order of coding is the same as for the accident variable MAXIMUM KNOWN A.I.S. (A72).

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

This two place numeric value provides an index score indicating the relative severity of overall injury to the individual pedestrian. 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:

A Pedestrian suffered severe 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.

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.

VARIABLE NAME AND LOCATION	DESCRIPTION

VEHICLE SHORT FORM
(V205)

This one place numeric value
indicates the use or nonuse of the
"Vehicle Short Form". When no vehicle
in an accident has suffered
sufficient damage to require towing
from the accident scene and there are
no serious injuries e.g.. TYPE OF
CASE '2' (nontowaway) and Stratum 'E'.
investigators use an abbreviated
version of the data collection form for
for the Vehicle level records
Its values are as follows:
   0   NO   [full-length form used]
   1   YES [Vehicle Short Form used]
If the case includes a special studv.
a full length vehicle form is
completed.

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- MORTALIT
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 cf
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 indicates 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 identically to PEDESTRIAN I.S.S., using data from the Occupant level record.

1 2	PSU NUMBER	
3 4 5 6	CASE NUMBER	
7	RECORD NUMBER	
8	/////////////////////////////	
9	VERSION NUMBER	
10	/////////////////////////////	
11	TYPE OF CASE	IDENTIFICATION
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	
31	LIGHT CONDITIONS	
32	ATMOSPHERIC CONDITIONS	
33 34	RELATION TO JUNCTION	AMBIENT CONDITIONS
35	INTERCHANGE GEOMETRY	
36	SCHOOL ZONE	
37	SCHOOL BUS RELATED	
38	RIGHT OR LEFT TURN ON RED	
39 40	DRIVER LEVEL ENVIRONMENTAL DATA	
41	LONGITUDINAL BARRIER	
42	CRASH CUSHION SPEC. STUDY	SPECIAL STUDIES
43	/////////////////////////////	
44	/////////////////////////////	
45 46	///////////////////////////// /////////////////////////////	

ACCIDENT RECORD

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

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Pedestrian/Nonmotorist Record — form field layout

IDENTIFICATION

Field	Description
1–2	PSU NUMBER
3/4/5/6	CASE NUMBER-STRATIFICATION
7	RECORD NUMBER
8	////////////////////
9	VERSION NUMBER
10	////////////////////

INTERVIEW

Field	Description
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	Description
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	Description
43	BODY REGION
44	ASPECT
45	LESION
46	SYSTEM/ORGAN
47	AIS SEVERITY

PEDESTRIAN INJURY CLASSIFICATION (CONTINUED)

2ND INJURY CONT.

Field	Description
48–49	INJURY SOURCE
50	DIR./INDIR. INJ.
51–52	SOURCE OF DATA

3RD INJURY

Field	Description
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	Description
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	Description
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	Description
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	Description
93	INJURY SEVERITY
94–95	TIME TO DEATH
96	TRAFFIC VIOLATION
97	ALCOHOL PRESENCE
98–99	ALCOHOL TEST RESULT
100–101	PEDESTRIAN RELATED FACTORS

DERIVED

Field	Description
102	MAXIMUM KNOWN AIS
103–104	INJURY SEVERITY SCORE

PEDESTRIAN/NONMOTORIST RECORD

Left Column

#	Item	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	
15	VEHICLE ROLE	
16	MANNER OF LEAVING SCENE	
17	HIT AND RUN INVOLVEMENT	
18–19	VEHICLE MODEL YEAR	EXTERIOR ITEMS
20–21	VEHICLE MAKE	
22–23	VEHICLE MODEL	
24	REGISTRATION OF VEHICLE	
25–34	VEHICLE IDENTIFICATION NUMBER	
35–41	///////////////////////////////	
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

Right Column

#	Item	Section
54	TIRE	3RD TIRE CONT.
55	CONDITION	
56	AXLE	4TH TIRE
57	TIRE	
58	CONDITION	EXTERIOR ITEMS CONT.
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"
80–81	OBJECT CONTACTED	
82–83	DIRECTION OF FORCE	
84	DEFORMATION LOCATION	
85	LONG./LATERAL LOCATION	
86	VERT./LATERAL LOCATION	DEFORMATION CLASSIFICATION
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	

VEHICLE RECORD

20

#	Description	Section
98	VERT./LATERAL LOCATION	DC/TDC SECOND "HIGHEST" A
99	TYPE OF DAMAGE DISTRIBUTION	
100	DEFORMATION	
101	EXTENT GUIDE	
102	ACCIDENT SEQUENCE NUMBER	
103 104 105 106	CRASH DAMAGE DATA FOR HIGHEST DELTA "V" - L	CRASH PROFILE
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	
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	

#	Description	Sub	Section
156	VEHICLE SPECIAL USE		FRONT OCCUPANT AREA INTRUSION
157 158 159	ODOMETER READING		
160	PASSENGER COMPARTMENT INTEGRITY		
161 162	INTRUDING COMPONENT	DRIVER AREA INJURY	
163	MAG. OF INTRUSION		
164 165	INTRUDING COMPONENT	DRIVER AREA OTHER	
166	MAG. OF INTRUSION		
167 168	INTRUDING COMPONENT	PASSENGER AREA INJURY	
169	MAG. OF INTRUSION		
170 171	INTRUDING COMPONENT	PASSENGER AREA OTHER	
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 1186
184 185 186	VEHICLE CARGO WEIGHT		
187	CARGO WEIGHT INFO SOURCE		
188	BASIS FOR TOTAL DELTA "V"		RECONSTRUCTION RESULTS
189 190	TOTAL DELTA "V"		
191 192 193	LONGITUDINAL COMPONENT OF DELTA "V"		
194 195 196	LATERAL COMPONENT OF DELTA "V"		
197 198 199 200	ENERGY ABSORPTION		
201 202	TRAVEL SPEED		RSS
203 204	VIN LENGTH		CODING
205	VEHICLE SHORT FORM		

206 207	NUMBER OF SERIOUSLY INJURED IN THIS VEHICLE	
208 209	NUMBER INJURED IN THIS VEHICLE	
210 211 212 213	WHEELBASE - SHORT	RESERVED (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)

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DRIVER RECORD

#	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	DRIVER
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	

#	Field	Section
49	PREVIOUS SUSPENSION/REVOC	CONTD.
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

#	Field	Group
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	OCCUPANT NUMBER	
15,16	OCCUPANT'S AGE	TREATMENT
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	
36,37	CHILD RESTRAINT MAKE/MODEL	OCCUPANT INJURY CLASSIFICATION
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	
45	BODY REGION	INJURY 1ST
46	ASPECT	
47	LESION	

OCCUPANT INJURY CLASSIFICATION (CONTINUED)

#	Field	Group
48	SYSTEM/ORGAN	1ST INJURY CONT.
49	AIS SEVERITY	
50,51	INJURY SOURCE	
52	DIR./INDIR, INJ.	
53,54	SOURCE OF DATA	
55	BODY REGION	2ND INJURY
56	ASPECT	
57	LESION	
58	SYSTEM/ORGAN	
59	AIS SEVERITY	
60,61	INJURY SOURCE	
62	DIR./INDIR, INJ.	
63,64	SOURCE OF DATA	
65	BODY REGION	3RD INJURY
66	ASPECT	
67	LESION	
68	SYSTEM/ORGAN	
69	AIS SEVERITY	
70,71	INJURY SOURCE	
72	DIR./INDIR, INJ.	
73,74	SOURCE OF DATA	
75	BODY REGION	4TH INJURY
76	ASPECT	
77	LESION	
78	SYSTEM/ORGAN	
79	AIS SEVERITY	
80,81	INJURY SOURCE	
82	DIR./INDIR, INJ.	
83,84	SOURCE OF DATA	
85	BODY REGION	5TH INJURY
86	ASPECT	
87	LESION	
88	SYSTEM/ORGAN	
89	AIS SEVERITY	
90,91	INJURY SOURCE	

OCCUPANT INJURY CLASSIFICATION (CONTINUED)

#	Field	Group
92	DIR./INDIR, INJ.	5TH INJURY CONT.
93,94	SOURCE OF DATA	
95	BODY REGION	6TH INJURY
96	ASPECT	
97	LESION	
98	SYSTEM/ORGAN	
99	AIS SEVERITY	
100,101	INJURY SOURCE	
102	DIR./INDIR, INJ.	
103,104	SOURCE OF DATA	
105	INJURY SEVERITY	OTHER
106,107	TIME TO DEATH	
108	MAXIMUM KNOWN AIS	DERIVED
109,110	INJURY SEVERITY SCORE	

OCCUPANT RECORD

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
Pedestrian/non-motorists and Driver Alcohol Test Results
(ALCTEST) has been recoded to .B; the value of 96 ("not
given") has been recoded .C; the value of 97 ("performed.
results unknown") has been recoded .D; and the value 99
("unknown") has been recoded .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;

- Numeric variables not present on the short vehicle form
for nontowaway accidents and numeric variables not codec on
the pedestrian, vehicle. driver and occupant forms for
source documents only accidents have been recoded to .N (Not
Collected);

- Character variables not present on the short vehicle form
or not coded for source documents only accidents have been
recoded to 8 or 98(Not Collected);

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

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 1986 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:

CONTENTS OF SAS DATA SET NASSANL.ACCIDENT

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
30	AAIS	NUM	2	78			MAXIMUM KNOWN AIS IN ACCIDENT
32	AINJSER	NUM	2	82			NUMBER OF SERIOUSLY INJURED PERSONS
33	AINJURED	NUM	2	84			TOTAL NUMBER OF INJURED PERSONS
31	ALCINV	NUM	2	80			ALCOHOL INVOLVED ACCIDENT
29	ATREAT	NUM	2	76			MAXIMUM TREATMENT IN ACCIDENT
2	CASEID	CHAR	4	2			CASE NUMBER - STRATIFICATION
3	CASEND	NUM	2	6			SEQUENCE NUMBER
34	DAYWEEK	NUM	2	86			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
27	NATWGT	NUM	6	64	9.3		NATIONAL INFLATION FACTOR
13	PEDFORMS	NUM	2	30			NUMBER OF PED/NONMOTOR FORMS SUBMITTED
1	PSU	NUM	2	4			PSU NUMBER
26	PSUWGT	NUM	6	58	9.3		PSU INFLATION FACTOR
28	RATWGT	NUM	6	70	9.3		RATIO INFLATION FACTOR
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
25	SSCC	NUM	2	56			CRASH CUSHION (S.S. INDICATOR)
24	SSLB	NUM	2	54			LONGITUDINAL BARRIER (S.S. INDICATOR)
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

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
12	AGE	NUM	4	40			AGE OF PERSON
47	AIS1	NUM	2	86			AIS SEVERITY (FIRST)
48	AIS2	NUM	2	88			AIS SEVERITY (SECOND)
49	AIS3	NUM	2	90			AIS SEVERITY (THIRD)
50	AIS4	NUM	2	92			AIS SEVERITY (FOURTH)
51	AIS5	NUM	2	94			AIS SEVERITY (FIFTH)
52	AIS6	NUM	2	96			AIS SEVERITY (SIXTH)
75	ALCTEST	NUM	2	142			ALCOHOL TEST RESULT
29	ASPECT1	CHAR	1	68			ASPECT (FIRST)
30	ASPECT2	CHAR	1	69			ASPECT (SECOND)
31	ASPECT3	CHAR	1	70			ASPECT (THIRD)
32	ASPECT4	CHAR	1	71			ASPECT (FOURTH)
33	ASPECT5	CHAR	1	72			ASPECT (FIFTH)
34	ASPECT6	CHAR	1	73			ASPECT (SIXTH)
23	BODYREG1	CHAR	1	62			OIC BODY REGION (FIRST)
24	BODYREG2	CHAR	1	63			OIC BODY REGION (SECOND)
25	BODYREG3	CHAR	1	64			OIC BODY REGION (THIRD)
26	BODYREG4	CHAR	1	65			OIC BODY REGION (FOURTH)
27	BODYREG5	CHAR	1	66			OIC BODY REGION (FIFTH)
28	BODYREG6	CHAR	1	67			OIC BODY REGION (SIXTH)
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
22	CASENO	NUM	3	10			SEQUENCE NUMBER
72	CONTACT	NUM	2	60			VEHICLE WHICH CONTACTED PEDESTRIAN
65	DEATH	NUM	2	136			TIME TO DEATH
66	DIRINJ1	NUM	2	122			DIRECT/INDIRECT INJURY (FIRST)
67	DIRINJ2	NUM	2	124			DIRECT/INDIRECT INJURY (SECOND)
68	DIRINJ3	NUM	2	126			DIRECT/INDIRECT INJURY (THIRD)
69	DIRINJ4	NUM	2	128			DIRECT/INDIRECT INJURY (FOURTH)
70	DIRINJ5	NUM	2	130			DIRECT/INDIRECT INJURY (FIFTH)
17	DIRINJ6	NUM	2	132			DIRECT/INDIRECT INJURY (SIXTH)
74	DISTANCE	NUM	2	50			DISTANCE FROM INTERSECTION
14	DRINKING	NUM	2	140			ALCOHOL PRESENCE
20	HEIGHT	NUM	2	44			HEIGHT OF PERSON
71	HOSPSTAY	NUM	2	56			HOSPITAL STAY
53	INJSEV	NUM	2	134			INJURY SEVERITY (POLICE RATING)
54	INJSOU1	NUM	2	98			INJURY SOURCE (FIRST)
55	INJSOU2	NUM	2	100			INJURY SOURCE (SECOND)
56	INJSOU3	NUM	2	102			INJURY SOURCE (THIRD)
57	INJSOU4	NUM	2	104			INJURY SOURCE (FOURTH)
58	INJSOU5	NUM	2	106			INJURY SOURCE (FIFTH)
78	INJSOU6	NUM	2	108			INJURY SOURCE (SIXTH)
35	ISS	NUM	2	148			ISS
36	LESION1	CHAR	1	74			LESION (FIRST)
37	LESION2	CHAR	1	75			LESION (SECOND)
38	LESION3	CHAR	1	76			LESION (THIRD)
39	LESION4	CHAR	1	77			LESION (FOURTH)
40	LESION5	CHAR	1	78			LESION (FIFTH)
	LESION6	CHAR	1	79			LESION (SIXTH)

#	NAME	TYPE	LEN	POS	FMT	LABEL
77	MAIS	NUM	2	146		MAXIMUM KNOWN OCC/PED/NM AIS
8	NATWGT	NUM	6	24	9.3	NATIONAL INFLATION FACTOR
18	PEDACT	NUM	2	52		PEDESTRIAN ACTIVITY
16	PEDLOC	NUM	2	48		PEDESTRIAN LOCATION
76	PEDRF	NUM	2	144		PEDESTRIAN RELATED FACTORS
10	PERNO	NUM	2	36		PEDESTRIAN/NONMOTORIST'S NUMBER
11	PERTYPE	NUM	2	38		PEDESTRIAN/NONMOTORIST'S TYPE
1	PSU	NUM	2	4		PSU NUMBER
7	PSUWGT	NUM	6	18	9.3	PSU INFLATION FACTOR
9	RATWGT	NUM	6	30	9.3	RATIO INFLATION FACTOR
5	RECND	NUM	2	14		RECORD NUMBER
13	SEX	NUM	2	42		SEX OF PERSON
59	SOUDAT1	NUM	2	110		SOURCE OF DATA (FIRST)
60	SOUDAT2	NUM	2	112		SOURCE OF DATA (SECOND)
61	SOUDAT3	NUM	2	114		SOURCE OF DATA (THIRD)
62	SOUDAT4	NUM	2	116		SOURCE OF DATA (FOURTH)
63	SOUDAT5	NUM	2	118		SOURCE OF DATA (FIFTH)
64	SOUDAT6	NUM	2	120		SOURCE OF DATA (SIXTH)
4	STRATIF	CHAR	1	13		INITIAL STRATIFICATION
41	SYSORG1	CHAR	1	80		SYSTEM/ORGAN (FIRST)
42	SYSORG2	CHAR	1	81		SYSTEM/ORGAN (SECOND)
43	SYSORG3	CHAR	1	82		SYSTEM/ORGAN (THIRD)
44	SYSORG4	CHAR	1	83		SYSTEM/ORGAN (FOURTH)
45	SYSORG5	CHAR	1	84		SYSTEM/ORGAN (FIFTH)
46	SYSORG6	CHAR	1	85		SYSTEM/ORGAN (SIXTH)
19	TREATMNT	NUM	2	54		TREATMENT - MORTALITY
6	VERSION	NUM	2	16		VERSION NUMBER
73	VIOLCHG	NUM	2	138		TRAFFIC VIOLATION CHARGED - PED/NONMOTOR
15	HEIGHT	NUM	2	46		HEIGHT OF PERSON
21	WORKDAYS	NUM	2	58		WORKING DAYS LOST

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
67	ACCSEQ1	NUM	2	150			EVENT NUMBER IN ACCIDENT (HIGHEST)
68	ACCSEQ2	NUM	2	152			EVENT NUMBER IN ACCIDENT (2ND HIGHEST)
40	AXLESP	NUM	2	104			NUMBER OF AXLES (POWER UNIT)
41	AXLEST1	NUM	2	106			NUMBER OF AXLES (1ST TRAILER)
42	AXLEST2	NUM	2	108			NUMBER OF AXLES (2ND TRAILER)
43	AXLEST3	NUM	2	110			NUMBER OF AXLES (3RD TRAILER)
20	BODYTYPE	NUM	2	64			BODY TYPE
49	BRAKETY	NUM	2	122			TYPE OF BRAKE ACTUATION
39	CABCONF	NUM	2	102			CAB CONFIGURATION
106	CARGOWGT	NUM	3	246			VEHICLE CARGO WEIGHT
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	NUM	3	10			SEQUENCE NUMBER
105	CURBWGT	NUM	3	243			VEHICLE CURB WEIGHT
85	DOCCDC	NUM	2	202			DOCUMENTATION MORE THAN TWO CDC/TDC
91	DOCOMPNT	NUM	3	215			DOCUMENTATION OTHER (INTRUDING COMPONENT)
55	DOF1	NUM	2	134			DIRECTION OF FORCE (HIGHEST)
56	DOF2	NUM	2	136			DIRECTION OF FORCE(2ND HIGHEST)
92	DOINTRSN	NUM	2	217			DRIVER OTHER (MAGNITUDE OF INTRUSION)
89	DPCOMPNT	NUM	3	211			DRIVER PRIMARY (INTRUDING COMPONENT)
90	DPINTRSN	NUM	2	213			DRIVER PRIMARY (MAGNITUDE OF INTRUSION)
119	DRIVE	NUM	2	274			FRONT/REAR WHEEL DRIVE
108	DVBASIS	NUM	2	251			BASIS FOR TOTAL DELTA V (HIGHEST)
70	DVC1	NUM	3	157			*CRASH* DAMAGE DATA MAX DELTA V - C1
71	DVC2	NUM	3	160			*CRASH* DAMAGE DATA MAX DELTA V - C2
72	DVC3	NUM	3	163			*CRASH* DAMAGE DATA MAX DELTA V - C3
73	DVC4	NUM	3	166			*CRASH* DAMAGE DATA MAX DELTA V - C4
74	DVC5	NUM	3	169			*CRASH* DAMAGE DATA MAX DELTA V - C5
75	DVC6	NUM	3	172			*CRASH* DAMAGE DATA MAX DELTA V - C6
76	DVD	NUM	3	175			*CRASH* DAMAGE DATA MAX DELTA V - D
69	DVL	NUM	3	154			*CRASH* DAMAGE DATA MAX DELTA V - L
111	DVLAT	NUM	2	257			LATERAL COMPONENT OF DELTA V
110	DVLONG	NUM	2	255			LONGITUDINAL COMPONENT OF DELTA V
109	DVTOTAL	NUM	2	253			TOTAL DELTA V
112	ENERGY	NUM	2	259			ENERGY ABSORPTION
65	EXTENT1	CHAR	2	146			DEFORMATION EXTENT GUIDE (HIGHEST)
66	EXTENT2	CHAR	2	148			DEFORMATION EXTENT GUIDE(2ND HIGHEST)
99	FIRE	NUM	2	231			FIRE OCCURRENCE
57	GAD1	CHAR	1	138			DEFORMATION LOCATION (HIGHEST)
58	GAD2	CHAR	1	139			DEFORMATION LOCATION(2ND HIGHEST)
50	GVWR	NUM	2	124			GROSS VEHICLE WEIGHT RATING
104	HAZCARGO	NUM	2	241			HAZARDOUS CARGO
11	HITRUN	NUM	2	38			HIT & RUN INVOLVEMENT
100	IMPTYPE	NUM	2	233			TYPE OF MOST SEVERE IMPACT
103	JACKNIFE	NUM	2	239			JACKKNIFE
35	LMIRROR	NUM	2	94			TYPE OUTSIDE MIRROR (LEFT)
16	MAKE	NUM	2	48			VEHICLE MAKE
48	MAXLEN	NUM	2	120			MAXIMUM OVERALL LENGTH
47	MAXWIDTH	NUM	2	118			MAXIMUM OVERALL WIDTH

#	Variable	Type	Len	Pos	Format	Label
17	MODEL	NUM	2	50		VEHICLE MODEL
15	MODELYR	NUM	2	46		VEHICLE MODEL YEAR
8	NATWGT	NUM	6	24	9.5	NATIONAL INFLATION FACTOR
53	OBJCONT1	NUM	2	130		OBJECT CONTACTED (HIGHEST)
54	OBJCONT2	NUM	2	132		OBJECT CONTACTED(2ND HIGHEST)
12	OCCFORMS	NUM	2	40		NUMBER OF OCCUPANT FORMS SUBMITTED
87	ODOMETER	NUM	6	206		ODOMETER READING
121	OTBDYTYP	NUM	3	279		BODY TYPE OF THE OTHER VEHICLE
101	OTHROLE	NUM	3	235		ROLE OF THE OTHER CONTACTED VEH, OBJ, PER
120	OTVEHHGT	NUM	3	276		HEIGHT OF THE OTHER VEHICLE
57	OVERRIDE	NUM	3	98		OVERRIDE/UNDERRIDE THIS VEHICLE
88	PCINTEG	NUM	2	209		PASSENGER COMPARTMENT INTEGRITY
95	POCMPNT	NUM	2	223		PASSENGER OTHER (INTRUDING COMPONENT)
96	POINTRSN	NUM	2	225		PASSENGER OTHER (MAGNITUDE OF INTRUSION)
93	PPCOMPNT	NUM	2	219		PASSENGER PRIMARY (INTRUDING COMPONENT)
94	PPINTRSN	NUM	2	221		PASSENGER PRIMARY (MAGN. OF INTRUSION)
1	PSU	NUM	2	4		PSU NUMBER
7	PSUWGT	NUM	6	18	9.5	PSU INFLATION FACTOR
9	RATWGT	NUM	6	30	9.3	RATIO INFLATION FACTOR
38	REARTURN	NUM	2	100		REAR TURN SIGNAL COLOR
5	RECNO	NUM	5	14		RECORD NUMBER
18	REGISTRA	NUM	2	52		REGISTRATION OF VEHICLE
36	RMIRROR	NUM	2	96		TYPE OUTSIDE MIRROR (RIGHT)
102	ROLLOVER	NUM	2	237		ROLLOVER
78	SDVC1	NUM	2	181		*CRASH* DAMAGE DATA 2ND DELTA V - C1
79	SDVC2	NUM	2	184		*CRASH* DAMAGE DATA 2ND DELTA V - C2
80	SDVC3	NUM	2	187		*CRASH* DAMAGE DATA 2ND DELTA V - C3
81	SDVC4	NUM	2	190		*CRASH* DAMAGE DATA 2ND DELTA V - C4
82	SDVC5	NUM	3	193		*CRASH* DAMAGE DATA 2ND DELTA V - C5
83	SDVC6	NUM	3	196		*CRASH* DAMAGE DATA 2ND DELTA V - C6
84	SDVD	NUM	3	199		*CRASH* DAMAGE DATA 2ND DELTA V - D
77	SDVL	NUM	3	178		*CRASH* DAMAGE DATA 2ND DELTA V - L
22	SEATCAP	NUM	2	68		SEATING CAPACITY/TRUCK VOCATION
59	SHL1	CHAR	1	140		SPECIFIC HORIZONTAL LOCATION (HIGHEST)
60	SHL2	CHAR	1	141		SPECIFIC HORIZONTAL LOCATION(2ND HIGHEST)
115	SHORT	NUM	2	266		VEHICLE SHORT FORM
107	SOURCWGT	NUM	2	249		REPORTED SOURCE OF CARGO HEIGHT
86	SPECUSE	NUM	2	204		VEHICLE SPECIAL USE (THIS TRIP)
98	STEERDEF	NUM	2	229		STEERING RIM DEFORMATION
97	STEERSEP	NUM	2	227		STEERING COLUMN SEPARATION
4	STRATIF	CHAR	1	13		INITIAL STRATIFICATION
61	SVL1	CHAR	1	143		SPECIFIC VERTICAL LOCATION (HIGHEST)
62	SVL2	CHAR	1	142		SPECIFIC VERTICAL LOCATION(2ND HIGHEST)
23	TCAXLE1	NUM	2	70		TIRE CONDITION (AXLE - 1)
24	TCAXLE2	NUM	2	72		TIRE CONDITION (AXLE - 2)
25	TCAXLE3	NUM	2	74		TIRE CONDITION (AXLE - 3)
26	TCAXLE4	NUM	2	76		TIRE CONDITION (AXLE - 4)
31	TCCOND1	NUM	2	86		TIRE CONDITION (CONDITION - 1)
32	TCCOND2	NUM	2	88		TIRE CONDITION (CONDITION - 2)
33	TCCOND3	NUM	2	90		TIRE CONDITION (CONDITION - 3)
34	TCCOND4	NUM	2	92		TIRE CONDITION (CONDITION - 4)
27	TCTIRE1	NUM	2	78		TIRE CONDITION (TIRE - 1)
28	TCTIRE2	NUM	2	80		TIRE CONDITION (TIRE - 2)
29	TCTIRE3	NUM	2	82		TIRE CONDITION (TIRE - 3)
30	TCTIRE4	NUM	2	84		TIRE CONDITION (TIRE - 4)
63	TDD1	CHAR	1	144		TYPE OF DAMAGE DISTRIBUTION (HIGHEST)

#	Name	Type		Pos	Description
64	TDD2	CHAR	1	145	TYPE OF DAMAGE DISTRIBUTION(2ND HIGHEST)
14	TOWAWAY	NUM	2	44	MANNER OF LEAVING SCENE
21	TOWHITCH	NUM		66	TOWED TRAILING UNIT
44	TRAILER1	NUM	2	112	LENGTH OF TRAILER - 1
45	TRAILER2	NUM	2	114	LENGTH OF TRAILER - 2
46	TRAILER3	NUM	2	116	LENGTH OF TRAILER - 3
113	TRAVELSP	NUM		262	TRAVEL SPEED
122	VAIS	NUM		281	MAXIMUM KNOWN AIS IN THIS VEHICLE
10	VEHNO	NUM		36	VEHICLE NUMBER
13	VEHROLE	NUM		42	VEHICLE ROLE
51	VEHSEQ1	NUM		126	EVENT NUMBER THIS VEHICLE (HIGHEST)
52	VEHSEQ2	NUM		128	EVENT NUMBER THIS VEHICLE (2ND HIGHEST)
6	VERSION	NUM		16	VERSION NUMBER
19	VIN	CHAR	10	54	VEHICLE IDENTIFICATION NUMBER
116	VINSER	NUM	2	268	NUMBER SERIOUSLY INJURED IN THIS VEHICLE
117	VINJURED	NUM	2	270	NUMBER INJURED IN THIS VEHICLE
114	VINLNGTH	NUM	2	264	VIN LENGTH
118	VTREAT	NUM	2	272	MAXIMUM TREATMENT(THIS VEH)
124	WHEELLNG	NUM	8	291	5.1	WHEELBASE LONG
123	WHEELSHT	NUM	8	283	5.1	WHEELBASE SHORT

CONTENTS OF SAS DATA SET NASSANL.DRIVER

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
44	ACCESS	NUM	2	107			ACCESS CONTROL
24	ACCTYPE	NUM	2	66			ACCIDENT TYPE
11	ALCTEST	NUM	2	38			ALCOHOL TEST RESULT
48	ALIGNMNT	NUM	2	115			ROADWAY ALIGNMENT
25	AVOIDMAN	NUM	2	68			ATTEMPTED AVOIDANCE MANEUVER
22	BMCSREG	NUM	2	62			FEDERAL SAFETY REGULATED
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	CHAR	3	10			SEQUENCE NUMBER
38	CLASTRAF	NUM	3	94			CLASS TRAFFICWAY
51	CURVE	NUM	2	122			DEGREE OF CURVATURE
10	DRCLASS	NUM	2	64			DRIVER'S CLASSIFICATION
23	DRINKING	NUM	2	36			ALCOHOL PRESENCE
14	DRPRES	NUM	2	44			DRIVER PRESENCE IN VEHICLE
18	DRTRAIN	NUM	2	54			DRIVER EDUCATION
61	ENVRF	NUM	2	144			ENVIRONMENTAL RELATED FACTORS
37	FEDAID	NUM	2	92			FEDERAL AID SYSTEM
20	FREQDRIV	NUM	2	58			FREQUENCY DRIVING ROAD
52	GRADE	NUM	3	125			GRADE MEASUREMENT
40	LANES	NUM	2	98			NUMBER OF TRAVEL LANES
41	LANEWIDT	NUM	3	100			LANE WIDTH
19	LASTRAIN	NUM	2	56			TIME SINCE LAST DRIVER EDUCATION
31	LREST	NUM	2	80			LICENSE RESTRICTION
29	LSTATUS	NUM	2	76			DRIVER LICENSE STATUS
50	LTYPCOMP	NUM	2	78			LICENSE TYPE COMPLIANCE
42	MEDIANT	NUM	2	103			MEDIAN TYPE
43	MEDIANW	NUM	3	105			MEDIAN WIDTH
17	MILETOT	NUM	3	51			TOTAL MILEAGE ALL VEHICLES
16	MILEVEH	NUM	3	48			ESTIMATED MILEAGE THIS VEHICLE
15	MONDRIVE	NUM	2	46			MONTHS DRIVING EXP. THIS CLASS VEHICLE
8	NATWGT	NUM	6	24	9.3		NATIONAL INFLATION FACTOR
13	OCUPANTS	NUM	2	42			NUMBER OF OCCUPANTS THIS MOTOR VEHICLE
36	PREVACC	NUM	2	90			PREVIOUS ACCIDENTS
34	PREVDWI	NUM	2	86			PREVIOUS D.W.I. CONVICTIONS
33	PREVOTH	NUM	2	84			PREVIOUS MOVING VIOLATIONS CONVICTIONS
32	PREVSPD	NUM	2	82			PREVIOUS SPEEDING CONVICTIONS
35	PREVSUS	NUM	2	88			PREVIOUS SUSPENSIONS AND REVOCATIONS
53	PROFILE	NUM	2	128			ROADWAY PROFILE
1	PSU	NUM	2	4			PSU NUMBER
7	PSUWGT	NUM	6	18	9.3		PSU INFLATION FACTOR
9	RATWGT	NUM	6	30	9.3		RATIO INFLATION FACTOR
5	RECNO	NUM	6	14			RECORD NUMBER
26	RELFACT	NUM	2	70			DRIVER RELATED FACTORS
57	RESTRICT	NUM	2	136			RESTRICTION OF ROADWAY AT SCENE
59	ROADFUNC	NUM	2	96			ROADWAY FUNCTION CLASS
46	SHOULDLT	NUM	2	111			LEFT SHOULDER TYPE
47	SHOULDRT	NUM	2	113			RIGHT SHOULDER TYPE
49	SLOPE	NUM	2	117			CROSS SLOPE
56	SPLIMIT	NUM	2	134			SPEED LIMIT

#	Name	Type		Pos	Label
4	STRATIF	CHAR			INITIAL STRATIFICATION
50	SUPELEV	NUM	1	15	SUPERELEVATION
55	SURCOND	NUM	3	119	ROADWAY SURFACE CONDITION
54	SURTYPE	NUM	2	132	ROADWAY SURFACE TYPE
52	TRAFCONT	NUM	2	130	TRAFFIC CONTROL DEVICE TYPE
45	TRAFFLOW	NUM	2	138	TRAFFIC CONTROL DEVICE
59	TRCTLFCT	NUM	2	109	TRAFFICWAY FLOW
60	TRUCKSYS	NUM	2	142	TRAFFIC CONTROL DEVICE FUNCTIONING
21	TYPEOP	NUM	2	140	DESIGNATED TRUCK SYSTEM
12	VEHNO	NUM	2	60	TYPE OF OPERATION OR CARRIER
6	VERSION	NUM	2	40	VEHICLE NUMBER
27	VIOCHAR1	NUM	2	16	VERSION NUMBER
28	VIOCHAR2	NUM	2	72	VIOLATION CHARGED (FIRST)
				74	VIOLATION CHARGED (SECOND)

ALPHABETIC LIST OF VARIABLES

#	VARIABLE	TYPE	LENGTH	POSITION	FORMAT	INFORMAT	LABEL
10	AGE	NUM	2	36			AGE OF PERSON
41	AIS1	NUM	2	74			AIS SEVERITY (FIRST)
42	AIS2	NUM	2	76			AIS SEVERITY (SECOND)
43	AIS3	NUM	2	78			AIS SEVERITY (THIRD)
44	AIS4	NUM	2	80			AIS SEVERITY (FOURTH)
45	AIS5	NUM	2	82			AIS SEVERITY (FIFTH)
46	AIS6	NUM	2	84			AIS SEVERITY (SIXTH)
23	ASPECT1	CHAR	1	56			ASPECT (FIRST)
24	ASPECT2	CHAR	1	57			ASPECT (SECOND)
25	ASPECT3	CHAR	1	58			ASPECT (THIRD)
26	ASPECT4	CHAR	1	59			ASPECT (FOURTH)
27	ASPECT5	CHAR	1	60			ASPECT (FIFTH)
28	ASPECT6	CHAR	1	61			ASPECT (SIXTH)
84	AUTAVAIL	NUM	2	160			PASSIVE RESTRAINT SYSTEM - AVAILABILITY
85	AUTFNCT	NUM	2	162			PASSIVE RESTRAINT SYSTEM - FUNCTION
17	BODYREG1	CHAR	1	50			DIC BODY REGION (FIRST)
18	BODYREG2	CHAR	1	51			DIC BODY REGION (SECOND)
19	BODYREG3	CHAR	1	52			DIC BODY REGION (THIRD)
20	BODYREG4	CHAR	1	53			DIC BODY REGION (FOURTH)
21	BODYREG5	CHAR	1	54			DIC BODY REGION (FIFTH)
22	BODYREG6	CHAR	1	55			DIC BODY REGION (SIXTH)
2	CASEID	CHAR	4	6			CASE NUMBER - STRATIFICATION
3	CASENO	CHAR	3	10			SEQUENCE NUMBER
66	DEATH	NUM	2	124			TIME TO DEATH
59	DIRINJ1	NUM	2	110			DIRECT/INDIRECT INJURY (FIRST)
60	DIRINJ2	NUM	2	112			DIRECT/INDIRECT INJURY (SECOND)
61	DIRINJ3	NUM	2	114			DIRECT/INDIRECT INJURY (THIRD)
62	DIRINJ4	NUM	2	116			DIRECT/INDIRECT INJURY (FOURTH)
63	DIRINJ5	NUM	2	118			DIRECT/INDIRECT INJURY (FIFTH)
64	DIRINJ6	NUM	2	120			DIRECT/INDIRECT INJURY (SIXTH)
75	EJCTAREA	NUM	2	142			EJECTION AREA
76	EJCTMED	NUM	2	144			EJECTION MEDIUM
74	EJECTION	NUM	2	140			EJECTION
73	ENTRAP	NUM	2	138			ENTRAPMENT
12	HEIGHT	NUM	2	40			HEIGHT OF PERSON
15	HOSPSTAY	NUM	2	46			HOSPITAL STAY
80	INFSEAT	NUM	2	152			INFANT SEAT ORIENTATION
81	INFUSAGE	NUM	2	154			INFANT RESTRAINT USAGE
65	INJSEV	NUM	2	122			INJURY SEVERITY (POLICE RATING)
47	INJSOU1	NUM	2	86			INJURY SOURCE (FIRST)
48	INJSOU2	NUM	2	88			INJURY SOURCE (SECOND)
49	INJSOU3	NUM	2	90			INJURY SOURCE (THIRD)
50	INJSOU4	NUM	2	92			INJURY SOURCE (FOURTH)
51	INJSOU5	NUM	2	94			INJURY SOURCE (FIFTH)
52	INJSOU6	NUM	2	96			INJURY SOURCE (SIXTH)
68	ISS	NUM	2	128			ISS
29	LESION1	CHAR	1	62			LESION (FIRST)
30	LESION2	CHAR	1	63			LESION (SECOND)

#	Variable	Type	Len	Pos	Format	Label
31	LESION3	CHAR	2	64		LESION (THIRD)
32	LESION4	CHAR	2	65		LESION (FOURTH)
33	LESION5	CHAR	2	66		LESION (FIFTH)
34	LESION6	CHAR	2	67		LESION (SIXTH)
27	MAIS	NUM	1			MAXIMUM KNOWN OCCUPANT/NM AIS
82	MANAVAIL	NUM	1	156		ACTIVE RESTRAINT SYSTEM - AVAILABILITY
83	MANUSE	NUM	1	158		ACTIVE RESTRAINT SYSTEM - USE
77	MEDSTA	NUM	2	146		MEDIUM STATUS
8	NATMOT	NUM	6	132	9.3	NATIONAL INFLATION FACTOR
70	DCCNO	NUM	2	24		OCCUPANT NUMBER
1	PSU	NUM	2	158		PSU NUMBER
9	PSUWGT	NUM	6	18	9.5	PSU INFLATION FACTOR
7	RATMOT	NUM	6	30	9.3	RATIO INFLATION FACTOR
5	RECNO	NUM	2	14		RECORD NUMBER
78	RESTMAKE	NUM	2	148		CHILD RESTRAINT MAKE/MODEL
71	ROLE	NUM	2	134		OCCUPANT'S ROLE
72	SEATPOS	NUM	2	136		OCCUPANT'S SEAT POSITION
11	SEX	NUM	2	38		SEX OF PERSON
53	SOUDAT1	NUM	2	98		SOURCE OF DATA (FIRST)
54	SOUDAT2	NUM	2	100		SOURCE OF DATA (SECOND)
55	SOUDAT3	NUM	2	102		SOURCE OF DATA (THIRD)
56	SOUDAT4	NUM	2	104		SOURCE OF DATA (FOURTH)
57	SOUDAT5	NUM	2	106		SOURCE OF DATA (FIFTH)
58	SOUDAT6	NUM	2	108		SOURCE OF DATA (SIXTH)
4	STRATIF	CHAR	1	13		INITIAL STRATIFICATION
35	SYSORG1	CHAR	1	68		SYSTEM/ORGAN (FIRST)
36	SYSORG2	CHAR	1	69		SYSTEM/ORGAN (SECOND)
37	SYSORG3	CHAR	1	70		SYSTEM/ORGAN (THIRD)
38	SYSORG4	CHAR	1	71		SYSTEM/ORGAN (FOURTH)
39	SYSORG5	CHAR	1	72		SYSTEM/ORGAN (FIFTH)
40	SYSORG6	CHAR	1	73		SYSTEM/ORGAN (SIXTH)
14	TREATMNT	NUM	2	44		TREATMENT - MORTALITY
79	TYPEREST	NUM	2	150		TYPE CHILD RESTRAINT
69	VEHNO	NUM	2	130		VEHICLE NUMBER
6	VERSION	NUM	2	16		VERSION NUMBER
13	HEIGHT	NUM	2	42		HEIGHT OF PERSON
16	WORKDAYS	NUM	2	48		WORKING DAYS LOST

APPENDIX A

DATA COLLECTION FORMS

US Department of Transportation
National Highway Traffic Safety
Administration

Accident 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

$\dfrac{1}{7}$

4. Transaction Code

$\overline{8}$

5. Version Number

$\dfrac{9}{9}$

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) $\overline{12}\ \overline{13}\ /\ \overline{14}\ \overline{15}\ /\ \dfrac{8}{16}\ \dfrac{6}{17}$

9. Blank (This variable is left blank so that
numbering consistency can be maintained
with the 1985 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 non-motorists 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

25

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

26

AMBIENT CONDITIONS

15. Time
___:___ Code reported military time of accident.
     (NOTE. midnight = 2400)
___ (9999) Unknown

27 28 29 30

16 Light Conditions
___ (1) Daylight
___ (2) Dark
___ (3) Dark, but lighted
___ (4) Dawn
___ (5) Dusk
___ (9) Unknown

31

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

32

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

33 34

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

20. Accident Occurrence in School Zone
___ (0) No
___ (1) Yes
___ (9) Unknown

21. School Bus Related
___ (0) No
___ (1) Yes

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

ENVIRONMENTAL DATA	SPECIAL STUDIES - INDICATORS

ENVIRONMENTAL DATA

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.

$\overline{39}$ $\overline{40}$

SPECIAL STUDIES - INDICATORS

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

$\overline{46}$

US Department of Transportation
National Highway Traffic Safety
Administration

PEDESTRIAN AND NONMOTORIST

NATIONAL ACCIDENT SAMPLING SYSTEM
CONTINUOUS SAMPLING SUBSYSTEM

1. Primary Sampling Unit Number ___ ___
   1   2

2. Case Number – Stratification ___ ___ ___ ___
   3   4   5   6

3. Record Number 2/7

4. Transaction Code ___
   8

5. Version Number 9/9

6. Investigator I.D. Number ___
   10

IDENTIFICATION

7. Pedestrian or Nonmotorist's Number ___ ___
   11   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 ___
   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 ___ ___
   14   15

10 Pedestrian or Nonmotorist's Sex

___ (1) Male
___ (2) Female
___ (9) Unknown ___
   16

11. Pedestrian or Nonmotorist's Height

_____ inches – Code actual height to the nearest inch.
___ (99) Unknown ___ ___
   17   18

12. Pedestrian or Nonmotorist's Weight

_____ pounds – Code actual weight to the nearest pound.
___ (999) Unknown ___ ___ ___
   19 20 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 ___ ___
   22 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

15. Pedestrian Activity
(Note: code the first attribute that applies)

__ (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

<u>__</u> <u>__</u>
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   __
<u>__</u>
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   __

<u>__</u> <u>__</u>
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

<u>__</u> <u>__</u>
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

<u>__</u>
32

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

NCI

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; 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.

	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	—	—	—	—	—	—	— —	—	— —

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 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

43

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 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
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 VEHIC
(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 protrusion (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.	__ __ (91 92)

Coding Section

OFFICIAL RECORDS	INVESTIGATOR DETERMINED

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
‾‾ 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
    extrance/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 11

1. Primary Sampling Unit Number

$\overline{\hspace{0.5cm}}_{1}$ $\overline{\hspace{0.5cm}}_{2}$

2. Case Number-Stratification

$\overline{\hspace{0.3cm}}_{3}$ $\overline{\hspace{0.3cm}}_{4}$ $\overline{\hspace{0.3cm}}_{5}$ $\overline{\hspace{0.3cm}}_{6}$

3. Record Number

$\dfrac{3}{7}$

4. Transaction Code

$\overline{\hspace{0.5cm}}_{8}$

5. Version Number

$\dfrac{9}{9}$

6. Investigator I.D. Number

$\overline{\hspace{0.5cm}}_{10}$

IDENTIFICATION

7. Vehicle Number

$\overline{\hspace{0.3cm}}_{11}$ $\overline{\hspace{0.3cm}}_{12}$

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

$\overline{\hspace{0.3cm}}_{13}$ $\overline{\hspace{0.3cm}}_{14}$

9. Vehicle Role
___ (0) Noncollision
___ (1) Striking unit
___ (2) Struck unit
___ (3) Both striking and struck
___ (9) Unknown

$\overline{\hspace{0.5cm}}_{15}$

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

$\overline{\hspace{0.5cm}}_{16}$

11. Hit and Run Involvement
___ (0) No hit-and-run
___ (1) Yes - hit-and-run involved vehicle

$\overline{\hspace{0.5cm}}_{17}$

EXTERIOR ITEMS

12. Vehicle Model Year
_____ Code the last two digits of the model year
___ (99) Unknown

$\overline{\hspace{0.3cm}}_{18}$ $\overline{\hspace{0.3cm}}_{19}$

13. Vehicle Make (specify):

_____

Applicable codes are found in your NASS Data
Collection. Coding and Editing Manual.
___ (99) Unknown

$\overline{\hspace{0.3cm}}_{20}$ $\overline{\hspace{0.3cm}}_{21}$

14. Vehicle Model (specify):

_____

Applicable codes are found in your NASS Data
Collection. Coding and Editing Manual.
___ (99) Unknown

$\overline{\hspace{0.3cm}}_{22}$ $\overline{\hspace{0.3cm}}_{23}$

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

$\overline{\hspace{0.5cm}}_{24}$

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

Left justify
Slash zeros. 0

$\overline{\hspace{0.2cm}}_{25}$ $\overline{\hspace{0.2cm}}_{26}$ $\overline{\hspace{0.2cm}}_{27}$ $\overline{\hspace{0.2cm}}_{28}$ $\overline{\hspace{0.2cm}}_{29}$ $\overline{\hspace{0.2cm}}_{30}$ $\overline{\hspace{0.2cm}}_{31}$ $\overline{\hspace{0.2cm}}_{32}$ $\overline{\hspace{0.2cm}}_{33}$ $\overline{\hspace{0.2cm}}_{34}$ $\overline{\hspace{0.2cm}}_{35}$ $\overline{\hspace{0.2cm}}_{36}$ $\overline{\hspace{0.2cm}}_{37}$ $\overline{\hspace{0.2cm}}_{38}$ $\overline{\hspace{0.2cm}}_{39}$ $\overline{\hspace{0.2cm}}_{40}$ $\overline{\hspace{0.2cm}}_{41}$

Delete see al production number
portion after 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 bicyles)

____ (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

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

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 (include; 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

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

	Axle	Tire	Condition
(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

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

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 $\overline{63}$

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 $\overline{64}$ $\overline{65}$ $\overline{66}$ $\overline{67}$

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 $\overline{68}$ $\overline{69}$ $\overline{70}$

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
                         $\overline{71}$ $\overline{72}$ $\overline{73}$

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
                         $\overline{74}$ $\overline{75}$ $\overline{76}$

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 $\overline{77}$

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 $\overline{78}$

     Specify GVWR: _____

NCI

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 Pro-
        gram 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 — 91	50 — — 92 93	51 — — 94 95	52 — 96	53 — 97	54 — 98	55 — 99	56 — — 100 101	57 — 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   L   59   C1   C2   C3   C4   C5   C6   60   + − 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   L   62   C1   C2   C3   C4   C5   C6   63   + − 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

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 com-
        ponents (specify). _____

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

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   ‾‾157 ‾‾158 ‾‾159 . 0 0 0

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 ‾‾161	‾‾162	69. ‾‾163
Driver Area Other	70 ‾‾164	‾‾165	71 ‾‾166
Passenger Area Primary	72 ‾‾167	‾‾168	73 ‾‾169
Passenger Area Other	74 ‾‾170	‾‾171	75 ‾‾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

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

86. Investigator Reported Source of Cargo Weight
____ (0) No cargo
____ (1) Measured
____ (2) Estimated
____ (3) Rated capacity
____ (9) Unknown: source or weight $\overline{18}$

Source: _____

RECONSTRUCTION RESULTS

87 Basis for Total Delta V (highest)

Delta V Calculated

____ (1) CRASH program - damage only routine

____ (2) CRASH program - damage and trajectory 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 acceptable reconstruction program. regardless of collision conditions

____ (7) All vehicles within scope (CDC applicable) 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 insufficient 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

‾‾ ‾‾
188 190

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
                            197 118 199 200

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

U.S Department of Transportation
National Highway Traffic Safety
Administration

Driver 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 $\frac{4}{7}$

4. Transaction Code $\overline{8}$

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

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 $\overline{13}\ \overline{14}$

9. 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 $\overline{18}\ \overline{19}\cdot\overline{20}$

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 $\overline{21}\ \overline{22}\cdot\overline{23}$

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

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 72 INITIAL SAME DIRECTIONS	73	(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 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc.	92 93 BACKING VEH.	OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 N Impact		

<table>
</table>

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-ugator
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

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 roadway or driveway
____ (20) Turning left or U-turning in front of oncoming 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 (slowing 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 complied 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-
curred within the last three (3) years (as measured
from 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   45

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 r
          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
                                              ‾55‾

38. Lane Width
___.__ Code actual measured value to nearest
         tenth of a foot
___ (999) Unknown
                                    ‾56‾ ‾57‾·‾58‾

39. Median Type
___ (0) No median
___ (1) Curbed with positive barrier
___ (2) Positive barrier
___ (3) Curbed
___ (4) Unprotected
___ (9) Unknown
                                              ‾59‾

40 Median Width
___ (00) No median
_____ Code actual measured value up to
         96 feet
___ (97) 96 5 feet or above
___ (99) Unknown
                                        ‾60‾ ‾61‾

41 Access Control
___ (1) Full
___ (2) Partial
___ (3) Uncontrolled
___ (9) Unknown
                                              ‾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
                                              ‾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
                                             ‾64‾ ‾65‾

45. Roadway Alignment
___ (1) Straight
___ (2) Curve right
___ (3) Curve left
___ (9) Unknown
                                              ‾66‾

46. Cross Slope
___ (1) Flat
___ (2) Normal crown
___ (3) Superelevation
___ (4) Negative superelevation
___ (8) Other (specify): _____
___ (9) Unknown
                                              ‾67‾

47. Superelevation
___ (+00) Normal crown/flat
_____ Code actual value to the nearest hundredth
___ (_98) Not a curve   +
___ (_99) Unknown   ‾68‾·‾69‾ ‾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
                                        ‾71‾ ‾72‾·‾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

58. 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

Occupant Data

National Highway Traffic Safety
Administration

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-   Inves-
viewee   tigator

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

V9
(68
thru
75)

National Accident Sampling System — C ntinuous Sampling Subsystem: Occupant Data

Inter-viewee	Inves-tigator

16 Ejection

$\overline{V9}$
(67)

_____ (0) None —

_____ (1) Complete ejection —

_____ (2) Partial ejection —

$\overline{V10}$ _____ (3) Ejection. unknown degree —

_____ (9) Unknown — $\overline{27}$

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 — $\overline{28}$

18 Ejection Medium

_____ (0) No ejection —

_____ (1) Door —

_____ (2) Open roof structure —

_____ (3) Fixed windows —

$\overline{V10}$ Operable windows

_____ (4) Roll down type —

_____ (5) Hinged type —

_____ (6) Sliding type —

_____ (7) Other type (specify) —

_____ (8) Other medium (specify) —

_____ (9) Unknown — $\overline{29}$

19 Medium Status

_____ (0) No ejection —

_____ (1) Open —

$\overline{V10}$ _____ (2) Separation —

_____ (3) Closed, closed when damaged —

_____ (4) Integral structure ripped open —

_____ (9) Unknown — $\overline{30}$

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 — $\overline{31}$

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 — $\overline{32}$ $\overline{33}$

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 $\overline{34}$ $\overline{35}$

INVESTIGATOR DETERMINED

Inter-viewee	Inves-tigator

23 Infant or Child Restraint Make/Model

_____ (00) No infant or child restraint —

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 — $\overline{36}$ $\overline{37}$

	Inter-viewee	Inves-tigator
	24 Type of Infant or Child Restraint	
	____ (0) No infant or child restraint	—
	____ (1) Infant seat	—
$\overline{V10}$	____ (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	—
$\overline{V10}$	____ (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	—
$\overline{V10}$	____ (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	—
$\overline{V10}$	____ (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	—	—
$\overline{V10}$	____ (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		—
	____ (1) Airbag		—
$\overline{V10}$	____ (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		—
$\overline{V10}$	____ (2) Automatic belt not in use		—
	____ (3) Deployed airbag		—
	____ (4) Nondeployed airbag		—
	____ (9) Unknown		— $\overline{44}$

National Accident Sampling System—Continuous Sampling Subsystem: Occupant Data   Page

NCI

OCCUPANT INJURY CLASSIFICATION

Consider all injuries which are reported from both <u>unofficial</u> and <u>official</u> 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 <u>no</u> 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	—	—	—	—	—	—	— —	—	— —

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 for 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

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 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	60 __80 __81	61 __82	62 __83 __84
5th ___	63 __85	64 __86	65 __87	66 __88	67 __89	68 __90 __91	69 __92	0 __93 __94
6th ___	71 __95	72 __96	73 __97	74 __98	75 __99	76 __100 __101	77 __102	8 __103 __104

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   ‾‾105‾‾

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   ‾‾106‾‾ ‾‾107‾‾

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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, interviewees and vehicle registration.

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)
     31-58, 99 - foreign passenger car (automobile)
     60-68, 99 - motored cycles (including motorcycles,
                 mini-bikes, motor scooters, dirt bikes,
                 and mo-peds)
     70-78, 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
            83   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
            88   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
            88   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.

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Variable Name: Vehicle Model

Format: 2 columns - numeric   Beginning
                                                column   22

Element Values:

Model Code	Vehicle Line	Includes	Model Years

American Motors (01)

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	68-70
05	AMX	(2-seater)	
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 (1983 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)

01	CJ-2/CJ-3/CJ-4	Military	
02	CJ-5/CJ-6/CJ-7/ CJ-8	Scrambler.Golden Eagle.Renegade. Laredo	
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

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Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Dodge (07) (cont'd.)			
14	600	ES	83 on
15	Daytona	Turbo, Z	84 on
16	Lancer	Pacifica	
17	Shadow		86 on
33	Challenger-foreign		78 on
34	Colt	GT, Custom, Carousel, RS	
35	Conquest		86 n
43	Colt Pickup, Vista Van	Power Ram, Ram 50	
71	Ramcharger	Ram	
72	Caravan	S-Van, Mini Ram Van	84 on
73	B, W-Series Pickup	Ram, Custom, Royal, Miser	
74	Van	Sportsman Van, Royal, Maxiwagon, Ram	
75	Van Derivative	Karivan	
77	Dakota/D50		
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		

Model Code	Vehicle Line	Includes	Model Years
Imperial (08)			
10	Imperial	Imperial LeBaron	thru 75
28	Other (domestic automobile)		
99	Unknown		

Model Code	Vehicle Line	Includes	Model Years
Plymouth (09)			
01	Valiant/Duster/ Scamp	100,200, Taxi, Brougham, Signet, Custom, Special 340, Special 360 340, 360	thru 76

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Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Plymouth (09) (cont'd.)			
02	Satellite/ Belvedere	Belvedere I, II, GTX, Road Runner (through 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	
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		
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		
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	
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	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Ford (12) (cont'd.)			
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 n
14	EXP	Turbo	82 on
15	Tempo	L, GL, GLX, Sport 4x4	83 on
16	Crown Victoria		83 on
17	Taurus		86 on
31	English Ford	(e.g., Cortina)	
32	Fiesta		78-80
33	Laser	GL Ghia, GL Sport	83 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)	82 n
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	
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		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Lincoln (13)			
01	Lincoln	Lincoln Continental (thru 81), Town Car (82 on)	
02	Mark	I, II, III, IV, V, VI, VII	
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 n
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	83 on
16	Grand Marquis		83 on
17	Sable		86 on
31	Capri-foreign	Capri (1970-1978), Capri II	70-78
33	Pantera		
34	Merkur	XR4T	
35	Scorpio		87 on
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/ Centuri n	Estate Wagon, Cust m, Luxus, Sport Coupe, Wagon, Limited, Invicta	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Buick (18) (cont'd.)			
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 Regal	N-car	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, 60-Special, Coupe, Sedan, Fleetwood	
04	Limousine	Fleetwood 75, Formal	
05	Eldorado	Touring Coupe, Biarritz	
09	Allante		87 on
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, Kingswood, Townsman, Estate, Brookwood, Super Sport, Bel Air, Biscayre	
04	Corvette	Stingray	53 on
06	Corvair	Corvair Monza,500,Corvair Spyder,Corsa	thru 69
07	El Camino	Royal Knight	59 on

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	M del Years

Chevrolet (20) (cont'd.)

Model Code	Vehicle Line	Includes	M del Years
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	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)		86 on
33	Sprint		
70	Blazer	S-10 based	83 on
71	Blazer	Full size truck based	
72	Astro Van	LUV pickup	
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		82 n
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	
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		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
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	
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	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	
02	Bonneville/ Catalina/Parisienne	Brougham, Grand Safari, Safari, GrandVille, Executive, 2 + 2, Starchief	
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	68 on
10	Grand Prix	LJ, SJ, Brougham, G-car	
11	Astre	Safari, Wagon, SJ, Custom	75-77
12	Sunbird	Sport, Safari, Wagon	76 on
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	82 on
17	6000	A-car, STE	82 on
18	Grand Am	N-car	85 on
28	Other (domestic automobile)		
99	Unknown		
GMC (23)			
07	Caballero/Sprint		
70	Jimmy	S-15 based	83 on

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
GMC (23) (cont'd.)			
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 n
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		
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

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Volkswagen (30) (cont'd.)			
35	Squareback/ Fastback	Type 3, 1600	
36	Rabbit	L, GTI Sport, LS Custom, GL Deluxe	
37	Dasher	.	
38	Scirocco		
39	The Thing		
40	Jetta		
41	Quantum		
42	Golf	Syncro	85 on
43	Rabbit Pickup		
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		
Audi (32)			
31	Super 90		
32	100	LS, GL	
33	Fox		
34	4000		
35	5000	Coupe	
36	Quattro		82 on
58	Other (foreign automobile)		
99	Unknown		
Austin/Austin Healey (33)			
31	Marina	GT	
32	America		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Austin/Austin Healey (33) (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
33	Healey Sprite		
34	Healey 3000	Healey 100	
35	Mini		
58	Other (foreign automobile)		
99	Unknown		

BMW (34)

Model Code	Vehicle Line	Includes	Model Years
31	1600, 2002	Tii	
32	Coupe	3.0CS, 2800 CS	
33	Bavaria Sedan	2500, 2800	
34	630, 633		
35	320i, 318i, 325E		
36	524i, 528i, 530i 533i	TD, Automatic	83 on
37	733i		
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		

Datsun/Nissan (35)

Model Code	Vehicle Line	Includes	Model Years
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

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Datsun/Nissan (35) (cont'd.)

41	PL 411/RL 411		
42	Stanza	XE	82 on
43	Sentra		83 on
44	Pulsar	NX, EXA (86 on)	83 on
70	MPV		86 on
77	Pickup		
78	Other (light truck)		
58	Other (foreign automobile)		
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	
33	Prelude		
34	600	Coupe, Sedan	
35	Civic-CRX	2 seater	
36	Acura	HX, Integra	86 n
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
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		
Mazda (41)			
31	RX2		
32	RX3		
33	RX4		
34	RX7	GLE, SE	
35	GLC/323		
36	Cosmo		
37	626		
38	808		
39	Mizer		thru 76
40	R-100		thru 72
41	618/616		
42	1800		
43	929		86 on
77	Pick-up	B-2200, B-2000, SE5, Cab Plus, LX	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

Mazda (41) (cont'd.)

78	Other (light truck)		
58	Other (foreign automobile)		
99	Unknown		

Mercedes-Benz (42)

31	200/220/230/240/ 250/280/300 (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		
34	350 SLC/ 450 SLC/380 SLC		
35	300 SEL/280 SEL	TD-T, TD, CDT	
36	450 SEL/380 SEL/ 500 SEL/500 SEC		
37	450 SE/380 SE	280 S, 280 SE (1975 on), 300 SD Sedan	
38	600/6.9 Sedan	Pullman	
39	190		
75	Van Derivative	Kurbstar	82 on
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		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
MG (43)			
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)

Model Code	Vehicle Line	Includes	Model Years
Peugeot (44)			
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		

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	
35	928	S	
36	930/Turbo		82 n
37	944		
38	959		86 on
58	Other (foreign automobile)		
99	Unknown		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

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		
41	Alpine GT		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	

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

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Toyota (49) (cont'd.)			
34	Celica Supra	Soarer	
35	Cressida		
36	Crown	2300, 2600	
37	Carina	2000	
38	Tercel	4WD Wagon, Corolla-Tercel	
39	Starlet		
40	Cambry		
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	
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)			
31	122	S	
32	142/144/145	S, Deluxe, GL, GLS, E	
33	164	S, E	

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years
Volvo (51) (cont'd.)			
34	242/244/245	Deluxe, DL, GLE, GLT, GL	
35	262/264/265	GL	
36	1800	E, S, ES	
37	P-544		
38	760/780		83 on
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)			
31	Starion	2 + 2	83 on
32	Tredia		83 on
33	Cordia		83 on
34	Galant		
70	Montero		
72	Mini-Van		83 on
77	Pickup		
58	Other (foreign automobile)		
99	Unknown		
Suzuki (53)			
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		

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

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)	
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

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

V14 (cont'd.)
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

TRUCKS AND BUSSES (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: unknown 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.

94

Variable Name: Vehicle Model (cont'd.)

Model Code	Vehicle Line	Includes	Model Years

International Harvester (84)

Model Code	Vehicle Line	Includes	Model Years
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	Travelall	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		
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 wh ther make is domestic r import.
+   Truck as used here includes (1) any truck of unknown GVWR, (2) medium or h avy trucks, and (3) bus s.

APPENDIX C

FILE ADJUSTMENTS

Decrease in the Number of Teams:

In September 1986, 20 of the 50 NASS PSU's were closed due to budget cuts. The closure of these teams adversely affected the the sampling scheme. Consequently, estimates from the file after August should not be interpreted as nationally representative. Chapter 2 on sampling discusses the meaning of the weights assigned to the cases in 1986.

Source Documents Only (SDO):

Occasionally some accident investigation teams have had personnel turnovers or other staffing problems which temporarily reduced their data collection capacity. Reducing the number of cases they investigate would contribute to more variation in the national and ratio weights. Since more credible national estimates are possible from weights with less variation, the number of cases these teams investigate has not been reduced. Instead. they collect less data for some cases.

These cases with less data were coded from official records only i.e.. Source Documents Only (SDO). To prevent potential bias. scene measurement, vehicle inspections and interviews were not performed for SDO cases. If part but not all of a team's data collection capacity were lost, then only less severe cases were designated as SDO cases. The potential bias introduced by this practice has not been examined. SDO cases are identified by code "3" in the variable "Type of Case". The numeric variables which have been coded "9" (Unknown) because the case was SDO. have been recoded as ".N" (Not Collected) on the SAS file. The character variables which have been coded " " (Blank) or "9" (Unknown) because the case was SDO. have been recoded as "8" or "98" (Not Collected) on the SAS file. Coding conventions for all variables in SDO cases are included on the following pages:

ACCIDENT FORM

Variable	Source	Or	Code
A01 - A06	Coding Manual		
A07			"3" (Source Document Only)
A08	PAR		
A09	Leave Blank		
A10 - A18	PAR		
A19	PAR Maps		
A20, A22			(Unknowns)
A21	PAR		
A23	Coding Manual		Driver Form - Var. D07
A24 - A29			"0" (No)

PEDESTRIAN AND NONMOTORIST FORM

Variable	Source	Or	Code
P01 - P06	Coding Manual		
P07	Assigned by Investigator		
P08	PAR		
P09, P10	PAR/Medical Report		
P11, P12			(Unknowns)
P13 - P15	PAR		
P16 - P19	Omitted		
P20	PAR/Medical Report		
P21	Medical report		"00" (Not hospitalized) If P20= 0,4-6.or 8
P22	Coding Manual		"97" (No working days lost) for persons over age 65 or under 17 unless fatally injured then code "62" "99" (unknown) for all others unless fatally injured
P23	Coding Manual		
P24 - P30	Omitted		
P31 - P78	Medical Report/PAR		
P79, P81, P82	PAR		
P80, P83, P84	PAR/Medical Report		

VEHICLE FORM

Variable	Source or Code	
V01 - V06	Coding Manual	
V07	Assigned by Investigator	
V08 - V11	PAR	
V12 - V14, V17	PAR Vehicle Registration Reference Manuals	
V15, V16	PAR Vehicle Registration	
V18, V19	PAR	
V20 - V27		(Unknowns)
V28	PAR Reference Manuals Vehicle Registration	
V29 - V32	PAR Vehicle Registration Reference Manuals	
V33 - V35		"8" (no trailer) If V3C-V32 ="8", otherwise.
V36 - V37		(Unknown) If V17 (Body Type) = 30-39, 70-78 (Zeros) for all others
V38	Vehicle Registration Reference Manuals	
V39	PAR Reference Manuals Vehicle Registration	
Page 6		Annotate with phrase. "SDO, no inspection"
Pages 6A-6P		(Blanks)
V40, V41, V48	PAR	
V49, V50, V57	PAR	
V42 - V47	Coding Manual	(Blanks or Unknowns)
V51 - V56	Coding Manual	(Blanks or Unknowns)
V58 - V63		(Blanks)
V64		"1"
V65	PAR	
V66		(Unknown)
V67 - V77		(Zeros) If V17(Body Type) = 20-29 (Motorcycles) (Unknowns) for all others
V78 - V83	PAR	
Pages 10-11		Annotate with phrase, "SDO, no inspection"
V84	Reference Manuals	
V85, V86		(Unknowns)
V87		"6, 7 or 8" (Delta V nct calculated) as appropriate
V88 - V91		(Unknowns)
V92	PAR	

DRIVER FORM

Variable	Source	Or	Code
DO1 - DO6	Coding Manual		
DO7	Assigned by Investigator		
DO8, DO9	PAR		
D10 - D15			(Unknowns)
			(Blanks) if driver not present (DO9="2")
D16 - D18	PAR		(Blanks) if DO9="2"
D19	Coding Manual		(Blank) if DO9="2"
D20			(Unknown)
			(Blank) if DO9="2"
D21	PAR/Medical Report		(Blank) if DO9="2"
D22 - D24	PAR		(Blanks) if DO9="2"
D25	PAR/Medical Report		(Blank) if DO9="2"
D26 - D28	Driver Record/PAR		(Blanks) if DO9="2"
D29 - D33	Driver Record		(Blanks) if DO9="2"
D34	FHWA state maps		
D35	PAR/FHWA state maps		
D36	FHWA state maps		
D37 - D51			(Unknowns)
D52	PAR		
D53	Statutory law		
D54	PAR		
D55. D56			(Unknowns)
D57	FHWA state maps		
D58	PAR		

OCCPANT FORM

Variable	Source	Or	Code
OO1 - OO6	Coding Manual		
OO7. OO8	Assigned by Investigator		
OO9, O10	PAR/Medical Report Driver Record		
O11. O12			(Unknowns)
O13. O14	PAR		
O15 - O19	Coding Manual		(Zeros) If V17 (Body Type) = 20-29 (Motorcycles) (Unknowns) for all others
O20	PAR/Medical Report		
O21	Medical Report		"OO" (Not hospitalized) if O20=0, 4-6, or 8
O22	Coding Manual		"97" (No working days lost) for persons over age 65 or under 17 unless fatally injured then code "62" "99" (Unknown) for all others unless fatally injured
O23 - O30	PAR		
O31 - O78	Medical Report/PAR		
O79	PAR		
O80	PAR/Medical Report		

APPENDIX D

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 and the Truck Deformation Classification (T.D.C.) for heavy trucks, per SAE J1301, in the 1986 NASS. The C.D.C. and T.D.C. codes contain eight characters. If there is no C.D.C./T.D.C., these codes are left blank. If there is a C.D.C./T.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 (C.D.C. or T.D.C.) is coded as follows:

00	Non-horizontal force		08	8 o'clock
01	1 o'clock		09	9 o'clock
02	2 o'clock		10	10 o'clock
03	3 o'clock		11	11 o'clock
04	4 o'clock		12	12 o'clock
05	5 o'clock		13	intra-unit
06	6 o'clock			force
07	7 o'clock			(T.D.C. only)
			99	Unknown

Incremental Value of Shift (C.D.C. only) 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:

C.D.C

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

T.D.C.

F   Front
R   Right side
L   Left side
B   Back of unit with cargo
    area, rear of trailer or
    straight truck
D   Back (rear of tractor)
C   Rear of cab
V   Front of cargo area
T   Top
U   Undercarriage
9   Unknown

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

C.D.C.

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

T.D.C

D   Distributed--side or end
L   Left--front or rear
C   Center--front or rear
R   Right--front or rear
F   Side front (forward of
    windshield)
P   Side cab
W   Side rear of cab to rear of
    tractor
K   Side (P + W)
S   Side (F + P + W)
B   Side rear of cab to rear of
    trailer or cargo area
T   Side trailer (rear of
    tractor to rear of trailer)
Y   Side (F + P) or end (L + C)
Z   Side (B + P) or end (R + C)
9   Unknown

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

         C.D.C. (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

         T.D.C. (Vertical - Front, Rear, or Side Impacts)
         ==

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

         C.D.C. or T.D.C. (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   (C.D.C. only)
D   Rollover (including side) U   No residual deformation
A   Overhanging structure   R   Override (T.D.C. only)
9   Unknown

                              102

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

01	One	08	Eight	
02	Two	09	Nine	
03	Three	OA	(T.D.C. only)	– minor
04	Four	OB	(T.D.C. only)	– moderate
05	Five	OC	(T.D.C. only)	– severe
06	Six	OD	(T.D.C. only)	– extremely severe
07	Seven			
		OX	(T.D.C. only)	– cargo/ impacts
		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.

LONGITUDINAL (X)
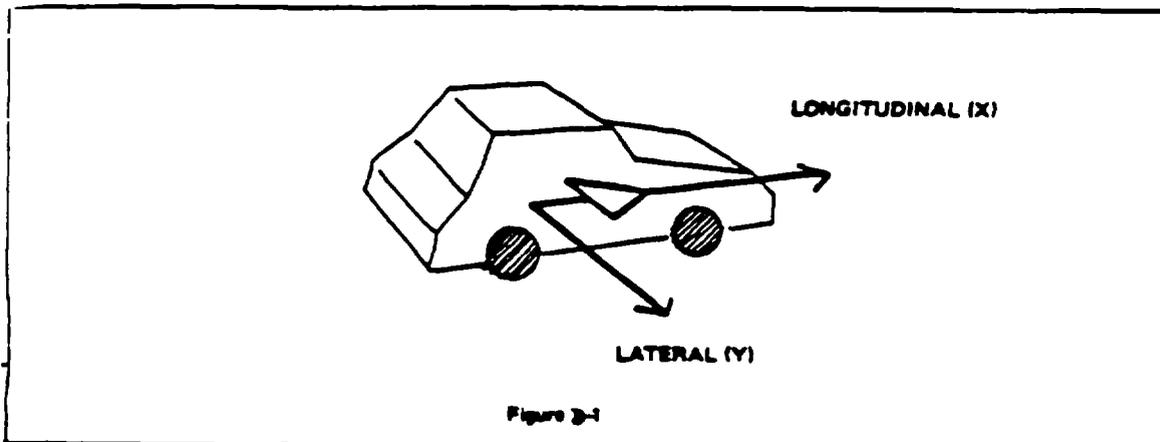
LATERAL (Y)

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   – 10,218
- Total Number of Pedestrian Records – 1,161
- Total Number of Vehicle Records   – 16,919
- Total Number of Driver Records   – 16,919
- Total Number of Occupant Records   – 26,701
- Total Number of Accident Records with neither Occupants nor Pedestrians – 8
- Total Number of Accident Records with at least One Pedestrian but no Occupants – 7
- Total Number of Vehicle Records with at least One Occupant but no Driver – 12
- Total Number of Vehicle records with no Occupant Record – 85

(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 50 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 118 and 174 of the same report.

PRIMARY SAMPLING UNIT (PSU) CODES AND DESCRIPTION

VALUES	STRATA	DESCRIPTION
01, 03, 31, 34, 35	1	Central City, one of the 10 largest 1970 SMSA's
36, 51, 63, 78, 85	2	Central city, one of the 11th - 60th largest 1970 SMSA's
08, 09, 28, 32, 79	3	Suburban, one of the 17 largest 1970 SMSA's; low gas sales
06, 29, 37, 38, 61	4	Suburban, one of the 17 largest 1970 SMSA's; high gas sales
10, 33, 39, 52, 56, 80	5	Suburban, one of the 18th - 60 largest 1970 SMSA's, or PSU within 61st - 119th largest SMSA's not containing a central city
04, 27, 57, 82, 87	6	PSU within 61th - 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
07, 11, 26, 59, 81	8	PSU containing towns with 1977 population over 19,718; high gas sales
12, 53, 54, 60, 62	9	PSU with no town with 1977 population over 19,718; low gas sales
05, 13, 14, 76, 83	10	PSU with no town with 1977 population over 19,718; high gas sales

Each of the ten strata comprises approximately one tenth of the 1977 U.S. population. they are not exactly the same size. Consequently when the ten strata are subdivided into fifty substrata, greater equality among the fifty is possible without requiring each of the ten strata to be divided into the same number of substrata. In the fifty PSU design one PSU has been selected from each of these approximately equal substrata.

POPULATION

PSU	1980	1970	LAND AREA
P01	3005078	3369357	223
P02	157589	157426	501
P03	453085	622236	61
P04	450449	445589	642
P05	171276	163940	580
P06	522965	546253	513
P07	102926	97250	678
P08	2248577	2124405	731
P09	1134552	1156305	467
P10	280326	231335	554
P11	264748	234103	771
P12	67226	63476	1990
P13	75067	64292	1881
P14	61638	60250	2883
P26	158158	141241	1141
P27	279780	263654	813
P28	555007	603456	184
P29	845385	897148	234
P30	227908	243131	454
P31	1688210	1949996	129
P32	1026147	1085044	673
P33	81974	83120	197
P34	2230936	2602012	70
P35	562994	641071	46
P36	357870	462768	41
P37	643621	624080	496
P38	737822	708760	944
P39	93317	85706	321
P51	274602	246463	56
P52	107503	65993	1438
P53	95370	89971	3702
P54	137222	119893	1031
P55	137541	116029	1333
P56	1278916	932933	2008
P57	319694	276293	508
P58	301327	229006	858
P59	107377	96303	2045
P60	74437	67551	2824
P61	652316	483294	589
P62	65528	50751	6200
P63	904074	844401	270
P76	116024	83248	2126
P78	397038	389455	335
P79	656380	555805	735
P80	374194	236572	931
P81	90554	60827	9983
P82	454499	333266	4883
P83	66698	61307	18859
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
P03	32252	30235	32667	39773	44586
P04	35990	37931	41977	45907	43818
P05	13055	14102	15207	16474	14107
P06	44372	43382	45081	51082	48654
P07	8342	8145	9138	10131	9289
P08	144239	152381	183059	204372	199470
P09	76380	83347	94403	107570	105764
P10	20048	22879	27981	29561	20640
P11	17143	17053	18338	27587	43336
P12	5402	5211	5867	6545	5369
P13	6308	6171	6533	7183	6219
P14	4360	3975	4751	5434	4716
P26	9584	10276	13384	14979	13805
P27	20596	21428	23355	27411	27254
P28	32902	33554	42946	53879	51317
P29	41972	47920	63313	72612	67470
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	1928˙
P35	29982	29133	36363	55677	8118˙
P36	23395	22620	26449	31345	39199
P37	36137	40527	50219	58755	54051
P38	52204	55492	67716	76732	79478
P39	6204	6366	7710	9983	10366
P51	12615	13539	16056	19154	22455
P52	8981	9298	9332	9976	9298
P53	8240	8245	8543	9661	7675
P54	9484	10719	12117	12653	10672
P55	9729	10599	10137	15116	18277
P56	74216	83200	91897	109826	104576
P57	19651	21140	23551	30217	35757
P58	18599	20931	23829	30119	35003
P59	8624	8654	9110	10364	9436
P60	6238	5971	6407	7593	6803
P61	52279	56302	59510	61574	59057
P62	6554	6683	7338	7255	4972
P63	66645	64556	67227	77012	102616
P76	8804	8502	8504	9616	9936
P78	30863	30088	32184	37568	39195
P79	44078	45079	54279	60086	52500
P80	26465	29978	33718	35310	30815
P81	8158	7779	7980	8235	9023
P82	35332	34190	37466	45052	46632
P83	6430	5442	5573	7018	6438
P85	24139	21106	24208	35215	5923˙
P87	37779	37586	39853	48720	569˙

PSU	25 TO 29	30 TO 44	45 TO 64	65 & OVER
P01	276035	542471	589789	341279
P02	12982	27824	31523	16844
P03	37872	64179	91594	79927
P04	37978	86480	84554	35814
P05	13602	31526	34306	18897
P06	43884	93060	107884	45566
P07	8271	18858	19640	11112
P08	187767	449567	497899	229823
P09	98794	213262	250933	104099
P10	20151	63151	55008	20907
P11	32757	53693	38149	16692
P12	5254	11424	13013	9141
P13	5783	13534	14280	9056
P14	4122	9681	12965	11634
P26	12569	31325	31739	20497
P27	23123	48695	57389	30529
P28	44024	94170	130934	71281
P29	61808	166438	218986	104866
P30	16138	37177	54780	37224
P31	141378	284943	363157	236951
P32	82228	187039	253672	131748
P33	5372	16325	20461	10269
P34	186722	415705	452338	278601
P35	63325	97346	98914	71065
P36	31527	54631	74977	53727
P37	50129	122915	149962	80926
P38	72495	169743	123628	40334
P39	8521	18132	16445	9590
P51	21679	47637	61779	59688
P52	9210	23139	18801	9468
P53	6834	16201	16906	13065
P54	10305	26654	28330	16288
P55	12174	23615	24540	13354
P56	99885	246046	273887	195383
P57	28818	62342	62441	35777
P58	30744	67390	52626	22086
P59	8423	18126	20284	14356
P60	5744	11506	13747	10428
P61	63128	157083	108001	35382
P62	4370	10071	11288	6997
P63	99279	175177	166351	85211
P76	10362	22325	23028	14947
P78	37978	74655	73099	41408
P79	53984	148568	137244	60562
P80	36126	93142	66394	22246
P81	7332	15451	16772	9824
P82	44802	91971	81880	37174
P83	5778	11125	11628	7266
P85	59383	96696	97826	76040
P87	49894	97917	100880	61894

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	1:037
P02	45826	9209	176	542	158	2013	295	908
P03	115855	8597	156	31342	372	9366	892	:619
P04	131665	24404	202	1781	137	4258	610	:502
P05	49968	11308	98	262	358	3437	474	:717
P06	163295	21959	205	6506	261	8499	731	:709
P07	31763	5619	44	215	120	1893	233	:000
P08	841817	58241	603	123817	2944	45846	3866	1:868
P09	394306	46325	228	9937	993	11630	1661	:443
P10	110643	12811	330	1246	428	4732	544	:737
P11	89936	11546	195	4848	1127	13732	673	:890
P12	16225	4089	94	39	125	4129	187	4944
P13	18986	6886	66	94	70	2084	181	:956
P14	13140	4836	72	61	100	2486	302	:702
P26	48344	7289	218	1305	236	5090	669	:007
P27	84377	13491	208	4298	323	8663	551	:121
P28	176075	14386	320	31823	662	13537	1153	:358
P29	321314	19144	621	43364	830	19177	1583	:752
P30	69585	6576	46	3375	43	7909	398	:384
P31	327866	19725	698	183432	2531	64005	2840	7294
P32	317743	37189	360	51635	237	21941	1791	4730
P33	29419	3385	103	9188	139	1051	84	499
P34	212075	10761	440	483236	1894	72149	3702	7997
P35	112405	5951	331	84211	1629	41472	1362	:689
P36	84084	5551	119	21534	462	12620	497	:491
P37	240110	20784	545	19097	1080	15560	1191	:959
P38	281626	31894	1263	36697	1035	12007	1726	4286
P39	32132	5246	152	521	283	2118	355	626
P51	93207	12015	920	3782	1420	4853	1184	:950
P52	31266	9469	149	147	21	1129	250	453
P53	17144	10721	102	159	42	1859	420	524
P54	45568	11119	100	278	18	1845	430	820
P55	39462	9820	160	423	183	1892	284	444
P56	463193	47749	3108	27127	4236	17699	3195	6816
P57	107340	18351	405	4742	167	5045	538	:745
P58	122422	15836	587	4044	582	5330	984	:409
P59	29136	8559	137	692	53	2414	293	533
P60	15039	6895	100	282	23	1174	287	344
P61	261114	55952	2304	3870	507	5390	1730	4186
P62	10653	6265	70	212	31	1200	215	422
P63	349802	46521	1468	37771	688	10846	2232	:739
P76	29108	9674	383	246	316	3437	573	1628
P78	141623	19250	520	11255	268	8050	660	:137
P79	217141	35731	2294	25794	1625	6851	3684	:634
P80	141541	27475	723	7909	537	4380	1025	:738
P81	19860	8098	851	583	554	2893	582	547
P82	139134	35880	2113	4934	2103	7848	1567	:556
P83	12776	6154	171	200	149	4323	502	:253
P85	149979	17874	1595	47695	3120	19562	1742	:142
P87	151229	40899	3107	6691	3928	8733	1773	4549

TRAVEL TIME TO WORK (IN MINUTES)

PSU	LESS THAN 10	10 TO 19	20 TO 29	30 TO 44	45 AND OVER
P01	82020	227900	215965	329788	323755
P02	10908	26382	12891	5823	2453
P03	16084	54697	42654	36643	17511
P04	22400	62152	46992	25037	6884
P05	16374	26022	13466	6358	3007
P06	27311	62180	48837	41782	21004
P07	8860	17233	6868	4034	3148
P08	140781	298183	192209	224367	221639
P09	62112	145299	114940	103940	38361
P10	24013	41526	32681	24727	9022
P11	23121	49791	25439	15066	9382
P12	10717	7050	2666	2308	2187
P13	9370	7375	3741	3572	4289
P14	9083	6470	2506	1866	1511
P26	13550	21932	12080	9153	6450
P27	22518	47509	23719	13644	4605
P28	29314	66498	47815	53325	42254
P29	60077	127639	75668	66818	76359
P30	17218	38529	17233	9595	5216
P31	48031	129282	116974	159984	145474
P32	54103	126240	92373	96883	60846
P33	5267	13678	7901	6022	2020
P34	40190	101641	78442	180685	384253
P35	27481	67744	51335	60578	40579
P36	15774	47881	33036	20517	7484
P37	51334	102725	58015	50663	36077
P38	31050	76663	76133	98693	85650
P39	8901	13178	7679	6759	4110
P51	18138	43635	24463	21497	9960
P52	6393	9502	6685	10812	9155
P53	10291	11296	3476	3606	1820
P54	11308	24299	12363	7593	4137
P55	8726	23546	9690	6378	4041
P56	60751	166303	135519	140383	64132
P57	15980	48441	33451	28795	10971
P58	21024	56965	39393	24927	7966
P59	7511	17665	7574	5877	2690
P60	6521	8404	3253	2949	3023
P61	43847	100670	78269	76310	32532
P62	5771	6836	1646	2361	2061
P63	42477	132539	116744	111585	47360
P76	12723	17939	5576	3369	4340
P78	30774	74814	47999	21901	6811
P79	36189	83431	53667	57732	62725
P80	20725	49990	46967	45334	20639
P81	10337	13705	3851	3281	1482
P82	29097	77834	49870	26664	9330
P83	11147	7384	2171	2109	1397
P85	29060	82550	61333	46972	21055
P87	31065	75086	52118	40649	17205