NATIONAL AUTOMOTIVE SAMPLING SYSTEM (NASS)

CRASHWORTHINESS DATA SYSTEM

Analytical User's Manual

2005 File

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

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SECTION 1

INTRODUCTION

The National Automotive Sampling System (NASS) Crashworthiness Data System (CDS) is a nationwide crash data collection program sponsored by the U.S. Department of Transportation. It is operated by the National Center for Statistics and Analysis (NCSA) of the National Highway Traffic Safety Administration (NHTSA).

The NASS CDS provides an automated, comprehensive national traffic crash database. Data collection began in 1979 in 10 geographic sites, called Primary Sampling Units (PSU's). In 2004, three additional PSU's were added to the system so that the 2005 NASS CDS file contains data from 27 PSU's. These data are weighted to represent all police reported motor vehicle crashes occurring in the USA during the year involving passenger cars, light trucks and vans that were towed due to damage.

The NASS program was re-evaluated in the mid-1980's. This re-evaluation resulted in changes, which were implemented by NHTSA in January 1988. NASS now has two major operating components: (1) the General Estimates System (GES) which collects data on a sample of police traffic crash reports; and (2) the Crashworthiness Data System (CDS) which collects additional detailed information on a sample of police reported traffic crashes.

Comparing the 1988-2005 files with files from years prior to 1988 is not recommended. The principal attributes of the NASS CDS 1988-2004 files include: focusing on crashes involving automobiles and automobile derivatives, light trucks and vans with gross vehicle weight less than 10,000 pounds (4,537 kg); giving special consideration to late model year vehicles (the five most recent model years [four, beginning in 1996]); emphasizing the more serious injury crashes; eliminating the pedestrian and non-motorist record, the driver record and vehicle registration information. A revised set of data collection forms was designed in 1988 for the crashworthiness data system. Some features are: the introduction of an Accident Event Record to capture all events in the crash; the creation of three new vehicle records (General Vehicle, Exterior Vehicle, Interior Vehicle); and the separation of occupant records into an Occupant Assessment Record and an Occupant Injury Record, wherein all injuries are coded.

The NASS CDS file is available in two automated formats: a sequential data set or a Statistical Analysis System (SAS) data set. Hard copy data collection records, sanitized to protect privacy, are available for review through data collection year 1996. An electronic version of these records is available beginning with data collection year 1997. These records contain photographic images, scene diagrams, and vehicle damage diagrams.

This manual and the NASS 2005 Crashworthiness Data System's Data Collection, Coding and Editing Manual 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:

CRASH3 Technical Manual, July 1986

Collision Deformation Classification (SAE J224 MAR 80)

Injury Coding Manual 1993

NASS Design for Crashworthiness Research, April 1986 (Internal Working Paper)

General Description of the NASS Crashworthiness Data System Sample Design, April 1987 (Internal Working Paper)

1988-1996 NASS CDS Variable-Attribute Structure Manual

The first document is available from the DOT/Volpe National Transportation Systems Center (VNTSC), DTS-64, 55 Broadway, Cambridge, Massachusetts 02142-1093. The second document is available from the Society of Automotive Engineers (SAE), Warrendale, Pennsylvania 15096. The last four documents are available from the National Highway Traffic Safety Administration at the address below.

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 - NPO-111, National Highway Traffic Safety Administration, U.S. Department of Transportation, 400 Seventh St., S.W., Washington, D.C. 20590.

SECTION 2

CHANGES IN 2005

General Vehicle Record
Vehicle Make (GV36) and Vehicle Model (GV38).
The following were added in 2005:

Make SASCode: 69
Model SASCode: 39
Model: Lotus Elise

Exterior Vehicle Record
Added to Range of Fuel Type-1 (EV45) and Fuel Type-2 (EV46) the attribute "15" (Nickel-Metal Hydride).

Occupant Assessment Record
ABLTPROP (OA5) and MANPROPR (OA47) contain blank values.

"Other" air bags (OA54) allowed for third row occupants (OA64).

OCCUPANT ASSESSMENT RECORD
Child Safety Seat Make/Model (OA55)
Additions and modifications for 2005

SASCODE	MAKEDESC	MODELDESC
122	Baby Trend	Flex Loc
343	Baby Trend	Recaro
130	Baby Trend	Tahoe
344	Baby Trend	Trend
131	Britax	Baby Safe
133	Britax	Baby Trend Latch-Loc
265	Britax	Boulevard
132	Britax	Companion
266	Britax	Decathlon
706	Britax	Expressway
267	Britax	Galaxy
331	Britax	Parkway
705	Britax	Regent
129	Buick	Baby Safe
123	Car Seat Speciality	Nania Baby One
268	Car Seat Speciality	Nania Convertible
329	Car Seat Speciality	Nania Ola
269	Car Seat Specialty	Nania Basic
851	Car Seat Specialty	Nania Nuevo

850	Car Seat Specialty	Nania Solo
	Chicco	KeyFit
342	Combi	Apogee
271	Combi	Avatar
347	Combi	Everest
270	Combi	Victoria
325	Cosco/Doral	Ambassador
324	Cosco/Doral	Commuter High Back Booster
124	Cosco/Doral	Eddie Bauer Comfort
326	Cosco/Doral	Eddie Bauer Deluxe 3-in-1
500	Cosco/Doral	Eddie Bauer Deluxe Convertible
135	Cosco/Doral	Eddie Bauer Integrated Travel System
502	Cosco/Doral	Enspira
328	Cosco/Doral	Highrise
503	Cosco/Doral	Intera
323	Cosco/Doral	Protek
272	Cosco/Doral	Scenera
332	Cosco/Doral	Traveler
333	Cosco/Doral	Valet
852	Cosco/Doral	Vantage Point
330	Evenflo	Big Kid
273	Evenflo	My Style
853	Evenflo	Traditions
795	Graco	ComfortSport
334	Graco	My CarGo
854	Graco	Platinum CarGo
711	IMMI	SafeGuard
335	LaRoche	Polar Bear
275	Lennox	Tattle Tale
125	Pioneered II	Safety System Infant Car Seat
126	Safe-n-Sound	Capsule
712	Safe-n-Sound	Series 3
857	Safety 1st	Apex
274	Safety 1st	Comfort Ride
505	Safety 1st	Enspira
336	Safety 1st	Highrider
504	Safety 1st	Intera
856	Safety 1st	Prospect
127	Safety 1st	Starter
855	Safety 1st	Surveyor
900	Safety 1st	Tote 'n Go
337	Safety Angel	Ride Ryte
858	Strolee	Airway Kansas
128	Strolee	Baby One
339	Strolee	Highride
340	Strolee	McKinley
338	Strolee	Saratoga
341	Strolee	Yorktown 8600

276	Sunshine Kids	Radian
327	Team Tex	Polo Uno
277	Tripleplay Products	Sit n' Stroll

SECTION 3

THE SAMPLING SYSTEM AND SAMPLE DESIGN

The crashes investigated in NASS CDS are a probability sample of all police reported crashes in the U.S. A NASS CDS crash must fulfill the following requirements: must be police reported, must involve a harmful event (property damage and/or personal injury) resulting from a crash and must involve at least one towed passenger car or light truck or van in transport on a trafficway. Every crash, 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 crashes in NASS is accomplished in three stages: (1) selection of PSU's, (2) selection of police jurisdictions and (3) selection of crashes.

Stage 1 - Select PSU's

For the first stage of selection, the country was divided into 1195 geographic areas called Primary Sampling Units (PSU's). Each PSU consisted of either a central city, a county surrounding a central city, an entire county or a group of contiguous counties. The PSU's were defined so that their minimum population was approximately 50,000.

The 1195 PSU's were grouped into 12 strata based on geographic region and type, e.g., central cities, suburban counties, and other PSU's. The 27 PSU's to be sampled were allocated to each stratum roughly proportional to the number of crashes in each stratum. At least two PSU's were selected from each stratum.

Stage 2 - Select Police Jurisdictions

If every crash in each PSU were investigated, a national estimate could be obtained by weighting each crash by the inverse of the probability of selecting the PSU. Because it is uneconomical and impractical to investigate every crash 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 crashes 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 crashes. A sample of jurisdictions is selected which over-samples those having a larger measure of size.

Stage 3 - Select Crashes

The final stage of sampling is the selection of crashes within the sampled jurisdictions. Each week, the police jurisdictions are contacted and all crashes that qualify for the NASS CDS for which a police crash report has been filed since the last date that jurisdiction was contacted are listed. While being listed, each crash is classified into a stratum based on type of vehicle; most severe police reported injury, disposition of the injured, tow status of the vehicles and model year of the vehicles. All qualifying crashes are listed, except in a few of the largest police jurisdictions. In these jurisdictions only crashes with either an even or an odd police crash report number are listed.

To select crashes, each team is assigned a fixed number of crashes to investigate each week. The number of crashes a team selects for investigation is governed by the number of researchers on a team. Sampling weights for the strata are assigned so that a larger percentage of the higher severity crashes are selected than of the lower severity crashes. Also, crashes in the same stratum have the same probability of being selected, regardless of the PSU.

To select the sample, each crash is assigned a weight equal to the inverse of the probability of selecting the police jurisdiction in which it was listed.

SAMPLING VARIABLES

The stratification category (1) by type of vehicle is [a] "CDS applicable"---passenger cars, light trucks and vans and [b] "Non-CDS Applicable vehicles"---all other vehicle types; (2) by injury is "fatal injury"---K, "serious injury"---A or "minor injury, not injured or unknown"---B,C,O,U; (3) by disposition of the injured is "transported to a medical facility" or "not transported"; (4) by hospitalization is "occupant admitted at least overnight"; (5) by tow status is "towed due to damage" or "not towed"; (6) by model year of the vehicle is "late model year"---2002 through 2006 or "non-late model year"---2001 or before.

SAMPLING STRATA

The ten PAR sampling Strata used by the CDS are listed below and shown in Table 3-1:

Stratum A-NASS crashes in which at least one occupant of a towed CDS applicable late model year vehicle had a police reported injury of "K" (fatal injury).

Stratum B-NASS crashes not qualifying for Stratum A in which at least one occupant of a towed CDS applicable non-late model year vehicle had a police reported injury of "K" (fatal injury).

Stratum J-NASS crashes not qualifying for Strata A or B in which at least one occupant of a towed CDS applicable late model year vehicle had a police reported injury of "A" (incapacitating injury) AND was transported to a treatment facility for treatment AND was admitted overnight to the

hospital. If the crash involved more than one CDS applicable vehicle, at least two CDS applicable vehicles must be towed.

Stratum K-NASS crashes not qualifying for Strata A, B or J in which at least one occupant of a towed CDS applicable nonlate model year vehicle had a police reported injury of "A" (incapacitating injury) AND was transported to a treatment facility for treatment AND was admitted overnight to the hospital. If the crash involved more than one CDS applicable vehicle, at least two CDS applicable vehicles must be towed.

Stratum C-NASS crashes not qualifying for Strata A, B, J or K in which at least one occupant of a towed CDS applicable late model year vehicle had a police reported injury of "A" (incapacitating injury) AND was transported to a treatment facility for treatment. If the crash involved more than one CDS applicable vehicle, then at least two CDS applicable vehicles must be towed.

Stratum D-NASS crashes not qualifying for Strata A, B, J, K or C in which at least one occupant of a towed CDS applicable non-late model year vehicle had a police reported injury of "A" (incapacitating injury) AND was transported to a treatment facility for treatment. If the crash involved more than one CDS applicable vehicle, then at least two CDS applicable vehicles must be towed.

Stratum E-NASS crashes not qualifying for Strata A, B, J, K, C or D in which at least one occupant of a towed CDS applicable late model vehicle was transported from the scene to a treatment facility for treatment.

Stratum F-NASS crashes not qualifying for Strata A, B, J, K, C, D or E in which at least one occupant of a towed CDS applicable non-late model vehicle was transported from the scene to a treatment facility for treatment.

Stratum G-NASS crashes not qualifying for Strata A, B, J, K, C, D, E or F which involve at least one CDS applicable late model vehicle that was towed, according to the police report, from the scene due to damage.

Stratum H-NASS crashes not qualifying for Strata A, B, J, K, C, D, E, F or G which involve at least one CDS applicable non-late model vehicle that was towed, according to the police report, from the scene due to damage.

Example of Crash Stratification: A CDS applicable non-late model year vehicle and a bicycle crash. The CDS applicable vehicle is towed with minor injuries to the occupants, who are not transported. The bicyclist receives a serious injury---"A". The crash is classified as Stratum H because of the minor injuries to the occupants of the towed CDS applicable non-late model year vehicle.

Table 3-1
2005 NASS CDS Strata

Late Model Year (LMY) Vehicle Involvement	Most Severe Police Reported Injury								
	Fatal Injury K	Transported					Non-transported	
		Serious Injury A				Minor Injury or Unk. B, C, or U	Minor Injury, Not injured or Unknown	
		Single CDS Veh.	Multiple CDS Applicable Vehicles				At Least one Towed CDS Veh.	No Towed CDS Appli. Veh.
		Towed	Two or More Towed		Only One Towed			
		Hosp-ital-ized	Not Hosp-ital-ized	Hosp-ital-ized	Not Hosp-ital-ized			
Injury in Towed LMY CDS Veh.	A	J	C	J	C	E	G	Not in Scope
Injury not in Towed LMY CDS Veh.	B	K	D	K	D	F	H	

Note: Late Model Year refers to 2002 through 2006 model years.

Sampling

Because the crashes selected in NASS CDS are a probability sample of all crashes occurring in the survey year, the data from these crashes are "weighted" to produce National Estimates. The weights result from the stages of selection, reflecting that crash's probability of selection. The analysis file contains only one weight.

PSU Inflation Factor

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

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

National Inflation Factor

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

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

Ratio Inflation Factor

The Ratio Inflation Factor is the product of the National Inflation Factor and a rate, which adjusts for differences between actual and estimated totals. This ratio is calculated using crash totals from both the sampled and non-sampled police jurisdictions. The totals for the sampled jurisdictions come from the Stage 3 frame. The totals for the non-sampled jurisdictions are collected annually. The PSU's are grouped into predetermined sets. Dividing the total crashes in each stratum and in each set of PSU's by the estimated total forms ratios. Those estimated totals are sums of the National Inflation Factors for each crash in the crash strata and set of PSU's.

Estimates of National totals for crash characteristics can be obtained using the Ratio Inflation Factor (RIF). However, because the RIFs have been adjusted to actual crash counts, some of the sampling variation has been removed. Therefore they will produce more precise estimates than the National Inflation Factor. It is for this reason that the RIF or Ratio Weight is the only weight on the analysis file. Less than one percent of the cases have RIFs greater than 5000. This is the result of listing at least twice the number of expected serious injury crashes on a given sampling day.

SECTION 4

DERIVED VARIABLES

Most of the data presented in the NASS record layout can be identified easily as coming from crash 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 crash. The following list identifies the specific data elements, gives their location in the Sequential File Record Layout, lists their SAS name (Label) and explains their derivation:

MAXIMUM TREATMENT IN THIS ACCIDENT (AC33) (SAS Label: ATREAT)

This single place numeric value indicates the most intensive treatment given to any occupant of a towed CDS applicable vehicle in the crash, using the following order of codes:

1	FATAL
3	HOSPITALIZED
4	TRANSPORTED AND RELEASED
5	TREATMENT AT SCENE
6	TREATMENT LATER
7	TREATMENT - OTHER
8	TRANSPORTED TO A MEDICAL FACILITY - UNKNOWN IF TREATED
2	FATAL - RULED DISEASE
9	UNKNOWN
0	NO TREATMENT
.	NOT COLLECTED

This variable is derived by scanning the TREATMENT-MORTALITY (OA62) variable in each occupant assessment record in the crash.

Source: TREATMENT-MORTALITY (OA62).
Missing Values: Occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49 and POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED (GV39) equals 0. If there are no occupants in any towed CDS applicable vehicle in the crash, then use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file.
SAS Codes: .N for Blank (Not Collected) and .U for 9 (Unknown).

MAXIMUM KNOWN A.I.S. IN THIS ACCIDENT (AC34) (SAS Label: AAIS)

This single place numeric value indicates the single most severe injury level reported for any occupant of a towed CDS applicable vehicle in the crash, 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
. NOT COLLECTED

This variable is derived by scanning the A.I.S. SEVERITY (OI010...OI100) variable on each occupant injury record in the crash. If none of the occupants in the crash has an occupant injury record, then scan the NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70) variable on the occupant assessment record. Use the following order of codes: if "97", then code "7"; if "99", then code "9"; if "00", then code "0".

Source: A.I.S. SEVERITY (OI010...OI100) and NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70).
Missing Values: Occupant injury and occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED (GV39) equals 0. Occupant injury records will be missing for: (1) Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00; (2) Non-towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00. If there are no occupants in any towed CDS applicable vehicle in the crash, then use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file.
SAS Codes: .N for Blank (Not Collected) and .U for 9 (Unknown).

NUMBER OF SERIOUSLY INJURED OCCUPANTS IN THIS ACCIDENT (AC35-36) (SAS Label: AINJSER)

This two place numeric value indicates the total number of fatally and other seriously injured occupants of towed CDS applicable vehicles involved in the crash. It is derived by totaling for the crash either the number of occupant assessment records in which the TREATMENT-MORTALITY (OA62) value is coded "1" (Fatal) or the number of occupant injury records in which the A.I.S. SEVERITY (OI010...OI100) value is coded "3-6". (Add together "1"s in OA62 and if the code in OA62 is not equal to "1", add one injury per occupant where OI010...OI100 is "3-6").

Source: TREATMENT-MORTALITY (OA62) and A.I.S. SEVERITY (OI010...OI100).
Missing Values: Occupant injury and occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED

(GV39) equals 0. Occupant injury records will be missing for: (1) Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00; (2) Non-towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00. If none of the occupants in the crash has an occupant injury record or if, on all the occupant assessment records the only codes in OA70 are equal to "97, 99 or 00", then use code "00" (None) for this derived variable. If there are no occupants in any towed CDS applicable vehicle in the crash, then use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file.
SAS Codes: .N for Blank (Not Collected). Unknown is not a valid code.

NUMBER OF INJURED OCCUPANTS IN THIS ACCIDENT (AC37-38) (SAS Label: AINJURED)

This two place numeric value indicates the total number of injured occupants of towed CDS applicable vehicles involved in the crash. It is derived by totaling the number of occupant assessment records in which the variable NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70) has a value of 01-97.

Source: NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70).
Missing Values: Occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles with -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED (GV39) equals 0. Towed CDS applicable vehicles with no known occupant injuries will have codes-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00. Non-towed CDS applicable vehicles with no known occupant injuries will have codes-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00. If, on all the occupant assessment records in the crash, the only codes in OA70 are equal to "99 or 00", then use code "00" (None) for this derived variable. If there are no occupants in any towed CDS applicable vehicle in the crash, then use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file.
SAS Codes: .N for Blank (Not Collected). Unknown is not a valid code.

ALCOHOL INVOLVEMENT IN THIS ACCIDENT (AC39) (SAS Label: ALCINV)

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

1 YES
2 NO
9 UNKNOWN

This variable is derived by scanning the POLICE REPORTED ALCOHOL PRESENCE FOR DRIVER (GV13) and ALCOHOL TEST RESULT FOR DRIVER (GV14) variables on each general vehicle record in the crash. The ALCOHOL INVOLVEMENT codes are derived as follows:

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

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

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

Source: POLICE REPORTED ALCOHOL PRESENCE FOR DRIVER (GV13) and ALCOHOL TEST RESULT FOR DRIVER (GV14).
Missing Values: None (must have at least one general vehicle record coded through the variable ACCIDENT TYPE (GV36) in the crash).
SAS Codes: .U for 9 (Unknown).

DAY OF WEEK (AC40-41) (SAS Label: DAYWEEK)

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

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

Source: DATE OF ACCIDENT (AC04).
Missing Values: None.
SAS codes: None. Unknown is not a valid code.

PSU INFLATION FACTOR (SAS Label: PSUWGT)

This eight place numeric value has three implied decimal places. It indicates the within PSU sampling weight for each crash in that PSU's sample.
This weight is not on the current year file.

Source: Computed by NHTSA Headquarters.
Missing Values: None.
SAS Codes: None.

NATIONAL INFLATION FACTOR (SAS Label: NATWGT)

This eight place numeric value has three implied decimal places. It indicates the overall sampling weight for each crash selected in the NASS sample.
This weight is not on the current year file.

Source: Computed by NHTSA Headquarters.
Missing Values: None.
SAS Codes: None.

RATIO INFLATION FACTOR (AC58-65) (SAS Label: RATWGT)

This eight place numeric value has three implied decimal places. It is the product of the National Inflation Factor and a ratio which adjusts for differences between actual and estimated totals.

Source: Computed by NHTSA Headquarters.
Missing Values: None.
SAS Codes: None.

DRUG INVOLVEMENT IN THIS ACCIDENT (AC66) (SAS Label: DRGINV)

This single place numeric value indicates if any involved driver were reported to have had some drug involvement at the time of the crash, using the following order of codes:

1 YES
2 NO
3 UNKNOWN

This variable is derived by scanning the POLICE REPORTED OTHER DRUG PRESENCE FOR DRIVER (GV15) and OTHER DRUG SPECIMEN TEST RESULT (GV16) variables on each general vehicle record in the crash. The DRUG INVOLVEMENT codes are derived as follows:

(YES) 1 - If POLICE REPORTED OTHER DRUG PRESENCE FOR DRIVER equals 1 (YES - OTHER DRUG PRESENT) or OTHER DRUG SPECIMEN TEST RESULT equals 2 (DRUG FOUND IN SPECIMEN).

(NO) 2 -If POLICE REPORTED OTHER DRUG PRESENCE FOR DRIVER equals 0 (NO OTHER DRUGS PRESENT) and OTHER DRUG SPECIMEN TEST RESULT equals 0 (NO SPECIMEN TEST GIVEN) or 1 (DRUG NOT FOUND IN SPECIMEN).

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

Source: POLICE REPORTED OTHER DRUG PRESENCE FOR DRIVER (GV15) and OTHER DRUG SPECIMEN TEST RESULT (GV16).
Missing Values: None (must have at least one general vehicle record coded through the variable ACCIDENT TYPE (GV36) in the crash).
SAS Codes: .U for 9 (Unknown).

MANNER OF COLLISION (AC67) (SAS Label: MANCOLL)

This single place numeric value indicates the configuration of the crash based on the first harmful event, using the following codes:

0 NOT COLLISION WITH VEHICLE IN TRANSPORT
1 REAR-END
2 HEAD-ON
4 ANGLE
5 SIDESWIPE, SAME DIRECTION
6 SIDESWIPE, OPPOSITE DIRECTION
9 UNKNOWN

This variable is derived by scanning the OBJECT CONTACTED (AC16) variable on the crash event record and the ACCIDENT TYPE (GV36) variable on the general vehicle record, where VEHICLE NUMBER (AC13) equals VEHICLE NUMBER (GV03). The MANNER OF COLLISION codes are derived as follows:

0 (NOT COLLISION WITH VEHICLE IN TRANSPORT) - If OBJECT CONTACTED equals 31-99.
1 (REAR-END) - If OBJECT CONTACTED equals 01-30 and ACCIDENT TYPE equals 20-43.
2 (HEAD-ON) - If OBJECT CONTACTED equals 01-30 and ACCIDENT TYPE equals 50-63.
4 (ANGLE) - If OBJECT CONTACTED equals 01-30 and ACCIDENT TYPE equals 68-91.
5 (SIDESWIPE, SAME DIRECTION) - If OBJECT CONTACTED equals 01-30 and ACCIDENT TYPE equals 44-49.
6 (SIDESWIPE, OPPOSITE DIRECTION) - If OBJECT CONTACTED equals 01-30 and ACCIDENT TYPE equals 64-67.
9 (UNKNOWN) - If OBJECT CONTACTED equals 01-30 and ACCIDENT TYPE equals 92-99.

Source: OBJECT CONTACTED (AC16) and ACCIDENT TYPE (GV36).
Missing Values: None (must have at least one general vehicle record coded through the variable ACCIDENT TYPE (GV36) in the crash.
SAS Codes: .U for 9 (Unknown).

PSU STRATA (AC68-69) (SAS Label: PSUSTRAT)

This two place numeric variable indicates the stratum into which each PSU is grouped in the first stage of selection of sample crashes. It is used for calculating variance by analysts using the SUDAAN statistical system. Values are coded as follows:

01 - 12

This variable is derived by scanning a coded table consisting of PSU number and stratum number.

Source: PSU NUMBER (AC01) and coded table.
Missing Values: None.
SAS Codes: None.

MAXIMUM TREATMENT IN THIS VEHICLE (GV75-REC22) (SAS Label: VTREAT)

This single place numeric value indicates the most intensive treatment given to any occupant of this towed CDS applicable vehicle using the following order of codes:

1	FATAL
3	HOSPITALIZED
4	TRANSPORTED AND RELEASED
5	TREATMENT AT SCENE
6	TREATMENT LATER
7	TREATMENT - OTHER
8	TRANSPORTED TO A MEDICAL FACILITY - UNKNOWN IF TREATED
2	FATAL - RULED DISEASE
9	UNKNOWN
0	NO TREATMENT
.	NOT COLLECTED

This variable is derived by scanning the TREATMENT-MORTALITY (OA62) variable in each occupant assessment record in this vehicle.

Source: TREATMENT-MORTALITY (OA62).
Missing Values: Occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles with - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED (GV39) equals 0. If none of the occupants in the vehicle has an occupant assessment record, then use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file.
SAS Codes: .N for Blank (Not Collected) and .U for 9 (Unknown).

MAXIMUM KNOWN A.I.S. IN THIS VEHICLE (GV76-REC22) (SAS Label: VAIS)

This single place numeric value indicates the single most severe injury level reported for any occupant in this towed CDS applicable vehicle 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
. NOT COLLECTED

This variable is derived by scanning the A.I.S. SEVERITY (OI010...OI100) variable on each occupant injury record in this towed CDS applicable vehicle. If none of the occupants in this vehicle has an occupant injury record, then scan the NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70) variable on the occupant assessment record. Use the following order of codes: if "97", then code "7"; if "99", then code "9"; if "00", then code "0".

Source: A.I.S. SEVERITY (OI010...OI100) and NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70).
Missing Values: Occupant injury and occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS vehicles - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED (GV39) equals 0. Occupant injury records will be missing for: (1) Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00; (2) Non-towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00. If none of the occupants in the vehicle has an occupant assessment record, then use code "BLANK" (Not Collected) on the Flat file and use ".N" (Not Collected) on the SAS file.
SAS Codes: .N for Blank (Not Collected) and .U for 9 (Unknown).

NUMBER SERIOUSLY INJURED IN THIS VEHICLE (GV77&78-REC22) (SAS Label: VINJSER)

This two place numeric value indicates the total number of fatally and other seriously injured occupants of this towed CDS applicable vehicle. It is derived by totaling for the vehicle either the number of occupant assessment records in which the TREATMENT-MORTALITY (OA62) value is coded "1" (Fatal) or the number of occupant injury records in which the A.I.S. SEVERITY (OI010...OI100) value is coded "3-6". (Add together "1"s in OA62 and if the code in OA62 is not equal to "1", add one injury per occupant where OI010...OI100 is "3-6").

Source: TREATMENT-MORTALITY (OA62) and A.I.S. SEVERITY (OI010...OI100).
Missing Values: Occupant injury and occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non towed CDS applicable vehicles -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED

(GV39) equals 0. Occupant injury records will be missing for: (1)Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00; (2) Non towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00.

If none of the occupants in the vehicle has an occupant assessment record, then use code "BLANK" (Not Collected) on the Flat file and use ".N" (Not Collected) on the SAS file. If, on all the occupant assessment records in the vehicle, the only codes in OA70 are equal to "97, 99 or 00", then use code "00" (None) for this derived variable.
SAS Codes: .N for Blank (Not Collected). Unknown is not a valid code.

NUMBER INJURED IN THIS VEHICLE (GV79&80-REC22) (SAS Label: VINJURED)

This two place numeric value indicates the total number of injured occupants of this towed CDS applicable vehicle. It is derived by totaling the number of occupant assessment records in which the variable NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70) has a value of 01-97.

Source: NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70).
Missing Values: Occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no occupants-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF OCCUPANT FORMS SUBMITTED (GV39) equals 0. Towed CDS applicable vehicles with no known occupant injuries will have codes-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00. Non-towed CDS applicable vehicles with no known occupant injuries will have codes-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00. If none of the occupants in the vehicle has an occupant assessment record, then use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file. If, on all the occupant assessment records in the vehicle, the only codes in OA70 are equal to "99 or 00", then use code "00" (None) for this derived variable.
SAS Codes: .N for Blank (Not Collected). Unknown is not a valid code.

FRONT/REAR WHEEL DRIVE (GV81-REC22) (SAS Label: DRIVE)

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 (FOUR WHEEL DRIVE POTENTIAL)

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.

Source: VEHICLE MODEL YEAR (GV04), VEHICLE MAKE (GV05), VEHICLE MODEL (GV06), BODY TYPE (GV07) and coded table.
Missing Values: None.
SAS Codes: .U for 9 (Unknown).

VIN LENGTH (GV82&83-REC22) (SAS Label: VINLNGTH)

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

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Values: None.
SAS Codes: .U for 99 (Unknown).

WEIGHT OF THE OTHER VEHICLE (GV84-86;REC22) (SAS Label: OTVEHWGT)

This three place numeric value indicates the weight (in kilograms) of the other vehicle, if the most severe impact is with another CDS applicable vehicle. (This vehicle must be an inspected CDS applicable vehicle, the other vehicle need only be a CDS applicable vehicle). Values are coded as follows:

045	LESS THAN 450 KILOGRAMS
046 - 609	460-6,090 KILOGRAMS
610	6,100 KILOGRAMS OR MORE
998	NOT APPLICABLE (MOST SEVERE IMPACT NOT WITH ANOTHER VEHICLE OR WITH VEHICLE HITTING ITSELF)
999	UNKNOWN
.	NOT COLLECTED

This variable is derived by scanning the OBJECT CONTACTED (EV05) variable from the HIGHEST DELTA "V" as coded on the exterior vehicle record. If the object contacted is another CDS applicable vehicle, then the weight is derived by scanning the VEHICLE CURB WEIGHT (GV43) variable as coded on the general vehicle record for the other CDS applicable vehicle.
Source: OBJECT CONTACTED (EV05), BODY TYPE (GV07) & VEHICLE CURB WEIGHT (GV43).
Missing Values: Exterior vehicle records will be missing and variables GV37-67 on general vehicle records will not be coded for Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99. If the most severe impact is between an inspected CDS applicable vehicle and a non CDS applicable vehicle, then use code "BLANK" (Not Collected) on the Flat file and use ".N" (Not Collected) on the SAS file. Exterior vehicle records will be missing for CDS applicable vehicles which are not inspected- BODY TYPE (GV07) equals 01-49 and TYPE OF VEHICLE INSPECTION (GV67) equals 0. Use code "BLANK" (Not Collected) on the Flat file and use ".N" (Not Collected) on the SAS file. If the OBJECT CONTACTED

(EV05) variable is blank (non collision event) for an inspected CDS applicable vehicle, then use code 998 (Not Applicable).
SAS Codes: .N for Blank (Not Collected) and .U for 999 (Unknown)

BODY TYPE OF THE OTHER VEHICLE (GV87&88-REC22) (SAS Label: OTBDYTYP)

This two place numeric value indicates the body type of the other vehicle if the most severe impact is with another vehicle. (This vehicle must be an inspected CDS applicable vehicle, the other vehicle may be any vehicle type). If the impact is not with another vehicle, the value is coded as follows:

98 NOT APPLICABLE (MOST SEVERE IMPACT NOT WITH ANOTHER VEHICLE OR WITH VEHICLE HITTING ITSELF)
. NOT COLLECTED

This variable is derived by scanning the OBJECT CONTACTED (EV05) variable from the HIGHEST DELTA "V" as coded on the exterior vehicle record. If the object contacted is another vehicle, then the body type is derived by scanning the BODY TYPE (GV07) variable as coded on the general vehicle record for the other vehicle.

Source: OBJECT CONTACTED (EV05) and BODY TYPE (GV07).
Missing Values: Exterior vehicle records will be missing for:
(1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99;
(2) Not Inspected CDS applicable vehicles-BODY TYPE (GV07) equals 01-49 and TYPE OF VEHICLE INSPECTION (GV67) equals 0. For these vehicle types, use code "BLANK" (Not Collected) on the Flat file and ".N" (Not Collected) on the SAS file. If the OBJECT CONTACTED (EV05) variable is blank (non collision event) for an inspected CDS applicable vehicle, then use code 98 (Not Applicable).
SAS Codes: .N for Blank (Not Collected) and .U for 99 (Unknown).

VINA MAKE (GV13-17;REC23) (SAS Label: VINMAKE)

This five place alphanumeric value indicates the National Crime Information Center (NCIC) code for vehicle make. 99999 denotes unknown.

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Values: If VINA VEHICLE TYPE is unknown (U), then VIN MAKE will be blank.
SAS Codes: None.

VINA MODEL (PASS. VEH.) (GV18-20;REC23) (SAS Label: VINAMOD)

This three place alphanumeric value contains a Polk series code for the model of passenger vehicles. For a listing of these codes please refer to the Polk PC VINA manual.

This variable is derived by the VINA analysis scanning the VEHICLE IDENTIFICATION NUMBER (GV08).
Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA MODEL (PASS. VEH.) will be blank.
SAS Codes: None.

VINA SERIES (TRUCKS) (GV21-23;REC23) (SAS Label: SERTR)

This three place alphanumeric value contains a Polk series code. For a listing of these codes please refer to the Polk PC VINA manual.

This variable is derived by the VINA analysis scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is equal to Passenger Vehicle (P), Motorcycle (M) or Unknown (U), then VINA SERIES (TRUCKS) will be blank.
SAS Codes: None.

VINA BODY TYPE (GV24&25;REC23) (SAS Label: VINBT)

This two place alphanumeric value indicates the vehicle's body type. The applicable codes and their descriptors are listed in the following table:

Body Type Codes

Passenger Vehicles			
AM	Ambulance	UT	Utility **
CB	Cab & Chassis (Luv)	WW	Wide Wheel Wagon
CP	Coupe	2D	Sedan 2 Dr.
CV	Convertible	2F	Formal Hardtop 2 Dr.
C4	Coupe 4 Dr.		
HB	Hatchback*	2H (81-03)	Hatchback 2 Dr.
HR	Hearse	2L	Liftback 3 Dr.
HT	Hardtop *	2P	Pillard Hardtop 2 Dr.
IN	Incomplete Passenger	2T	Hardtop 2 Dr.
LB	Liftback	2W	Wagon 2 Dr.
LM	Limousine	3D	Runabout 3 Dr.
			Coupe 3 Dr.

NB	Notchback	3P	
PK	Pickup **	4D	Sedan 4 Dr.
PN	Panel **	4H (81-03)	Hatchback 4 Dr.
P2	2 Passenger Low	4L	Liftback 5 Dr.
P4	4 Passenger Low	4P	Pillard Hardtop 4 Dr.
RD	Roadster	4T	Hardtop 4 Dr.
SB	Sport Hatchback	4W	Wagon 4 Dr.
SC	Sport Coupe	5D	Sedan 5 Dr.
SD	Sedan *		
SV	Sport Van		
SW	Station Wagon		

* Used only when number of doors is unknown
** To code trucks commonly registered as passenger vehicles

Trucks			
AC	Auto Carrier	MV	Maxi Van
AR	Armored Truck	MW	Maxi Wagon
BU	Bus	MY	Motorized Cutaway
CB	Chassis and Cab	PC	Club Cab Pickup
CC	Conventional Cab	PD	Parcel Delivery
CG	Cargo Van	PK	Pickup
CH	Crew Chassis	PM	Pickup with Camper mounted on bed
CL	Club Chassis	PN	Panel
CM	Concrete or Transit Mixer	PS	Super Cab Pickup
CR	Crane	RD	Roadster (Jeep, Jeep Commando)
CS	Super Cab/Chassis Pickup	SN	Step Van
CU	Custom Pickup	SP	Sport Pickup
CV	Convertible (Jeep	ST	Stake or Rack

	Commando, Suzuki Samarai, Dodge Dakota)		
CW	Crew Pickup	SV	Sports Van
CY	Cargo Cutaway	SW	Station Wagon (Jeep Wagonneer, Dodge Sportsman A100, Toyota Landcruiser)
DP	Dump	TL	Tilt Tandem
DS	Tractor Truck (diesel)	TM	Tandem
EC	Extended Cargo Van	TN	Tank
ES	Extended Sport Van	TR	Tractor Truck (Gasoline)
EV	Ext Van	UT	Utility (Blazer, Jimmy, Scout, etc.)
EW	Extended Window Van	VC	Van Camper
FB	Flat-bed or Platform	VD	Display Van
FC	Forward Control	VN	Van
FT	Fire Truck	VT	Vanette (including Metro and Handy Van)
GG	Garbage or Refuse	VW	Window Van
GL	Gliders	WK	Tow Truck Wrecker
GN	Grain	WW	Wide Wheel Wagon
HO	Hopper	XT	Travelall
IC	Incomplete Chassis	YY	Cutaway
IE	Incomplete Ext Van	2W	2 Dr. Wagon
LG	Logger	3B	3 Dr. Extended Cab / Chassis
LL	Suburban & Carry All	3C	4 Dr. Extended Cab Pickup
LM	Limousine		
MH	Motorized Home	4B	4 Dr. Extended Cab / Chassis
MP	Multi-purpose	4C	4 Dr. Extended Cab Pickup
S1	One Seat	4W	4 Dr. Wagon
S2	Two Seat	8V	8 Passenger Sport Van
TB	Tilt Cab		

Motorcycles			
AT	All terrain	MY	Mini Cycle
EN	Enduro	RC	Racer
MK	Mini Bike	RS	Road/Street
MM	Mini Moto Cross	RT	Road/Trail
MP	Moped	T	Dirt
MR	Mini Road/Trail	TL	Trail/Dirt
MS	Motor Scooter	TR	Trails
MX	Moto Cross		

This variable is derived by the VINA analysis scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA BODY TYPE will be blank.
SAS Codes: A.@ for Blank.

VINA ROOF TYPE (GV26;REC23) (SAS Label: ROOF1)

This single place numeric value indicates the type of roof on the vehicle (model years 1985 and later) using the following codes:

1 None/not available
2 Manual sun/moon roof
3 Power sun/moon roof
4 Removable panels
5 Removable roof
6 retractable roof panel
7 Other/unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA ROOF TYPE will be blank.
SAS Codes: A.@ for Blank.

VINA ROOF TYPE (OPTIONAL 1) (GV27;REC23) (SAS Label: ROOF2)

This single place numeric value indicates the optional type of roof for the vehicle (model year 1985 and later) using the following codes:

1 None/not available
2 Manual sun/moon roof
3 Power sun/moon roof
4 Removable panels
5 Removable roof
6 retractable roof panel
7 Other/unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA ROOF TYPE (OPTIONAL 1) will be blank.
SAS Codes: `A.@` for Blank.

VINA ROOF TYPE (OPTIONAL 2) (GV28;REC23) (SAS Label: ROOF3)

This single place numeric value indicates the an optional type of roof for the vehicle (model year 1985 and later) using the following codes:

1 None/not available
2 Manual sun/moon roof
3 Power sun/moon roof
4 Removable panels
5 Removable roof
6 retractable roof panel
7 Other/unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA ROOF TYPE (OPTIONAL 2) will be blank.
SAS Codes: `A.@` for Blank.

VINA ANTI-LOCK BRAKES (GV29;REC23) (SAS Label: ANTILOCK)

This single place numeric value indicates if anti-lock brakes are available in the vehicle (model year 1985 and later) and if so, which axles have the system (if known). The following codes are used:

1 Not Available
2 4 wheel standard

3 Rear only standard
4 ABS standard, wheels unknown
5 4 wheel optional
6 Rear only optional
7 ABS optional, wheels unknown
9 Unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA ANTI-LOCK BRAKES will be blank.
SAS Codes: `A.@` for Blank.

VINA FRONT WHEEL DRIVE (GV30;REC23) (SAS Label: FRTWHLDR)

This single place alphanumeric value indicates if the vehicle (model year 1985 and later) is front wheel drive using the following codes.

N No
Y Yes
* Some vehicles of this series

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA FRONT WHEEL DRIVE will be blank.
SAS Codes: `None`.

VINA FOUR WHEEL DRIVE (GV31;REC 23) (SAS Label: FOURWHDR)

This single place alphnumeric value indicates if the vehicle (model year 1985 and later) is four wheel drive using the following codes.

N No
Y Yes
* Some vehicles of this series

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA FOUR WHEEL DRIVE will be blank.
SAS Codes: `None`.

VINA RESTRAINT TYPE (GV32;REC23) (SAS Label: RESTYPE)

This single place alphanumeric value indicates the actual presence of the restraint type in the vehicle. The code cannot be used to determine whether the restraint is an optional or a standard feature of the vehicle. The codes are valid for model years 1985 to the current model year. The following codes are used:

A	Active (manual) belts
B	Driver front air bag/passenger side belt unknown
C	Dual front air bags/belt system unknown
D	Dual front air bag/passenger side passive belts
E	Dual front air bags/active belts
F	Dual front air bags/passive belts
G	Dual air bags front and side/belts unknown
H	Dual air bags front, head and sides/belts unknown
I	Dual air bags front, head and sides/passive belts
J	Dual air bags front and sides/passive belts
K	Dual air bags front and sides/active belts
L	Dual air bags front, head and sides/active belt
M	Driver front air bag/passenger side active belt
N	If unable to determine
P	Passive (automatic) belts
R	Dual air bags front and side/active belts w/ automatic passenger sensor
S	Dual air bags front, head, and side/active belts w/ automatic passenger sensor
T	Dual air bags front/active belts/rear passenger side air bag
U	(1985-1998) Unknown restraint type
U	(1999-Present) Dual front air bags/active belts with passenger side deactivation cutoff switch
V	Dual air bags front, head and side/active belts/rear dual side air bags
W	Dual air bags front, head and side/active belts w/ automaticpassenger sensor/ rear dual side airbags
X	Dual air bags front/side air bag, driver-side only/active belts
Y	Dual front and side air bags with passenger deactivation switch
3	Dual front & head airbags with passenger sensor; active belts
4	Dual front airbags with passenger sensor; active belts
7	Dual front, side & head airbags, Rear head airbags; active belts
9	Unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA RESTRAINT TYPE will be blank.
SAS Codes: None.

VINA CARBURETION (PASS VEH) (GV 33;REC23) (SAS Label: CARBUR)

This single place alphanumeric value contains the number of barrels for the engine or a descriptive code indicating that the engine is high performance, fuel-injected, turbo, or electronically controlled. The codes are for passenger vehicles only. The codes and their meanings are listed in the following table:

Carburetion Codes and Meanings		
Code	Number of BBL	Description of Engine
(a number)	Number specified by the code	Number of barrels for the engine (e.g. 4)
A*	1	Lower HP
B*	1	Higher HP
C	1	Turbo
D*	1	Turbo Low HP
E*	1	Turbo High HP
F	Unknown	A fuel injection rating code used when the manufacturer=s specifications do not show the number of barrels.
G	1	Electronically controlled
H	Unknown	A high performance rating code used when the manufacturer=s specifications do not show the number of barrels.
J*	2	Lower HP
K*	2	Higher HP
L	2	Turbo
M*	2	Turbo Low HP
N*	2	Turbo High HP
P	2	Electronically controlled
Q	Unknown	Electronically controlled
R	4	Electronically controlled

S*	4	Lower HP
T	1,2 or 4	Turbo Fuel Injected
U*	4	Higher HP
V	4	Turbo
W*	4	Turbo Low HP
X*	4	Turbo High HP
Y	Unknown	Turbo
Z	Unknown	Super Charged

*NOTE: These values are coded only when necessary to apply correct insurance symbol.

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is equal to Trucks (T), Motorcycle (M) or unknown (U), then VINA CARBURETION (PASS VEH) will be blank.
SAS Codes: `None`.

VINA FUEL CODE (GV34;REC23) (SAS Label: FUELCODE)

This single place alphanumeric value indicates the type of fuel suggested by the manufacturer for the engine. The descriptive codes and their meanings are as follows:

B	Electric and gasoline hybrid engine
C	Gasoline engine that can be easily converted to a gaseous powered engine (powered by natural gas, propane, etc.)
D	Diesel
E	Electric
F	Flexible Fuel
G	Gas
H	Ethanol Fuel Only
M	Methanol Fuel Only
N	Compressed Natural Gas
P	Propane

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA FUEL CODE will be blank.
SAS Codes: None.

VINA WEIGHT CODE (TRUCKS) (GV35;REC23) (SAS Label: WGTCDTR)

This single place numeric value indicates the manufacturer=s Gross Vehicle Weight (GVW) rating. The descriptive codes and their meanings are as follows:

1	6,000 and less
2	6,001 - 10,000
3	10,001 - 14,000
4	14,001 - 16,000
5	16,001 - 19,500
6	19,501 - 26,000
7	26,001 - 33,000
8	33,001 - and more
9	weight unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is equal to Passenger Vehicle (P), Motorcycle (M) or unknown (U), then VINA WEIGHT CODE (TRUCKS) will be blank.
SAS Codes: `A.@` for Blank.

VINA VEHICLE TYPE (GV36;REC23) (SAS Label: VEHTYPE)

This single place alphanumeric value indicates the type of vehicle using the following values:

P	Passenger Vehicle
T	Truck
M	Motorcycle
U	Unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: None.
SAS Codes: None.

VINA WHEELS/DRIVING WHEELS (TRUCKS) (GV37&38;REC23) (SAS Label: WHLDRWHEL)

This two place numeric value contains information about truck wheels. The first position contains the total number of wheels. The second position contains the number of driving wheels.

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is equal to Passenger Vehicle (P), Motorcycle (M) or unknown (U), then VINA WHEELS/DRIVING WHEELS (TRUCKS) will be blank.
SAS Codes: `A.@` for Blank.

VINA DAYTIME RUNNING LIGHTS (GV39;REC23) (SAS Label: DAYRUNLT)

This single place alphanumeric value indicates the availability of Daytime Running Lights. Values are coded as follows:

S	Standard
O	Optional
N	Not Available
U	Unknown

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA DAYTIME RUNNING LIGHTS will be blank.
SAS Codes: None.

VINA BASE SHIPPING WEIGHT (PASS VEH & M/C) (GV40-43;REC23) (SAS Label: VEHWGT)

This four place numeric value indicates the base shipping weight (dry weight) of passenger vehicles and motorcycles.

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA BASE SHIPPING WEIGHT (PASS VEH & M/C) will be blank.
SAS Codes: `A.@` for Blank.

VINA MOTORCYCLE CC=s ENGINE DISPLACEMENT (GV44-47;REC23) (SAS Label: MCYCLDS)

This four place numeric value indicates the manufacturer=s cubic centimeter (CC) displacement of the model.

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is equal to Passenger Vehicle (P), Truck (T) or unknown (U), then VINA MOTORCYCLE CC=s ENGINE DISPLACEMENT will be blank.
SAS Codes: `A.@` for Blank.

VINA MODEL YEAR (GV48-51;REC23) (SAS Label: VINMODYR)

This four place numeric value indicates the vehicle=s model year.

This variable is derived by the VINA analysis system scanning the VEHICLE IDENTIFICATION NUMBER (GV08).

Source: VEHICLE IDENTIFICATION NUMBER (GV08).
Missing Value: If VINA VEHICLE TYPE is unknown (U), then VINA MODEL YEAR will be blank.
SAS Codes: `A.@` for Blank.

MAXIMUM KNOWN OCCUPANT A.I.S. (OA115) (SAS Label: MAIS)

This single place numeric value indicates the single most severe injury level reported for this occupant of a towed CDS applicable vehicle 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

This variable is derived by scanning the A.I.S. SEVERITY (OI010...OI100) variable on the occupant injury record. If this occupant does not have an occupant injury record, then scan the NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70) variable on the occupant assessment record. Use the following order of codes: if "97", then code "7"; if "99", then code "9"; if "00", then code "0".
Source: A.I.S. SEVERITY (OI010...OI100) and NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70).
Missing Values: None (if you do not have an occupant injury record, you will have an occupant assessment record for each occupant of a towed CDS applicable vehicle). Occupant injury and occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9. Occupant injury records will be missing for: (1)Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1

and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00; (2)Non-towed CDS applicable vehicles -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9.
SAS Codes: .U for 9 (Unknown).

OCCUPANT I.S.S. (OA116-117) (SAS Label: ISS)

This two place numeric value provides an index score indicating the relative severity of overall injury to the individual vehicle occupant of a towed CDS applicable vehicle 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
0	NOT INJURED

It is derived by scanning the BODY REGION (OI006...OI096) and the A.I.S. SEVERITY (OI010...OI100) variables on the occupant injury record. The I.S.S. score is calculated by adding the squares of the highest A.I.S. SEVERITY entries for each of the three most severely injured body regions. For A.I.S. Code "7" (Injury, Unknown Severity), use code "0". If the occupant injury record is missing, scan the NUMBER OF RECORDED INJURIES FOR THIS OCCUPANT (OA70) variable on the occupant assessment record. If the codes in OA70 are "97, 99 or 00", then use code "0". An example of calculating an I.S.S. score is the following:

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

Source: BODY REGION (OI006...OI096) and A.I.S. SEVERITY OI010...OI100).
Missing Values: None (if you do not have an occupant injury record, you will have an occupant assessment record for each occupant of a towed CDS applicable vehicle). Occupant injury and occupant assessment records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles -BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9. Occupant injury records will be missing for: (1)Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00; (2)Non-towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 97, 99 or 00.
SAS Codes: None.

BODY REGION - AIS-85 (OI33) (SAS Label: BODYREG)

This single place alphanumeric value captures the body regions as defined in the 1988 Injury Coding Manual in accordance with the coding conventions of AIS-85.
Values are coded as follows:

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

This variable is derived by scanning a coded table which converts AIS-90 injury codes to OIC (AIS-85) codes.

Source: BODY REGION (AIS-90) (OI006...OI096), TYPE OF ANATOMIC STRUCTURE (OI007...OI097), SPECIFIC ANATOMIC STRUCTURE (OI008...OI098), LEVEL OF INJURY (OOI009..OI099) and coded table.
Missing Values: Occupant injury records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00.
SAS Codes: None

LESION - AIS-85 (OI34) (SAS Label: LESION)

This single place alphanumeric value captures the lesions as defined in the 1988 Injury Coding Manual in accordance with the coding conventions of AIS-85.
Values are coded as follows:

A Abrasion
M Amputation
V Avulsion
B Burn
K Concussion
C Contusion
N Crush
G Detachment, separation
Z Fracture and dislocation
U Injured, unknown lesion
L Laceration
O Other
P Perforation, puncture
R Rupture
S Sprain
T Strain

D Dislocation
E Total severence, transection
F Fracture

This variable is derived by scanning a coded table which converts AIS-90 injury codes to OIC (AIS-85) codes.

Source: BODY REGION (AIS-90) (OI006...OI096), TYPE OF ANATOMIC STRUCTURE (OI007...OI097), SPECIFIC ANATOMIC STRUCTURE (OI008...OI098), LEVEL OF INJURY (OOI009..OI099) and coded table.
Missing Values: Occupant injury records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00.
SAS Codes: None

SYSTEM ORGAN - AIS-85 (OI35) (SAS Label: SYSORG)

This single place alphanumeric value captures the system organs as defined in the 1988 Injury Coding Manual in accordance with the coding conventions of AIS-85.
Values are as follows:

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

This variable is derived by scanning a coded table which converts AIS-90 injury codes to OIC (AIS-85) codes.

Source: BODY REGION (AIS-90) (OI006...OI096), TYPE OF ANATOMIC STRUCTURE (OI007...OI097), SPECIFIC ANATOMIC STRUCTURE (OI008...OI098), LEVEL OF INJURY (OOI009..OI099) and coded table.
Missing Values: Occupant injury records will be missing for: (1) Non CDS applicable vehicles-BODY TYPE (GV07) equals 50-99; (2) Non-towed CDS applicable vehicles - BODY TYPE (GV07) equals 01-49 AND POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 0 or 9; (3) Towed CDS applicable vehicles with no known occupant injuries-BODY TYPE (GV07) equals 01-49, POLICE REPORTED VEHICLE DISPOSITION (GV10) equals 1 and NUMBER OF RECORDED INJURIES THIS OCCUPANT (OA70) equals 99 or 00.

SAS Codes: None

SECTION 5
SEQUENTIAL ANALYTICAL FILE RECORD LAYOUTS

ACCIDENT RECORD

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (11)	7	8	2
Version Number	9	10	2
Number of General Vehicle Forms Submitted	11	12	2
Month of Accident	13	14	2
FILLER	15	16	2
Year of Accident	17	20	4
Time of Accident	21	24	4
Administrative Use	25	25	1
FILLER	26	26	1
FILLER	27	27	1
FILLER	28	28	1
FILLER	29	29	1
FILLER	30	30	1
No. of Recorded Events in this Accident	31	32	2
Maximum Treatment	33	33	1
Maximum Known AIS	34	34	1
No. of Seriously Injured Occupants	35	36	2
No. of Injured Occupants	37	38	2
Alcohol Involved	39	39	1
Day of Week of Accident	40	41	2
FILLER	42	49	8
FILLER	50	57	8
Ratio Inflation Factor	58	65	8
Drug Involved	66	66	1
Manner of Collision	67	67	1
PSU Strata	68	69	2

ACCIDENT EVENT RECORD

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (12)	7	8	2
Version Number	9	10	2
Accident Event Sequence Number	11	12	2
Vehicle Number (1)	13	14	2
Class Of Vehicle (1)	15	16	2
General Area Of Damage (1)	17	17	1
Vehicle Number (2) OR Object Contacted	18	19	2
Class Of Vehicle (2)	20	21	2
General Area Of Damage (2)	22	22	1

GENERAL VEHICLE RECORD - (21)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (21)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Vehicle Model Year	13	16	4
Vehicle Make	17	18	2
Vehicle Model	19	21	3
Body Type	22	23	2
Vehicle Identification Number	24	33	10
FILLER	34	40	7
Vehicle Special Use	41	41	1
Vehicle Disposition	42	42	1
Travel Speed	43	45	3
Speed Limit	46	48	3
Alcohol Presence	49	49	1
Alcohol Test Result	50	51	2
Drug Presence	52	52	1
Other Drug Specimen Test	53	53	1
Drivers Zip Code	54	58	5
Drivers Race	59	59	1
Relation to Interchange	60	60	1
Trafficway Flow	61	61	1
Number of Travel Lanes	62	62	1
Roadway Alignment	63	63	1
Roadway Profile	64	64	1
Roadway Surface Type	65	65	1
Roadway Surface Condition	66	66	1
Light Conditions	67	67	1
Atmospheric Conditions	68	68	1
Traffic Control Device	69	69	1
Traffic Control Functioning	70	70	1
Drivers Distraction/Inattention to Driving	71	72	2
Pre-Event Movement	73	74	2
Critical PreCrash Event	75	76	2
Attempted Avoidance Manuever	77	78	2
Pre-Impact Stability	79	79	1
Pre-Impact Location	80	80	1
Accident Type	81	82	2
VIN Check	83	83	1

GENERAL VEHICLE RECORD - (22)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (22)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Driver Presence	13	13	1
Number of Occupants This Vehicle	14	15	2
Number of Occupant Forms submitted	16	17	2
AOPS Vehicle	18	18	1
Bag Deployment - 1st Seat FRONTAL	19	19	1
Bag Deployment - Other	20	20	1
Vehicle Curb Weight	21	23	3
Vehicle Cargo Weight	24	26	3
Rollover	27	28	2
Rollover Initiation Type	29	30	2
Location of Rollover Initiation	31	31	1
Rollover Object Contacted	32	33	2
Location of Tripping Force	34	34	1
Direction of Initial Roll	35	35	1
Front Override/Underride	36	36	1
Rear Override/Underride	37	37	1
Heading Angle for This Vehicle	38	40	3
Heading Angle for Other Vehicle	41	43	3
Towed Trailing Unit	44	44	1
Doc. Of Trajectory Data	45	45	1
Condition of Tree or Pole	46	46	1
Basis for Total Delta V	47	48	2
Total Delta V	49	51	3
Longitudinal Component of Delta V	52	55	4
Lateral Component of Delta V	56	59	4
Energy Absorption	60	63	4
Impact Speed	64	66	3
Confidence in Reconstruction Program	67	67	1
Barrier Equivalent Speed	68	70	3
Estimated Highest Delta V	71	71	1
Type of Vehicle Inspection	72	72	1
Delta V Event Number	73	74	2
Maximum Treatment	75	75	1
Maximum Known AIS	76	76	1
Number of Seriously Injured in This Vehicle	77	78	2
Number of Injured in This Vehicle	79	80	2
Front/Rear Wheel Drive	81	81	1
VIN Length	82	83	2
Weight of the Other Vehicle	84	86	3
Body Type of the Other Vehicle	87	88	2

GENERAL VEHICLE RECORD - (23)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (23)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
VINA Make	13	17	5
VINA Model (Pass. Veh.)	18	20	3
VINA Series (Trucks)	21	23	3
VINA Body Type	24	25	2
VINA Roof Type	26	26	1
VINA Roof Type (Option 1)	27	27	1
VINA Roof Type (Option 2)	28	28	1
VINA Anti-Lock Brakes	29	29	1
VINA Front Wheel Drive	30	30	1
VINA Four Wheel Drive	31	31	1
VINA Restraint Type	32	32	1
VINA Carburetion (Pass. Veh.)	33	33	1
VINA Fuel Code	34	34	1
VINA Weight Code (Trucks)	35	35	1
VINA Vehicle Type	36	36	1
VINA Wheels/Driving Wheels (Trucks)	37	38	2
VINA Daylight Running Lights	39	39	1
VINA Base Shipping Weight (Pass. Veh. & M/C)	40	43	4
VINA Motorcycle CC's (Engine Displ)	44	47	4
VINA Model Year	48	51	4

EXTERIOR VEHICLE RECORD - (31)			
FIELD NAME	**START**	**END**	**LENGTH**
PSU Number	1	2	2
Case Number	3	6	4
Record Number (31)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Accident Sequence - 1	13	14	2
Object Contacted - 1	15	16	2
Direction of Force - 1	17	18	2
Deformation Location - 1	19	19	1
Longitude/Lateral Location - 1	20	20	1
Vertical/Lateral Location - 1	21	21	1
Type of Damage Distribution - 1	22	22	1
Deformation Extent - 1	23	24	2
Accident Sequence - 2	25	26	2
Object Contacted - 2	27	28	2
Direction of Force - 2	29	30	2
Deformation Location - 2	31	31	1
Longitude/Lateral Location - 2	32	32	1
Vertical/Lateral Location - 2	33	33	1
Type of Damage Distribution - 2	34	34	1
Deformation Extent - 2	35	36	2
Crash Damage Data for Highest Delta V - L	37	39	3
Crash Damage Data for Highest Delta V - C1	40	42	3
Crash Damage Data for Highest Delta V - C2	43	45	3
Crash Damage Data for Highest Delta V - C3	46	48	3
Crash Damage Data for Highest Delta V - C4	49	51	3
Crash Damage Data for Highest Delta V - C5	52	54	3
Crash Damage Data for Highest Delta V - C6	55	57	3
Crash Damage Data for Highest Delta V - D	58	61	4
Crash Damage Data/ 2nd Highest DeltaV -L	62	64	3
Crash Damage Data/ 2nd Highest DeltaV -C1	65	67	3
Crash Damage Data/ 2nd Highest DeltaV -C2	68	70	3
Crash Damage Data/ 2nd Highest DeltaV -C3	71	73	3
Crash Damage Data/ 2nd Highest DeltaV -C4	74	76	3
Crash Damage Data/ 2nd Highest DeltaV -C5	77	79	3
Crash Damage Data/ 2nd Highest DeltaV -C6	80	82	3
Crash Damage Data/ 2nd Highest DeltaV -D	83	86	4
Undeformed End Width	87	89	3
Direct Damage Width	90	92	3
Original Wheelbase	93	95	3
Original Average Track Width	96	98	3
CDCS Documented - Not Coded	99	99	1
Vehicle Disposition (RES.)	100	100	1

Altered Vehicle	101	101	1
EXTERIOR VEHICLE RECORD - (31)			
FIELD NAME - (CONTINUED)	**START**	**END**	**LENGTH**
Fire Occurrence	102	102	1
Origin of Fire	103	103	1
Filler Cap Tank - 1	104	104	1
Filler Cap Tank - 2	105	105	1
Type of Tank - 1	106	106	1
Type of Tank - 2	107	107	1
Location Tank - 1	108	108	1
Location Tank - 2	109	109	1
Damage Tank - 1	110	110	1
Damage Tank - 2	111	111	1
Leakage Tank - 1	112	112	1
Leakage Tank -2	113	113	1
Fuel Type Tank - 1	114	115	2
Fuel Type Tank - 2	116	117	2
More Than 2 Tanks	118	118	1

INTERIOR VEHICLE RECORD - (41)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (41)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Passenger Compartment Integrity	13	14	2
Door/Gate/Hatch Opening-LF	15	15	1
Door/Gate/Hatch Opening-RF	16	16	1
Door/Gate/Hatch Opening-LR	17	17	1
Door/Gate/Hatch Opening-RR	18	18	1
Door/Gate/Hatch Opening-TG	19	19	1
Door/Gate/Hatch Damage - LF	20	20	1
Door/Gate/Hatch Damage - RF	21	21	1
Door/Gate/Hatch Damage - LR	22	22	1
Door/Gate/Hatch Damage - RR	23	23	1
Door/Gate/Hatch Damage - TG	24	24	1
Type of Glazing - WS	25	25	1
Type of Glazing - LF	26	26	1
Type of Glazing - RF	27	27	1
Type of Glazing - LR	28	28	1
Type of Glazing - RR	29	29	1
Type of Glazing - BL	30	30	1
Type of Glazing - RO	31	31	1
Type of Glazing - OT	32	32	1
PreCrash Glazing Status - WS	33	33	1
PreCrash Glazing Status - LF	34	34	1
PreCrash Glazing Status - RF	35	35	1
PreCrash Glazing Status - LR	36	36	1
PreCrash Glazing Status - RR	37	37	1
PreCrash Glazing Status - BL	38	38	1
PreCrash Glazing Status - RO	39	39	1
PreCrash Glazing Status - OT	40	40	1
Glazing Damage - Impact - WS	41	41	1
Glazing Damage - Impact - LF	42	42	1
Glazing Damage - Impact - RF	43	43	1
Glazing Damage - Impact - LR	44	44	1
Glazing Damage - Impact - RR	45	45	1
Glazing Damage - Impact - BL	46	46	1
Glazing Damage - Impact - RO	47	47	1
Glazing Damage - Impact - OT	48	48	1
Glazing Damage - Contact - WS	49	49	1
Glazing Damage - Contact - LF	50	50	1
Glazing Damage - Contact - RF	51	51	1
Glazing Damage - Contact - LR	52	52	1
Glazing Damage - Contact - RR	53	53	1
Glazing Damage - Contact - BL	54	54	1
Glazing Damage - Contact - RO	55	55	1
Glazing Damage - Contact - OT	56	56	1

INTERIOR VEHICLE RECORD - (42)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (42)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Location of Intrusion - 1st	13	14	2
Intruding Component - 1st	15	16	2
Magnitude of Intrusion - 1st	17	17	1
Crush Direction - 1st	18	18	1
Location of Intrusion - 2nd	19	20	2
Intruding Component - 2nd	21	22	2
Magnitude of Intrusion - 2nd	23	23	1
Crush Direction - 2nd	24	24	1
Location of Intrusion - 3rd	25	26	2
Intruding Component - 3rd	27	28	2
Magnitude of Intrusion - 3rd	29	29	1
Crush Direction - 3rd	30	30	1
Location of Intrusion - 4th	31	32	2
Intruding Component - 4th	33	34	2
Magnitude of Intrusion - 4th	35	35	1
Crush Direction - 4th	36	36	1
Location of Intrusion - 5th	37	38	2
Intruding Component - 5th	39	40	2
Magnitude of Intrusion - 5th	41	41	1
Crush Direction - 5th	42	42	1
Location of Intrusion - 6th	43	44	2
Intruding Component - 6th	45	46	2
Magnitude of Intrusion - 6th	47	47	1
Crush Direction - 6th	48	48	1
Location of Intrusion - 7th	49	50	2
Intruding Component - 7th	51	52	2
Magnitude of Intrusion - 7th	53	53	1
Crush Direction - 7th	54	54	1
Location of Intrusion - 8th	55	56	2
Intruding Component - 8th	57	58	2
Magnitude of Intrusion - 8th	59	59	1
Crush Direction - 8th	60	60	1
Location of Intrusion - 9th	61	62	2
Intruding Component - 9th	63	64	2
Magnitude of Intrusion - 9th	65	65	1
Crush Direction - 9th	66	66	1
Location of Intrusion - 10th	67	68	2
Intruding Component - 10th	69	70	2
Magnitude of Intrusion - 10th	71	71	1
Crush Direction - 10th	72	72	1
Steering Column Type	73	73	1
FILLER	74	75	2
FILLER	76	78	3
FILLER	79	81	3
FILLER	82	84	3
Tilt Steering Column Adj.	85	85	1
Telescoping Steering Column Adj.	86	86	1
Steering Rim/Spoke Deformation	87	88	2
Location of Steering Rim/Spoke Deformation	89	90	2
Odometer Reading	91	93	3

INTERIOR VEHICLE RECORD - (42)

FIELD NAME - (CONTINUED)	START	END	LENGTH
Instrument Panel Damage	94	94	1
Type Knee Bolster Covering	95	95	1
Knee Bolsters Deformed	96	96	1
Glove Compartment Door Open	97	97	1
Adaptive Driving Equipment	98	98	1

OCCUPANT ASSESSMENT RECORD - (51)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (51)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Occupant Number	13	14	2
Occupants Age	15	16	2
Occupants Sex	17	17	1
Occupants Height	18	20	3
Occupants Weight	21	23	3
Occupants Role	24	24	1
Occupants Seat Position	25	26	2
Occupants Posture	27	27	1
Ejection	28	28	1
Ejection Area	29	29	1
Ejection Medium	30	30	1
Medium Status	31	31	1
Entrapment	32	32	1
Occupant Mobility	33	33	1
Manual Belt Availability	34	34	1
Manual Belt Use	35	36	2
Blank	37	37	1
Manual Belt Failure	38	38	1
Shoulder Belt Anchorage Adj	39	39	1
Automatic Belt Availability	40	40	1
Automatic Belt Use	41	41	1
Automatic Belt Type	42	42	1
Blank	43	43	1
Automatic Belt Failure Mode	44	44	1
Police Reported Belt Use	45	45	1
Police Reported Air Bag Availability	46	46	1
Air Bag Availability - Frontal	47	47	1
Air Bag Deployment - Frontal	48	48	1
Air Bag Availability - Other	49	49	1
Air Bag Deployment - Other	50	50	1
Did Air Bag Fail?	51	51	1
Vehicle in Previous Accident?	52	52	1

OCCUPANT ASSESSMENT RECORD - (51)			
FIELD NAME - (CONTINUED)	**START**	**END**	**LENGTH**
Type of Air Bag	53	53	1
Prior Maintenance on Bag?	54	54	1
Air Bag Deployment Accident Event Sequence Number	55	56	2
CDC for Air Bag Deployment	57	57	1
Longitudinal Component of Delta V for Air Bag Deployment Impact	58	61	4
Did Air Bag Flaps Open?	62	62	1
Were Air Bag Flaps Damaged?	63	63	1
Was There Damage to the Air Bag	64	65	2
Source of Air Bag Damage	66	67	2
Was the Air Bag Tethered?	68	68	1
Did Air Bag have Vent Ports?	69	69	1
Air Bag Contact by other Occupant?	70	70	1
Was Occupant wearing Eye wear?	71	71	1
Head Restraint Type/Damage	72	72	1
Seat Type	73	74	2
Seat Orientation	75	75	1
Seat Track Position Prior To Impact	76	76	1
Seat Back Incline Prior and Post Impact	77	78	2
Seat Performance	79	79	1
Child Safety Seat Make /Model	80	82	3
Type of Child Seat	83	83	1
Child Safety Seat Orientation	84	85	2
Child Safety Seat Harness Usage	86	87	2
Child Safety Seat Shield Usage	88	89	2
Child Safety Seat Tether Usage	90	91	2
Injury Severity	92	92	1
Treatment - Mortality	93	93	1
Type of Medical Facility	94	94	1
Hospital Stay	95	96	2
Working Days Lost	97	98	2
Time To Death	99	100	2
1st Medically Reported Cause of Death	101	102	2
2nd Medically Reported Cause of Death	103	104	2
3rd Medically Reported Cause of Death	105	106	2
Number of Recorded Injuries for this Occupant	107	108	2
Glasgow Score	109	110	2
Blood Given	111	111	1
ABG Bicarbonate	112	113	2
Belt Use Determination	114	114	1
Maximum Known AIS	115	115	1
Injury Severity Score	116	117	2

OCCUPANT INJURY RECORD - (61)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (61)	7	8	2
Version Number	9	10	2
Vehicle Number	11	12	2
Occupant Number	13	14	2
Injury Number	15	16	2
Source of Injury Data	17	17	1
Body Region - AIS90	18	18	1
Type of Anatomic Structure	19	19	1
Specific Anatomic Structure	20	21	2
Level of Injury	22	23	2
AIS Severity	24	24	1
Aspect - AIS90	25	25	1
Injury Source	26	28	3
Confidence Level	29	29	1
Direct/Indirect Injury	30	30	1
Occupant Area Intrusion Number	31	32	2
Body Region - AIS85	33	33	1
Lesion - AIS85	34	34	1
System Organ - AIS85	35	35	1

TYPE ACCIDENT RECORD - (66)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (66)	7	8	2
Version	9	10	2
Line Number	11	12	2
Text66	13	92	80

ACCIDENT DESCRIPTION RECORD - (71)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (71)	7	8	2
Version	9	10	2
Line Number	11	12	2
Text71	13	92	80

VEHICLE PROFILE RECORD - (81)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (81)	7	8	2
Version	9	10	2
Line Number	11	12	2
Text81	13	92	80

PERSON PROFILE RECORD - (91)

FIELD NAME	START	END	LENGTH
PSU Number	1	2	2
Case Number	3	6	4
Record Number (91)	7	8	2
Version	9	10	2
Line Number	11	12	2
Text91	13	92	80

SECTION 6
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-hierarchical database. The SAS database for NASS consists of eleven individual data sets, corresponding to the six NASS CDS data collection records. The exceptions are (1) the Case Summary record which is broken into four data sets, the Type Accident, the Accident Description, the Vehicle Profile and the Person Profile data sets and (2) the Accident record which is broken into Accident and Accident Event data sets. The other data sets are General Vehicle, Exterior Vehicle, Interior Vehicle, Occupant Assessment and Occupant Injury. Using modified relational database concepts, SAS allows the natural hierarchical 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 occupant 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 or derived variables 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 Alcohol Test Result For Driver (ALCTEST) has been recoded to .B; the value of 96 ("none given") has been recoded to .C; the value of 97 ("performed, results unknown") has been recoded to .D; the value of 98 ("no driver present") has been recoded to .E; and the value of 99 ("unknown") has been recoded to .U; these values are not included in percentage tabulations;

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

- Values for derived variables which cannot be computed due to conditions where a form is not completed e.g., non CDS applicable vehicle have been recoded to .N ("not coded");

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

PSU NUMBER (PSU), CASE NUMBER-STRATUM (CASEID) and CASE 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 General Vehicle, Exterior Vehicle, Interior Vehicle, Occupant Assessment and Occupant Injury 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 current year NASS Analysis file. 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:

```
The SAS System        08:28 Wednesday, July 26, 2006   1

                        The CONTENTS Procedure

                         -----Directory-----

                      Libref:        NASS2005
                      Engine:        V8
                      Physical Name: e:\anal2005
                      File Name:     e:\anal2005


                                    File
 #  Name      Memtype      Size  Last Modified
-------------------------------------------------------
 1  ACCIDENT  DATA       369664   26JUL2006:08:31:53
 2  ACC_DESC  DATA      4998144   26JUL2006:08:31:52
 3  EVENT     DATA       418816   26JUL2006:08:31:53
 4  GV        DATA      2720768   26JUL2006:08:31:54
 5  OA        DATA      2589696   26JUL2006:08:31:54
 6  OI        DATA      2270208   26JUL2006:08:31:54
 7  PERS_PRO  DATA      1934336   26JUL2006:08:31:52
 8  TYP_ACC   DATA       443392   26JUL2006:08:31:51
 9  VE        DATA      1164288   26JUL2006:08:31:54
10  VEH_PRO   DATA       787456   26JUL2006:08:31:52
11  VI        DATA      1704960   26JUL2006:08:31:54
```

The CONTENTS Procedure

Data Set Name:	NASS2005.ACCIDENT	Observations:	4481
Member Type:	DATA	Variables:	22
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	80
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	8192
Number of Data Set Pages:	45
First Data Page:	1
Max Obs per Page:	101
Obs in First Data Page:	56
Number of Data Set Repairs:	0
File Name:	e:\anal2005\accident.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
1	AAIS	Num	3	25	MAXIMUM KNOWN AIS IN ACCIDENT
21	ADMINSS	Num	3	70	ADMINISTRATIVE USE
2	AINJSER	Num	3	28	NUMBER OF SERIOUSLY INJURED OCCUPANTS
3	AINJURED	Num	3	31	TOTAL NUMBER OF INJURED OCCUPANTS
4	ALCINV	Num	3	34	ALCOHOL INVOLVED IN ACCIDENT
5	ATREAT	Num	3	37	MAXIMUM TREATMENT IN ACCIDENT
6	CASEID	Char	4	20	CASE NUMBER - STRATUM
7	CASENO	Num	3	40	CASE SEQUENCE NUMBER
8	DAYWEEK	Num	3	43	DAY OF WEEK OF ACCIDENT
9	DRGINV	Num	3	46	DRUG INVOLVED
10	EVENTS	Num	3	49	NUMBER OF RECORDED EVENTS IN ACCIDENT
11	MANCOLL	Num	3	52	MANNER OF COLLISION
12	MONTH	Num	3	55	MONTH OF ACCIDENT
13	PSU	Num	3	58	PRIMARY SAMPLING UNIT NUMBER
14	PSUSTRAT	Num	3	61	PRIMARY SAMPLING UNIT STRATIFICATION
15	RATWGT	Num	8	0	RATIO INFLATION FACTOR
16	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED
17	STRATIF	Char	1	24	CASE STRATUM
18	TIME	Num	4	16	TIME OF ACCIDENT
19	VEHFORMS	Num	3	64	NUMBER GENERAL VEHICLE FORMS SUBMITTED
22	VERSION	Num	3	73	VERSION NUMBER
20	YEAR	Num	3	67	YEAR OF ACCIDENT

The CONTENTS Procedure

-----Sort Information-----

Sortedby: PSU CASENO
Validated: YES
Character Set: ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.ACC_DESC	Observations:	51193
Member Type:	DATA	Variables:	7
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	97
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	8192
Number of Data Set Pages:	610
First Data Page:	1
Max Obs per Page:	84
Obs in First Data Page:	65
Number of Data Set Repairs:	0
File Name:	e:\anal2005\acc_desc.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
6	CASEID	Char	4	81	CASE NUMBER - STRATUM
3	CASENO	Num	3	88	CASE SEQUENCE NUMBER
5	LINENO	Num	3	91	LINE NUMBER
2	PSU	Num	3	85	PRIMARY SAMPLING UNIT NUMBER
4	STRATIF	Char	1	80	CASE STRATUM
1	TEXT71	Char	80	0	SUMMARY TEXT
7	VERSION	Num	3	94	VERSION NUMBER

-----Sort Information-----

Sortedby: PSU CASENO LINENO
Validated: YES
Character Set: ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.EVENT	Observations:	8482
Member Type:	DATA	Variables:	14
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	48
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	4096
Number of Data Set Pages:	102
First Data Page:	1
Max Obs per Page:	84
Obs in First Data Page:	28
Number of Data Set Repairs:	0
File Name:	e:\anal2005\event.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
1	ACCSEQ	Num	3	23	ACCIDENT EVENT SEQUENCE NUMBER
2	CASEID	Char	4	16	CASE NUMBER - STRATUM
3	CASENO	Num	3	26	CASE SEQUENCE NUMBER
5	CLASS1	Num	3	32	CLASS OF FIRST VEHICLE
4	CLASS2	Num	3	29	CLASS OF OTHER VEHICLE
6	GADEV1	Char	1	20	GENERAL AREA OF DAMAGE FIRST VEHICLE
7	GADEV2	Char	1	21	GENERAL AREA OF DAMAGE OTHER VEHICLE
8	OBJCONT	Num	3	35	OTHER VEHICLE NUMBER OR OBJECT CONTACTED
9	PSU	Num	3	38	PRIMARY SAMPLING UNIT NUMBER
10	RATWGT	Num	8	0	RATIO INFLATION FACTOR
11	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED
12	STRATIF	Char	1	22	CASE STRATUM
13	VEHNUM	Num	3	41	VEHICLE NUMBER
14	VERSION	Num	3	44	VERSION NUMBER

-----Sort Information-----

Sortedby:	PSU CASENO ACCSEQ
Validated:	YES
Character Set:	ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.GV	Observations:	7907
Member Type:	DATA	Variables:	102
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	336
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	16384
Number of Data Set Pages:	166
First Data Page:	1
Max Obs per Page:	48
Obs in First Data Page:	9
Number of Data Set Repairs:	0
File Name:	e:\anal2005\gv.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
1	ACCSEQDV	Num	3	114	ACCIDENT SEQUENCE NO FOR HIGHEST DELTA V
2	ACCTYPE	Num	3	117	ACCIDENT TYPE
3	ALCTEST	Num	3	120	ALCOHOL TEST RESULT FOR DRIVER
49	ALIGNMNT	Num	3	237	ROADWAY ALIGNMENT
5	ANGOTHER	Num	3	126	HEADING ANGLE FOR OTHER VEHICLE
4	ANGTHIS	Num	3	123	HEADING ANGLE FOR THIS VEHICLE
87	ANTILOCK	Num	3	324	ANTILOCK BRAKES
6	AOPSVEH	Num	3	129	AOPS VEHICLE
8	BAGDEPFV	Num	3	135	AIR BAG DEPLOYMENT, FIRST SEAT FRONTAL
9	BAGDEPOV	Num	3	138	AIR BAG DEPLOYMENT, OTHER
10	BAREQSP	Num	3	141	BARRIER EQUIVALENT SPEED
11	BODYTYPE	Num	3	144	VEHICLE BODY TYPE
91	CARBUR	Char	1	110	CARBURETION
12	CARGOWGT	Num	3	147	VEHICLE CARGO WEIGHT
13	CASEID	Char	4	80	CASE NUMBER - STRATUM
14	CASENO	Num	3	150	CASE SEQUENCE NUMBER
15	CONDTREE	Num	3	153	POST COLLISION CONDITION OF TREE OR POLE
16	CURBWGT	Num	4	48	VEHICLE CURB WEIGHT
96	DAYRUNLT	Char	1	113	DAYLIGHT RUNNING LIGHTS
18	DOCTRAJ	Num	3	159	DOCUMENTATION OF TRAJECTORY DATA
20	DRINKING	Num	3	165	POLICE REPORTED ALCOHOL PRESENCE
19	DRIVDIST	Num	3	162	DRIVER'S DISTRACTION/INATTENTION TO DRIVING
21	DRIVE	Num	3	168	FRONT/REAR WHEEL DRIVE
22	DRPRES	Num	3	171	DRIVER PRESENCE IN VEHICLE
23	DRRACE	Num	3	174	DRIVER'S RACE/ETHNIC ORIGIN
74	DRUGS	Num	3	306	REPORTED OTHER DRUG
24	DRZIP	Num	4	52	DRIVER'S ZIP CODE
25	DVBASIS	Num	3	177	BASIS FOR TOTAL DELTA V (HIGHEST)
26	DVCONFID	Num	3	180	CONFIDENCE IN RECONSTRUCTION
17	DVEST	Num	3	156	ESTIMATED HIGHEST DELTA V
27	DVLAT	Num	3	183	LATERAL COMPONENT OF DELTA V
28	DVLONG	Num	3	186	LONGITUDINAL COMPONENT OF DELTA V
29	DVTOTAL	Num	3	189	TOTAL DELTA V
30	ENERGY	Num	4	56	ENERGY ABSORPTION

89	FOURWHDR	Char	1	108	FOUR WHEEL DRIVE
31	FOVERIDE	Num	3	192	FRONT OVERRIDE/UNDERRIDE THIS VEHICLE
88	FRTWHLDR	Char	1	107	FRONT WHEEL DRIVE
92	FUELCODE	Char	1	111	FUEL CODE
32	IMPACTSP	Num	3	195	IMPACT SPEED
33	INSPTYPE	Num	3	198	TYPE OF VEHICLE INSPECTION
34	LANES	Num	3	201	NUMBER OF LANES
35	LGTCOND	Num	3	204	LIGHT CONDITIONS
36	MAKE	Num	3	207	VEHICLE MAKE
37	MANEUVER	Num	3	210	ATTEMPTED AVOIDANCE MANEUVER
78	MCYCLDS	Num	4	68	MOTORCYCLE ENGINE DISPLACEMENT
38	MODEL	Num	3	213	VEHICLE MODEL
39	MODELYR	Num	4	60	VEHICLE MODEL YEAR
40	OCCFORMS	Num	3	216	NUMBER OF OCCUPANT FORMS SUBMITTED
41	OCUPANTS	Num	3	219	NUMBER OF OCCUPANTS THIS VEHICLE
44	PREEVENT	Num	3	222	INITIAL CRITICAL (PRECRASH) EVENT
46	PREILOC	Num	3	228	PRE-IMPACT LOCATION
47	PREISTAB	Num	3	231	PRE-IMPACT STABILITY
45	PREMOVE	Num	3	225	PRE-EVENT MOVEMENT PRIOR REC CRIT EVENT
51	PROFILE	Num	3	243	ROADWAY PROFILE
48	PSU	Num	3	234	PRIMARY SAMPLING UNIT NUMBER
42	RATWGT	Num	8	0	RATIO INFLATION FACTOR
43	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED
53	RELINTER	Num	3	249	RELATION TO JUNCTION
90	RESTYPE	Char	1	109	RESTRAINT TYPE
54	ROLINDIR	Num	3	252	DIRECTION OF INITIAL ROLL
55	ROLINLOC	Num	3	255	LOCATION OF ROLLOVER
56	ROLINTYP	Num	3	258	ROLLOVER INITIATION TYPE
57	ROLLOBJ	Num	3	261	ROLLOVER INITIATION OBJECT CONTACTED
58	ROLLOVER	Num	3	264	ROLLOVER
84	ROOF1	Num	3	315	ROOF
85	ROOF2	Num	3	318	OPTIONAL ROOF 1
86	ROOF3	Num	3	321	OPTIONAL ROOF 2
59	ROVERIDE	Num	3	267	REAR OVERRIDE/UNDERRIDE THIS VEHICLE
82	SERTR	Char	3	102	VIN SERIES TRUCK
60	SPECOTH	Num	3	270	OTHER DRUG: SPECIMEN TEST RESULTS
61	SPLIMIT	Num	3	273	SPEED LIMIT
62	STRATIF	Char	1	84	CASE STRATUM
50	SURCOND	Num	3	240	ROADWAY SURFACE CONDITION
52	SURTYPE	Num	3	246	ROADWAY SURFACE TYPE
63	TOWHITCH	Num	3	276	TOWED TRAILING UNIT
64	TOWPAR	Num	3	279	POLICE REPORTED VEHICLE DISPOSITION
65	TRAFCONT	Num	3	282	TRAFFIC CONTROL DEVICE
68	TRAFFLOW	Num	3	291	TRAFFICWAY FLOW
67	TRAVELSP	Num	3	288	POLICE REPORTED TRAVEL SPEED
66	TRCTLFCT	Num	3	285	TRAFFIC CONTROL DEVICE FUNCTIONING
69	TRIPLOC	Num	3	294	LOC. ON VEH. WHERE INIT TRIP FORCE APPL
102	VAIS	Num	8	40	MAXIMUM KNOWN AIS IN THIS VEHICLE
70	VEHNO	Num	3	297	VEHICLE NUMBER
94	VEHTYPE	Char	1	112	TYPE OF VEHICLE
71	VEHUSE	Num	3	300	VEHICLE SPECIAL USE
79	VEHWGT	Num	4	72	VIN VEHICLE WEIGHT
76	VERSION	Num	3	312	VERSION NUMBER
72	VIN	Char	10	85	VEHICLE IDENTIFICATION NUMBER
81	VINAMOD	Char	3	99	VIN MODEL CARS AND TRUCKS
83	VINBT	Char	2	105	VIN BODY TYPE
99	VINJSER	Num	8	16	NUMBER SERIOUSLY INJURED IN THIS VEHICLE
100	VINJURED	Num	8	24	NUMBER INJURED IN THIS VEHICLE
73	VINLNGTH	Num	3	303	VIN LENGTH
80	VINMAKE	Char	4	95	VIN MAKE
77	VINMODYR	Num	4	64	VIN MODEL YEAR
75	VINO	Num	3	309	VINO
101	VTREAT	Num	8	32	MAXIMUM TREATMENT IN THIS VEHICLE
7	WEATHER	Num	3	132	ATMOSPHERIC CONDITIONS

93	WGTCDTR	Num	3	327	TRUCK WEIGHT CODE
95	WHLDRWHL	Num	3	330	NUMBER WHEELS/NUMBER OF DRIVE WHEELS
98	otbdytyp	Num	3	333	BODY TYPE OF THE OTHER VEHICLE
97	otvehwgt	Num	4	76	WEIGHT OF THE OTHER VEHICLE

-----Sort Information-----

Sortedby: PSU CASENO VEHNO
Validated: YES
Character Set: ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.OA	Observations:	9859
Member Type:	DATA	Variables:	81
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	256
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	16384
Number of Data Set Pages:	158
First Data Page:	1
Max Obs per Page:	63
Obs in First Data Page:	20
Number of Data Set Repairs:	0
File Name:	e:\anal2005\oa.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
1	ABELTAVL	Num	3	21	AUTOMATIC BELT SYSTEM AVAILABILITY/FUNC
2	ABELTUSE	Num	3	24	AUTOMATIC BELT (PASSIVE) SYSTEM USE
3	ABELTYPE	Num	3	27	AUTOMATIC (PASSIVE) BELT SYSTEM TYPE
4	ABLTFAIL	Num	3	30	AUTOMATIC (PASSIVE) BELT SYSTEM FAILURE
5	ABLTPROP	Num	3	33	PROPER USE OF AUTO (PASSIVE) BELT SYSTEM
6	AGE	Num	3	36	AGE OF OCCUPANT
7	BAGAVAIL	Num	3	39	AIR BAG SYSTEM AVAILABILITY
54	BAGAVOTH	Num	3	177	OTHER FRONTAL AIR BAG AVAILABILITY/FUNCTION
8	BAGAVRPT	Num	3	42	POLICE REPORTED AIRBAG AVAILABILITY/FUNCTION
21	BAGCDC	Num	3	78	CDC FOR AIR BAG DEPLOYMENT IMPACT
28	BAGCONOT	Num	3	99	AIR BAG CONTACTED BY ANOTHER OCCUPANT
11	BAGDAMAG	Num	3	51	WAS THERE DAMAGE TO THE AIR BAG
68	BAGDAMSO	Num	3	213	SOURCE OF AIR BAG DAMAGE
9	BAGDEPLY	Num	3	45	AIR BAG SYSTEM DEPLOYED
55	BAGDEPOT	Num	3	180	OTHER AIR BAG SYSTEM DEPLOYMENT
10	BAGEVENT	Num	3	48	AIR BAG DEPLOYMENT ACCIDENT EVENT SEQUENCE NUMBER
12	BAGFAIL	Num	3	54	AIR BAG SYSTEM FAILURE
35	BAGFLDAM	Num	3	120	WERE AIR BAG MODULE COVER FLAPS DAMAGED
36	BAGFLOPN	Num	3	123	DID AIR BAG MODULE COVER FLAPS OPEN AT DESG TEAR PTS
43	BAGMAINT	Num	3	144	PRIOR MAINTENANCE/SERVICE ON AIR BAG
13	BAGTETHR	Num	3	57	WAS THE AIR BAG TETHERED
14	BAGTYPE	Num	3	60	TYPE OF AIR BAG
73	BAGVENTS	Num	3	225	DID THE AIR BAG HAVE VENT PORTS
15	BELTANCH	Num	3	63	SHOULDER BELT UPPER ANCHORAGE ADJUSTMENT
57	BELTSOU	Num	3	186	PRIMARY SOURCE OF BELT USE DETERMINATION
80	BICARB	Num	3	246	ARTERIAL BLOOD GASES (ABG) HCO3
79	BLOOD	Num	3	243	WAS THE OCCUPANT GIVEN BLOOD?
16	CASEID	Char	4	16	CASE NUMBER - STRATUM
17	CASENO	Num	3	66	CASE SEQUENCE NUMBER
18	CAUSE1	Num	3	69	1ST MEDICALLY REPORTED CAUSE OF DEATH
19	CAUSE2	Num	3	72	2ND MEDICALLY REPORTED CAUSE OF DEATH
20	CAUSE3	Num	3	75	3RD MEDICALLY REPORTED CAUSE OF DEATH
22	CHHARNES	Num	3	81	CHILD SAFETY SEAT HARNESS USAGE

23	CHMAKE	Num	3	84	CHILD SAFETY SEAT MAKE/MODEL
24	CHORIENT	Num	3	87	CHILD SAFETY SEAT ORIENTATION
25	CHSHIELD	Num	3	90	CHILD SAFETY SEAT SHIELD USAGE
26	CHTETHER	Num	3	93	CHILD SAFETY SEAT TETHER USAGE
27	CHTYPE	Num	3	96	TYPE OF CHILD SAFETY SEAT
29	DEATH	Num	3	102	TIME TO DEATH
30	DVBAG	Num	3	105	LONGITUDINAL COMPONENT OF DELTA V FOR AIR BAG
31	EJCTAREA	Num	3	108	EJECTION AREA
32	EJCTMED	Num	3	111	EJECTION MEDIUM
33	EJECTION	Num	3	114	EJECTION
34	ENTRAP	Num	3	117	ENTRAPMENT
51	EYEWEAR	Num	3	168	WAS THE OCCUPANT WEARING EYE-WEAR
78	GLASGOW	Num	3	240	GLASGOW COMA SCALE (GCS) SCORE
37	HEADREST	Num	3	126	HEAD RESTRAINT TYPE/DAMAGE BY OCCUPANT
38	HEIGHT	Num	3	129	HEIGHT OF OCCUPANT
39	HOSPSTAY	Num	3	132	HOSPITAL STAY
40	INJNUM	Num	3	135	NUMBER RECORDED INJURIES THIS OCCUPANT
41	INJSEV	Num	3	138	INJURY SEVERITY (POLICE RATING)
42	ISS	Num	3	141	INJURY SEVERITY SCORE
44	MAIS	Num	3	147	MAXIMUM KNOWN OCCUPANT AIS
45	MANAVAIL	Num	3	150	MANUAL BELT SYSTEM AVAILABILITY
46	MANFAIL	Num	3	153	MANUAL BELT FAILURE MODE DURING ACCIDENT
47	MANPROPR	Num	3	156	PROPER USE OF MANUAL BELTS
48	MANUSE	Num	3	159	MANUAL BELT SYSTEM USE
50	MEDFACIL	Num	3	165	TYPE MEDICAL FACILITY INITIAL TREATMENT
49	MEDSTA	Num	3	162	MEDIUM STATUS (PRIOR TO IMPACT)
52	OCCMOBIL	Num	3	171	OCCUPANT MOBILITY
53	OCCNO	Num	3	174	OCCUPANT NUMBER
56	PARUSE	Num	3	183	POLICE REPORTED RESTRAINT USE
58	POSTURE	Num	3	189	OCCUPANT'S POSTURE
59	PREVACC	Num	3	192	HAD VEHICLE BEEN IN PREVIOUS ACCIDENTS
60	PSU	Num	3	195	PRIMARY SAMPLING UNIT NUMBER
61	RATWGT	Num	8	0	RATIO INFLATION FACTOR
62	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED
63	ROLE	Num	3	198	OCCUPANT'S ROLE
64	SEATPERF	Num	3	201	SEAT PERFORMANCE (THIS POSITION)
65	SEATPOS	Num	3	204	OCCUPANT'S SEAT POSITION
71	SEATRACK	Num	3	219	SEAT TRACK ADJUSTED POSITION PRIOR TO IMPACT
66	SEATTYPE	Num	3	207	SEAT TYPE (THIS OCCUPANT POSITION)
67	SEX	Num	3	210	OCCUPANT'S SEX
69	STBACINC	Num	3	216	SEAT BACK INCLINE PRIOR AND POST IMPACT
77	STORIENT	Num	3	237	SEAT ORIENTATION (THIS OCCUPANT POS.)
70	STRATIF	Char	1	20	CASE STRATUM
72	TREATMNT	Num	3	222	TREATMENT - MORTALITY
74	VEHNO	Num	3	228	VEHICLE NUMBER
81	VERSION	Num	3	249	VERSION NUMBER
75	WEIGHT	Num	3	231	OCCUPANT'S WEIGHT
76	WORKDAYS	Num	3	234	WORKING DAYS LOST

-----Sort Information-----

Sortedby: PSU CASENO VEHNO OCCNO
Validated: YES
Character Set: ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.OI	Observations:	27855
Member Type:	DATA	Variables:	24
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	80
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	8192
Number of Data Set Pages:	277
First Data Page:	1
Max Obs per Page:	101
Obs in First Data Page:	54
Number of Data Set Repairs:	0
File Name:	e:\anal2005\oi.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
1	AIS	Num	3	24	A.I.S. SEVERITY
2	ASPECT90	Num	3	27	ASPECT90
3	CASEID	Char	4	16	CASE NUMBER - STRATUM
4	CASENO	Num	3	30	CASE SEQUENCE NUMBER
5	DIRINJ	Num	3	33	DIRECT/INDIRECT INJURY
6	INJLEVEL	Num	3	36	INJURY LEVEL
7	INJNO	Num	3	39	INJURY NUMBER
8	INJSOU	Num	3	42	INJURY SOURCE
9	INTRUNO	Num	3	45	OCCUPANT AREA INTRUSION NO.
10	OCCNO	Num	3	48	OCCUPANT NUMBER
11	PSU	Num	3	51	PRIMARY SAMPLING UNIT NUMBER
12	RATWGT	Num	8	0	RATIO INFLATION FACTOR
13	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED
14	REGION90	Num	3	54	BODY REGION (O.I.C. - A.I.S.)
15	SOUCON	Num	3	57	INJURY SOURCE CONFIDENCE LEVEL
16	SOUDAT	Num	3	60	SOURCE OF INJURY DATA
17	STRATIF	Char	1	20	CASE STRATUM
18	STRUSPEC	Num	3	63	SPECIFIC ANATOMIC STRUCTURE
19	STRUTYPE	Num	3	66	TYPE OF ANATOMIC STRUCTURE
20	VEHNO	Num	3	69	VEHICLE NUMBER
21	VERSION	Num	3	72	VERSION NUMBER
23	bodyreg	Char	1	22	BODY REGION
24	lesion	Char	1	23	LESION (A.I.S. - O.I.C.)
22	sysorg	Char	1	21	SYSTEM/ORGAN (O.I.C. - A.I.S.)

The CONTENTS Procedure

-----Sort Information-----

Sortedby:	PSU CASENO VEHNO OCCNO INJNO
Validated:	YES
Character Set:	ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.PERS_PRO	Observations:	19736
Member Type:	DATA	Variables:	7
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	97
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	8192
Number of Data Set Pages:	236
First Data Page:	1
Max Obs per Page:	84
Obs in First Data Page:	65
Number of Data Set Repairs:	0
File Name:	e:\anal2005\pers_pro.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
6	CASEID	Char	4	81	CASE NUMBER - STRATUM
3	CASENO	Num	3	88	CASE SEQUENCE NUMBER
5	LINENO	Num	3	91	LINE NUMBER
2	PSU	Num	3	85	PRIMARY SAMPLING UNIT NUMBER
4	STRATIF	Char	1	80	CASE STRATUM
1	TEXT91	Char	80	0	SUMMARY TEXT
7	VERSION	Num	3	94	VERSION NUMBER

-----Sort Information-----

Sortedby:	PSU CASENO LINENO
Validated:	YES
Character Set:	ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.TYP_ACC	Observations:	4481
Member Type:	DATA	Variables:	7
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	97
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	8192
Number of Data Set Pages:	54
First Data Page:	1
Max Obs per Page:	84
Obs in First Data Page:	65
Number of Data Set Repairs:	0
File Name:	e:\anal2005\typ_acc.sas7bdat
Release Created:	8.0202MO
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
6	CASEID	Char	4	81	CASE NUMBER - STRATUM
3	CASENO	Num	3	88	CASE SEQUENCE NUMBER
5	LINENO	Num	3	91	LINE NUMBER
2	PSU	Num	3	85	PRIMARY SAMPLING UNIT NUMBER
4	STRATIF	Char	1	80	CASE STRATUM
1	TEXT66	Char	80	0	SUMMARY TEXT
7	VERSION	Num	3	94	VERSION NUMBER

-----Sort Information-----

Sortedby:	PSU CASENO LINENO
Validated:	YES
Character Set:	ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.VE	Observations:	5915
Member Type:	DATA	Variables:	64
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	192
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	16384
Number of Data Set Pages:	71
First Data Page:	1
Max Obs per Page:	85
Obs in First Data Page:	38
Number of Data Set Repairs:	0
File Name:	e:\anal2005\ve.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
1	ACCSEQ1	Num	3	37	ACCIDENT EVENT SEQUENCE (HIGHEST)
2	ACCSEQ2	Num	3	40	ACCIDENT EVENT SEQUENCE (2ND HIGHEST)
3	ALTVEH	Num	3	43	MULTI-STAGE MANUFACTURED/CERT. ALT. VEH.
5	CASEID	Char	4	24	CASE NUMBER - STRATUM
6	CASENO	Num	3	49	CASE SEQUENCE NUMBER
7	DIRDAMW	Num	3	52	DIRECT DAMAGE WIDTH
8	DOCCDC	Num	3	55	CDCs DOCUMENTED BUT NOT CODED ON FILE?
17	DOF1	Num	3	82	DIRECTION OF FORCE (HIGHEST)
18	DOF2	Num	3	85	DIRECTION OF FORCE (2ND HIGHEST)
9	DVC1	Num	3	58	CRUSH PROFILE C1 (HIGHEST)
10	DVC2	Num	3	61	CRUSH PROFILE C2 (HIGHEST)
11	DVC3	Num	3	64	CRUSH PROFILE C3 (HIGHEST)
12	DVC4	Num	3	67	CRUSH PROFILE C4 (HIGHEST)
13	DVC5	Num	3	70	CRUSH PROFILE C5 (HIGHEST)
14	DVC6	Num	3	73	CRUSH PROFILE C6 (HIGHEST)
15	DVD	Num	3	76	CRUSH PROFILE D (HIGHEST)
16	DVL	Num	3	79	CRUSH PROFILE L (HIGHEST)
20	EXTENT1	Num	3	91	DEFORMATION EXTENT (HIGHEST)
21	EXTENT2	Num	3	94	DEFORMATION EXTENT (2ND HIGHEST)
24	FIRE	Num	3	103	FIRE OCCURRENCE
25	FIREORIG	Num	3	106	ORIGIN OF FIRE
22	FUELCAP1	Num	3	97	LOCATION OF FUEL TANK-1 FILLER CAP
23	FUELCAP2	Num	3	100	LOCATION OF FUEL TANK-2 FILLER CAP
26	FUELDAM1	Num	3	109	DAMAGE TO FUEL TANK-1
27	FUELDAM2	Num	3	112	DAMAGE TO FUEL TANK-2
36	FUELEAK1	Num	3	133	LEAKAGE LOCATION OF FUEL SYSTEM-1
37	FUELEAK2	Num	3	136	LEAKAGE LOCATION OF FUEL SYSTEM-2
38	FUELGT2	Num	3	139	EQUIPPED WITH MORE THAN TWO FUEL TANKS
30	FUELLOC1	Num	3	115	LOCATION OF FUEL TANK-1
31	FUELLOC2	Num	3	118	LOCATION OF FUEL TANK-2
32	FUELTNK1	Num	3	121	TYPE OF FUEL TANK-1
33	FUELTNK2	Num	3	124	TYPE OF FUEL TANK-2
34	FUELTYP1	Num	3	127	FUEL TYPE-1

35	FUELTYP2	Num	3	130	FUEL TYPE-2
28	GAD1	Char	1	28	DEFORMATION LOCATION (HIGHEST)
29	GAD2	Char	1	29	DEFORMATION LOCATION (2ND HIGHEST)
39	OBJCONT1	Num	3	142	OBJECT CONTACTED (HIGHEST)
40	OBJCONT2	Num	3	145	OBJECT CONTACTED (2ND HIGHEST)
4	ORIGAVTW	Num	3	46	ORIGINAL AVERAGE TRACK WIDTH
41	PDOF1	Num	3	148	CLOCK DIRECTION FOR PDOF IN DEGREES (HIGHEST CDC)
42	PDOF2	Num	3	151	CLOCK DIRECTION FOR PDOF IN DEGREES (2ND HIGHEST CDC)
43	PSU	Num	3	154	PRIMARY SAMPLING UNIT NUMBER
44	RATWGT	Num	8	0	RATIO INFLATION FACTOR
45	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED
46	SDVC1	Num	3	157	CRUSH PROFILE C1 (2ND HIGHEST)
47	SDVC2	Num	3	160	CRUSH PROFILE C2 (2ND HIGHEST)
48	SDVC3	Num	3	163	CRUSH PROFILE C3 (2ND HIGHEST)
49	SDVC4	Num	3	166	CRUSH PROFILE C4 (2ND HIGHEST)
50	SDVC5	Num	3	169	CRUSH PROFILE C5 (2ND HIGHEST)
51	SDVC6	Num	3	172	CRUSH PROFILE C6 (2ND HIGHEST)
52	SDVD	Num	3	175	CRUSH PROFILE D (2ND HIGHEST)
53	SDVL	Num	3	178	CRUSH PROFILE L (2ND HIGHEST)
54	SHL1	Char	1	30	SPECIFIC LONGITUDINAL LOCATION (HIGHEST)
55	SHL2	Char	1	31	SPECIFIC LONGITUDINAL LOC. (2ND HIGHEST)
56	STRATIF	Char	1	32	CASE STRATUM
57	SVL1	Char	1	33	SPECIFIC VERTICAL LOCATION (HIGHEST)
58	SVL2	Char	1	34	SPECIFIC VERTICAL LOCATION (2ND HIGHEST)
59	TDD1	Char	1	35	TYPE OF DAMAGE DISTRIBUTION (HIGHEST)
60	TDD2	Char	1	36	TYPE OF DAMAGE DISTRIBUTION(2ND HIGHEST)
61	TOWRES	Num	3	181	RESEARCHER ASSESSMNT VEHICLE DISPOSITION
19	UNDENDW	Num	3	88	UNDEFORMED END WIDTH
62	VEHNO	Num	3	184	VEHICLE NUMBER
64	VERSION	Num	3	187	VERSION NUMBER
63	WHEELBAS	Num	8	16	ORIGINAL WHEELBASE

-----Sort Information-----

Sortedby: PSU CASENO VEHNO
Validated: YES
Character Set: ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.VEH_PRO	Observations:	8018
Member Type:	DATA	Variables:	7
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	97
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	8192
Number of Data Set Pages:	96
First Data Page:	1
Max Obs per Page:	84
Obs in First Data Page:	65
Number of Data Set Repairs:	0
File Name:	e:\anal2005\veh_pro.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
6	CASEID	Char	4	81	CASE NUMBER - STRATUM
3	CASENO	Num	3	88	CASE SEQUENCE NUMBER
5	LINENO	Num	3	91	LINE NUMBER
2	PSU	Num	3	85	PRIMARY SAMPLING UNIT NUMBER
4	STRATIF	Char	1	80	CASE STRATUM
1	TEXT81	Char	80	0	SUMMARY TEXT
7	VERSION	Num	3	94	VERSION NUMBER

-----Sort Information-----

Sortedby:	PSU CASENO LINENO
Validated:	YES
Character Set:	ANSI

The CONTENTS Procedure

Data Set Name:	NASS2005.VI	Observations:	5241
Member Type:	DATA	Variables:	102
Engine:	V8	Indexes:	0
Created:	8:31 Wednesday, July 26, 2006	Observation Length:	320
Last Modified:	8:31 Wednesday, July 26, 2006	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	YES
Label:			

-----Engine/Host Dependent Information-----

Data Set Page Size:	16384
Number of Data Set Pages:	104
First Data Page:	1
Max Obs per Page:	51
Obs in First Data Page:	7
Number of Data Set Repairs:	0
File Name:	e:\anal2005\vi.sas7bdat
Release Created:	8.0202M0
Host Created:	WIN_PRO

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Label
49	ADAPTEQ	Num	3	159	ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT
50	BOLSTDEF	Num	3	162	KNEE BOLSTER DEFORMED - OCCUPANT CONTACT
101	BOLSTYPE	Num	3	309	TYPE OF KNEE BOLSTER COVERING
1	CASEID	Char	4	16	CASE NUMBER - STRATUM
2	CASENO	Num	3	21	CASE SEQUENCE NUMBER
53	CDRIR1	Num	3	171	1ST DOMINANT CRUSH DIRECTION
57	CDRIR2	Num	3	183	2ND DOMINANT CRUSH DIRECTION
61	CDRIR3	Num	3	195	3RD DOMINANT CRUSH DIRECTION
65	CDRIR4	Num	3	207	4TH DOMINANT CRUSH DIRECTION
69	CDRIR5	Num	3	219	5TH DOMINANT CRUSH DIRECTION
73	CDRIR6	Num	3	231	6TH DOMINANT CRUSH DIRECTION
77	CDRIR7	Num	3	243	7TH DOMINANT CRUSH DIRECTION
81	CDRIR8	Num	3	255	8TH DOMINANT CRUSH DIRECTION
85	CDRIR9	Num	3	267	9TH DOMINANT CRUSH DIRECTION
89	CDRIR10	Num	3	279	10TH DOMINANT CRUSH DIRECTION
99	COLMTELE	Num	3	303	TELESCOPING STEERING COLUMN ADJUSTMENT
100	COLMTILT	Num	3	306	TILT STEERING COLUMN ADJUSTMENT
51	COLUMTYP	Num	3	165	STEERING COLUMN TYPE
3	FAILLF	Num	3	24	LF DAMAGE/FAILURE ASSOCIATED W
4	FAILLR	Num	3	27	LR DAMAGE/FAILURE - OPENING IN COLLISION
5	FAILRF	Num	3	30	RF DAMAGE/FAILURE - OPENING IN COLLISION
6	FAILRR	Num	3	33	RR DAMAGE/FAILURE - OPENING IN COLLISION
7	FAILTG	Num	3	36	TG DAMAGE/FAILURE - OPENING IN COLLISION
8	GLIMPBL	Num	3	39	BL GLAZING DAMAGE FROM IMPACT FORCES
9	GLIMPLF	Num	3	42	LF GLAZING DAMAGE FROM IMPACT FORCES
10	GLIMPLR	Num	3	45	LR GLAZING DAMAGE FROM IMPACT FORCES
11	GLIMPOTH	Num	3	48	OTHER GLAZING DAMAGE FROM IMPACT FORCES
12	GLIMPRF	Num	3	51	RF GLAZING DAMAGE FROM IMPACT FORCES
13	GLIMPRR	Num	3	54	RR GLAZING DAMAGE FROM IMPACT FORCES
14	GLIMPRUF	Num	3	57	ROOF GLAZING DAMAGE FROM IMPACT FORCES
15	GLIMPWS	Num	3	60	WS GLAZING DAMAGE FROM IMPACT FORCES
16	GLOCCBL	Num	3	63	BL GLAZING DAMAGE FROM OCCUPANT CONTACT
17	GLOCCLF	Num	3	66	LF GLAZING DAMAGE FROM OCCUPANT CONTACT

18	GLOCCLR	Num	3	69	LR GLAZING DAMAGE FROM OCCUPANT CONTACT
19	GLOCCOTH	Num	3	72	OTHER GLAZING DAMAGE FROM OCC. CONTACT
20	GLOCCRF	Num	3	75	RF GLAZING DAMAGE FROM OCCUPANT CONTACT
21	GLOCCRR	Num	3	78	RR GLAZING DAMAGE FROM OCCUPANT CONTACT
22	GLOCCRUF	Num	3	81	ROOF GLAZING DAMAGE FROM OCC. CONTACT
23	GLOCCWS	Num	3	84	WS GLAZING DAMAGE FROM OCCUPANT CONTACT
52	GLOVOPEN	Num	3	168	DID GLOVE COMPARTMENT DOOR OPEN
24	GLPREBL	Num	3	87	BL WINDOW PRECRASH GLAZING STATUS
25	GLPRELF	Num	3	90	LF WINDOW PRECRASH GLAZING STATUS
26	GLPRELR	Num	3	93	LR WINDOW PRECRASH GLAZING STATUS
27	GLPREOTH	Num	3	96	OTHER WINDOW PRECRASH GLAZING STATUS
28	GLPRERF	Num	3	99	RF WINDOW PRECRASH GLAZING STATUS
29	GLPRERR	Num	3	102	RR WINDOW PRECRASH GLAZING STATUS
30	GLPRERUF	Num	3	105	ROOF WINDOW PRECRASH GLAZING STATUS
31	GLPREWS	Num	3	108	WS WINDOW PRECRASH GLAZING STATUS
32	GLTYPBL	Num	3	111	BL TYPE OF WINDOW/WINDSHIELD GLAZING
33	GLTYPLF	Num	3	114	LF TYPE OF WINDOW/WINDSHIELD GLAZING
34	GLTYPLR	Num	3	117	LR TYPE OF WINDOW/WINDSHIELD GLAZING
35	GLTYPOTH	Num	3	120	OTHER TYPE OF WINDOW/WINDSHIELD GLAZING
36	GLTYPRF	Num	3	123	RF TYPE OF WINDOW/WINDSHIELD GLAZING
37	GLTYPRR	Num	3	126	RR TYPE OF WINDOW/WINDSHIELD GLAZING
38	GLTYPRUF	Num	3	129	ROOF TYPE OF WINDOW/WINDSHIELD GLAZING
39	GLTYPWS	Num	3	132	WS TYPE OF WINDOW/WINDSHIELD GLAZING
55	INCOMP1	Num	3	177	1ST INTRUDING COMPONENT
59	INCOMP2	Num	3	189	2ND INTRUDING COMPONENT
63	INCOMP3	Num	3	201	3RD INTRUDING COMPONENT
67	INCOMP4	Num	3	213	4TH INTRUDING COMPONENT
71	INCOMP5	Num	3	225	5TH INTRUDING COMPONENT
75	INCOMP6	Num	3	237	6TH INTRUDING COMPONENT
79	INCOMP7	Num	3	249	7TH INTRUDING COMPONENT
83	INCOMP8	Num	3	261	8TH INTRUDING COMPONENT
87	INCOMP9	Num	3	273	9TH INTRUDING COMPONENT
91	INCOMP10	Num	3	285	10TH INTRUDING COMPONENT
54	INLOC1	Num	3	174	1ST LOCATION OF INTRUSION
58	INLOC2	Num	3	186	2ND LOCATION OF INTRUSION
62	INLOC3	Num	3	198	3RD LOCATION OF INTRUSION
66	INLOC4	Num	3	210	4TH LOCATION OF INTRUSION
70	INLOC5	Num	3	222	5TH LOCATION OF INTRUSION
74	INLOC6	Num	3	234	6TH LOCATION OF INTRUSION
78	INLOC7	Num	3	246	7TH LOCATION OF INTRUSION
82	INLOC8	Num	3	258	8TH LOCATION OF INTRUSION
86	INLOC9	Num	3	270	9TH LOCATION OF INTRUSION
90	INLOC10	Num	3	282	10TH LOCATION OF INTRUSION
56	INMAG1	Num	3	180	1ST MAGNITUDE OF INTRUSION
60	INMAG2	Num	3	192	2ND MAGNITUDE OF INTRUSION
64	INMAG3	Num	3	204	3RD MAGNITUDE OF INTRUSION
68	INMAG4	Num	3	216	4TH MAGNITUDE OF INTRUSION
72	INMAG5	Num	3	228	5TH MAGNITUDE OF INTRUSION
76	INMAG6	Num	3	240	6TH MAGNITUDE OF INTRUSION
80	INMAG7	Num	3	252	7TH MAGNITUDE OF INTRUSION
84	INMAG8	Num	3	264	8TH MAGNITUDE OF INTRUSION
88	INMAG9	Num	3	276	9TH MAGNITUDE OF INTRUSION
92	INMAG10	Num	3	288	10TH MAGNITUDE OF INTRUSION
93	ODOMETER	Num	3	291	ODOMETER READING
40	OPENLF	Num	3	135	LF DOOR, TAILGATE OR HATCH OPENING
41	OPENLR	Num	3	138	LR DOOR, TAILGATE OR HATCH OPENING
42	OPENRF	Num	3	141	RF DOOR, TAILGATE OR HATCH OPENING
43	OPENRR	Num	3	144	RR DOOR, TAILGATE OR HATCH OPENING
44	OPENTG	Num	3	147	TG DOOR, TAILGATE OR HATCH OPENING
94	PANELDAM	Num	3	294	INSTRUMENT PANEL DAMAGE - OCC. CONTACT
45	PASINTEG	Num	3	150	PASSENGER COMPARTMENT INTEGRITY
46	PSU	Num	3	153	PRIMARY SAMPLING UNIT NUMBER
95	RATWGT	Num	8	0	RATIO INFLATION FACTOR
96	RATWGT_U	Num	8	8	RATIO INFLATION FACTOR UNTRIMMED

97	RDEFLOC	Num	3	297	LOCATION STEERING RIM/SPOKE DEFORMATION
98	RIMDEF	Num	3	300	STEERING RIM/SPOKE DEFORMATION
47	STRATIF	Char	1	20	CASE STRATUM
48	VEHNO	Num	3	156	VEHICLE NUMBER
102	VERSION	Num	3	312	VERSION NUMBER

-----Sort Information-----

Sortedby: PSU CASENO VEHNO
Validated: YES
Character Set: ANSI

APPENDIX A

DATA COLLECTION FORMS
(These forms can be found in the NASS Data Collection, Coding and Editing Manual)

APPENDIX B

CODING INFORMATION FOR VEHICLE MAKE/MODEL
(The complete codes can be found in the NASS Data Collection, Coding and Editing Manual)

The primary source of information on vehicle make and model is vehicle inspection; the VIN provides vehicle make data. Secondary sources include the police report and interviews. If the make of the vehicle is known and the model is not known, but the vehicle type (e. g., passenger car) is known, then Vehicle Model is coded as "399" (Unknown automobile). If the make of the vehicle is not known but the body type is known (e.g., a hit-and-run 2-door sedan), then Vehicle Make is coded "99" (Unknown) and Vehicle Model is coded "399" (Unknown automobile). If no information is available for a vehicle, then Vehicle Make and Body Type are coded "99" (Unknown) and Vehicle Model is coded "999" (Unknown). Vehicle models are organized into general groups. These groups are:

001-397 - Passenger vehicle (automobile)

398 - Other automobile

399 - Unknown automobile

401-490 - Light trucks (including compact and large utility vehicles, utility station wagons, minivans, large vans [includes step vans and van derivatives], compact pickup trucks, and large pickup trucks)

498 - Other light truck

499 - Unknown light truck

701-739 - Motored Cycles/ATCs/ATVs (including motorcycles, mopeds, minibikes, motorscooters and dirt bikes) (701 - 709 Motorcycles/Mopeds) (731 - 739 ATCs/ATVs)

798 - Other motored cycle

799 - Unknown motored cycle

801-890 - Medium/heavy trucks (includes all trucks over 10,000 lbs. GVWR except some pickup type trucks under Body Type code "31" -Large pickup)

898 - Other medium/heavy truck

899 - Unknown medium/heavy truck

901-983 - Buses

988 - Other bus

989 - Unknown bus

998 - Other vehicle (includes construction equipment, farm vehicles and go-karts)

999 - Unknown vehicle

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, medium/heavy trucks, buses and other vehicles have specific definition. These definitions are:

Motored Cycles
701 0-50cc
702 51-124cc
703 125-349cc
704 350-449cc
705 450-749cc
706 750cc or greater
709 Unknown cc

All Terrain Cycles/Vehicles
731 0-50cc
732 51-124cc
733 125-349cc
734 350cc or greater
739 Unknown cc

Trucks and Buses
850 M/H truck based motor home
881 Medium/Heavy - CBE
882 Medium/Heavy - COE/low entry
883 Medium/Heavy - COE/high entry
884 Medium/Heavy - Unknown engine location
890 Medium/Heavy - COE entry position unknown
950 Truck based motor home
981 Bus - conventional front engine
982 Bus - front engine/flat front
983 Bus - rear engine/flat front

Other
398 Other automobile
498 Other light truck
798 Other motored cycle
898 Other medium/heavy truck
988 Other bus
998 Other vehicle (farm vehicle, go-kart)

Unknown
399 Unknown automobile
499 Unknown light truck
799 Unknown motored cycle
899 Unknown medium/heavy truck
989 Unknown bus
999 Unknown vehicle

APPENDIX C

MISSING RECORD RULES

Under the NASS Crashworthiness Data System (CDS) the rules for the presence or absence of forms (records) in a crash will depend on whether data exists or has been collected. For example, if a vehicle is not inspected there will not be an Exterior Vehicle record; if an occupant does not have a recorded injury there will not be an Occupant Injury record. In the current year NASS CDS, at least one of each record type will be required for a crash which includes a towed, inspected, CDS applicable vehicle involved in a CDC applicable event (or CDC is blank) with an occupant having a recorded injury. The rules for the presence and absence of each record type and whether partial or complete are as follows:

Accident Record — One required for every crash.

Accident Event Record — At least one required for every crash.

General Vehicle Record

- Complete Record: One required for every CDS applicable vehicle (GV07=01-49).
- Partial Record: One required (completed through variable GV36) for every non CDS applicable vehicle (GV07=50-99).

Exterior Vehicle Record

- Complete Record: One required for every inspected (GV67=1-3) CDS applicable vehicle (GV07=01-49) involved in a CDC applicable event.
- Partial Record: One required for every inspected CDS applicable vehicle not involved in a CDC applicable event (variables EV04-19 will be blank).
- Missing Record: (1) Not inspected (GV67=0) CDS applicable vehicle.
  (2) Non CDS applicable vehicle (GV07=50-99).

Interior Vehicle Record

- Complete Record: Towed (GV10=1), inspected (GV67=1-3), CDS applicable vehicle (GV07=01-49).
- Missing Record: (1) Towed, not inspected (GV67=0) CDS applicable vehicle.
  (2) Not towed (GV10=0 or 9) CDS applicable vehicle.
  (3) Non CDS applicable vehicle (GV07=50-99).

Occupant Assessment

- Complete Record: Towed (GV10=1), CDS applicable vehicle (GV07=01-49).
- Missing Record: (1) Not towed (GV10=0 or 9), CDS applicable vehicle.
  (2) Non CDS applicable vehicle (GV07=50-99).

Occupant Injury Record

- Complete Record: Towed (GV10=1), CDS applicable vehicle (GV07=01-49) with an occupant having a recorded injury (OA70=01-96).
- Missing Record: (1) Towed, CDS applicable vehicle with occupant not having a recorded injury (OA70=00,97,99).
  (2) Not towed (GV10=0 or 9), CDS applicable vehicle.
  (3) Non CDS applicable vehicle (GV07=50-99).

APPENDIX D

CDC AND DELTA-V

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

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

Clock Direction is coded as follows:

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

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

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

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

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

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

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

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

Vertical - Front, Rear, or Side Impacts

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

Lateral - Top and Undercarriage Impacts

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

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

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

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

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

Delta-V.

NASS-CDS uses a computer model that provides a measure of crash severity in terms of delta-v. In vehicle-to-vehicle crashes, the model assumes that the two vehicles approach each other at an impact velocity, reach a common velocity, and then separate. Delta-v is equal to the impact velocity minus the separation velocity. Other factors being equal, the greater the delta-v during a collision, the greater the potential for occupant injury.

Delta-V = Impact Velocity – Separation Velocity

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 axes of that vehicle.

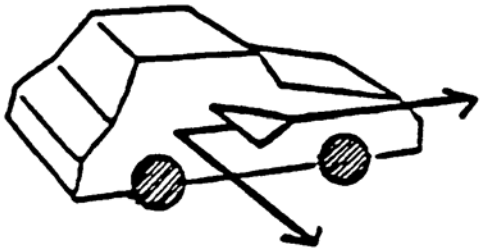

Figure D-1

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

APPENDIX E

SELECTED COUNTS

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

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

Total Number of Type Accident Records.....	4,481
Total Number of Accident Description Records.....	51,193
Total Number of Vehicle Profile Records.....	8,018
Total Number of Person Profile Records.....	19,736
Total Number of Accident Records.....	4,481
Total Number of Accident Event Records.....	8,482
Total Number of General Vehicle Records.....	7,907
Total Number of Exterior Vehicle Records.....	5,915
Total Number of Interior Vehicle Records.....	5,241
Total Number of Occupant Assessment Records.....	9,859
Total Number of Occupant Injury Records.....	27,855

(1) PSU Codes
(2) PSU Description
(3) Population (2000 & 1990)
(4) Land Area (Square Miles)
(5) Population (by Age Group)
(6) Number of Workers and Means of Transportation to Work
(7) Number of Housing Units and Vehicles Available

Demographics data on the 27 PSU's are included to give researchers supplementary information on the nature of the PSU's when analyzing NASS data.

All data was taken from 2000 U.S. Census figures available at **http://factfinder.census.gov** .

POPULATION
Table GCT-PH1 of the Census 2000 Summary File 1 (SF1) - Population, Housing Units, Area, and Density: 2000.

POPULATION BY AGE GROUP
Table DP-1 of the Census 2000 Summary File 1 (SF1) - Profile of General Demographic Characteristics: 2000.

WORKERS AND MEANS OF TRANSPORTATION TO WORK
Table DP-3 of the Census 2000 Summary File 3 (SF3) - Sample Data - Profile of Selected Economic Characteristics: 2000.

HOUSING UNITS AND AVAILABILITY
Table H44 of the Census 2000 Summary File (SF3) - Sample Data - Tenure By Vehicles Available - Universe: Occupied housing units.

PRIMARY SAMPLING UNIT (PSU) CODES AND DESCRIPTION

VALUES	STRATA	DESCRIPTION
03, 06, 41, 49,	1	Central City, one of the 60 largest
72, 74, 79, 82		SMSAs
05, 08, 09, 12, 42, 45, 47, 50, 73, 75, 81	2	Suburban, one of the 17 - 60th largest SMSAs or PSU within 61st - 119th largest SMSAs either containing or not containing a central city.
02, 04, 11, 13, 43, 48, 76, 78	3	Other PSU

SMSA – (Standard Metropolitan Statistical Area) – A standard Census Bureau designation of the region around a city in the United States, collected from a variety of sources.

2000 Census: POPULATION

PSU	2000	1990	% Change	Land Area
P02	177,749	165,304	7.5	1,126
P03	2,465,326	2,300,664	7.2	71
P04	510,916	433,203	17.9	636
P05	750,097	678,111	10.6	483
P06	1,517,550	1,585,577	-4.3	136
P08	947,103	966,570	-2.0	675
P09	922,061	830,422	11.0	946
P11	322,895	282,937	14.1	710
P12	436,141	430,459	1.3	640
P13	170,200	158,983	7.1	509
P41	291,754	271,074	7.6	55
P42	2,253,362	1,937,094	16.3	1,946
P43	627,846	423,380	47.3	832
P45	382,032	335,749	13.8	508
P47	340,151	266,995	21.5	3,515
P48	185,701	167,098	11.1	1,947
P49	1,188,580	1,006,877	18.0	331
P50	2,218,899	1,852,810	19.8	880
P72	2,896,016	2,783,726	4.0	228
P73	484,564	475,594	1.9	497
P74	463,585	416,444	11.3	331
P75	531,813	441,500	20.5	922
P76	93,371	74,778	24.9	11,244
P78	179,741	120,739	48.9	10,014
P79	5,362,996	4,948,333	8.4	3,554
P81	1,173,660	991,060	18.4	2,044
P82	563,374	516,259	9.1	84
PSU TOTAL	**27,457,483**	**24,861,740**	**9.5**	**44,864**
USA	**281,421,906**	**248,709,873**	**13.2**	

Table: GCT-PH1. Population, Housing Units, Area, and Density: 2000
Data Set: Census 2000 Summary File 1 (SF 1)

2000 Census: POPULATION BY AGE GROUP

PSU	< 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 44	45 to 64	>= 65
P02	9,758	12,127	12,610	12,070	10,735	9,831	43,000	43,907	23,711
P03	182,599	189,677	182,866	177,281	183,217	197,427	560,887	508,714	282,658
P04	32,181	34,396	33,898	28,690	23,528	25,579	107,397	111,987	113,260
P05	47,290	51,341	52,874	45,759	36,970	45,816	183,068	175,182	111,797
P06	98,161	112,111	112,726	110,701	117,609	114,353	330,421	307,746	213,722
P08	53,747	60,381	63,781	55,840	41,122	50,939	216,582	231,502	173,382
P09	66,543	74,014	70,022	66,485	64,643	67,372	237,205	204,424	71,353
P11	20,130	20,296	19,630	27,987	38,444	27,705	75,935	66,497	26,271
P12	31,622	35,181	33,562	31,279	26,698	28,973	100,435	97,784	50,607
P13	11,675	13,307	13,783	12,69	10,247	10,619	38,717	37,286	21,887
P41	16,293	16,946	16,458	15,730	15,349	20,032	73,539	69,942	47,465
*P42	145,752	157,871	160,754	154,989	144,721	337,433	361,966	489,324	300,552
P43	45,142	46,090	43,320	41,020	48,939	55,998	173,074	127,891	46,372
P45	23,371	23,984	23,846	26,976	31,408	27,396	88,561	88,075	48,415
*P47	23,554	19,361	24,846	22,981	20,229	49,911	56,409	61,439	37,270
P48	12,041	12,383	12,144	15,965	20,547	13,948	38,755	38,940	20,978
P49	98,785	89,942	79,546	81,733	106,190	126,340	293,702	210,041	102,301
*P50	181,951	175,763	165,025	161,126	172,678	399,345	364,860	419,279	178,872
P72	218,522	224,012	200,802	200,962	239,252	280,558	685,909	547,196	298,803
P73	34,639	36,745	35,954	36,423	30,870	30,506	106,668	109,525	63,234
P74	34,293	34,241	34,050	34,145	34,163	36,246	108,314	97,338	50,795
P75	33,549	37,199	39,932	36,952	29,737	34,120	136,634	132,545	51,096
P76	6,428	7,091	7,646	7,374	2,117	2,165	9,265	13,576	10,159
P78	13,679	14,470	14,236	13,177	12,127	10,800	34,217	35,491	31,544
P79	413,077	462,861	432,407	398,292	366,253	400,894	1,401,078	1,156,230	569,544
P81	79,106	86,703	86,567	78,613	65,583	79,986	305,921	277,216	113,965
P82	26,215	24,459	23,425	29,648	51,014	61,809	155,550	123,447	67,807
PSU Totals	**1,960,103**	**2,072,952**	**1,996,710**	**1,924,877**	**1,944,390**	**2,546,101**	**6,288,069**	**5,782,524**	**3,127,820**

Table: DP-1. Profile of General Demographic Characteristics: 2000

Data Set: Census 2000 Summary File 1 (SF 1)

* Instead of breakdown for age groups 25-29 and 30-44, numbers reflect age groups of 25-34 and 35-44.

2000 Census: WORKERS AND MEANS OF TRANSPORTATION TO WORK

NOTE: This table will be updated as new Census information is released.

PSU	Workers (16 & Older)	Number Using Car/Truck/Van (drove alone)	% Using Car/Truck/Van (drove alone)	Number Using Car/Truck/Van (carpool)	% Using Car/Truck/Van (carpool)	Number Using Public Transit (incl. taxi)	% Using Public Transit (incl. Taxi)	Number Walked	% Walked	Number Other (incl. Work at home)	% Other
P02	81,726	63,804	78.1%	8,459	10.4%	1,803	2.2%	3,079	3.8%	4,581	5.6%
P03	901,027	202,070	22.4%	72,231	8.0%	517,635	57.4%	78,933	8.8%	30,158	3.4%
P04	209,328	173,156	82.7%	21,991	10.5%	4,071	1.9%	3,220	1.5%	6,890	3.3%
P05	379,832	337,317	88.8%	31,393	8.2%	16,555	4.4%	9,963	2.6%	15,122	4.0%
P06	569,761	280,315	49.2%	73,156	12.8%	144,936	25.4%	51,564	9.1%	14,443	2.5%
P08	582,362	419,829	72.1%	58,512	10.0%	61,085	10.5%	24,006	4.1%	17,773	3.1%
P09	459,392	313,103	68.2%	74,145	16.1%	48,805	10.6%	9,358	2.1%	13,690	3.0%
P11	169,169	128,514	76.0%	14,386	8.5%	5,494	3.2%	12,445	7.4%	6,648	3.9%
P12	187,587	158,120	84.3%	19,845	23.1%	2,319	1.2%	2,307	1.2%	4,838	2.6%
P13	75,376	63,303	84.0%	7,831	10.4%	417	0.6%	1,065	1.4%	2,564	3.4%
P41	134,620	102,834	76.4%	16,339	12.1%	5,471	4.1%	2,880	2.1%	5,750	4.3%
P42	899,323	663,902	73.8%	131,302	14.6%	47,087	5.2%	19,367	2.2%	13,516	1.5%
P43	338,602	274,674	81.1%	37,823	11.2%	4,153	1.2%	5,847	1.7%	15,156	4.5%
P45	184,824	156,194	84.5%	17,017	9.2%	1,286	0.7%	4,113	2.2%	5,883	3.2%
P47	154,890	130,179	84.0%	17,992	11.6%	394	<1.0%	1579	1.0%	916	<1.0%
P48	81,167	67,797	83.5%	9,074	11.2%	398	0.5%	1,731	2.1%	2,167	2.7%
P49	537,006	380,265	70.8%	95,437	17.8%	29,361	5.5%	10,466	1.9%	20,498	3.8%
P50	1,038,779	777,372	75%	167,270	16.1%	36,925	3.6%	17,390	1.7%	11,444	1.1%
P72	1,192,139	597,598	50.1%	172,722	14.5%	310,924	26.1%	67,556	5.7%	43,339	3.7%
P73	208,957	168,666	80.7%	23,566	11.3%	6,707	3.2%	4,136	2.0%	5,517	2.6%
P74	433,600	354,993	81.9%	46,692	10.8%	7,597	1.8%	9,537	2.2%	14,781	3.4%
P75	289,302	230,033	79.5%	28,848	10.0%	9,514	3.3%	3,762	1.3%	17,145	5.9%
P76	31,587	23,353	73.9%	5,280	16.7%	98	0.3%	1,110	3.5%	1,547	4.9%
P78	51,675	49,081	95.0%	9,264	17.9%	588	1.1%	2,678	5.2%	2,015	3.9%
P79	3,858,750	2,714,944	70.4%	582,020	15.1%	254,091	6.6%	113,004	2.9%	163,918	4.2%
P81	911,677	626,576	68.7%	109,573	12.0%	87,298	9.6%	33,137	3.6%	45,441	5.0%
P82	316,493	178,964	56.5%	35,387	11.2%	55,652	17.6%	23,291	7.4%	16,251	5.1%

Table: DP-3. Profile of Selected Economic Characteristics: 2000

Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

2000 Census: HOUSING UNITS AND AVAILABILITY

NOTE: This table will be updated as new Census information is released.

PSU	All Occupied Housing Units	Number With No Vehicle Available	% With No Vehicles Available	Number With 1 Vehicle Available	% With 1 Vehicle Available	Number with 2+ Vehicles Available	% With 2+ Vehicles Available
P02	67,499	5,706	9.7%	23,541	34.9%	38,252	56.7%
P03	880,727	501,803	57.0%	291,238	33.1%	87,686	10.0%
P04	200,402	16,574	8.3%	79,234	39.5%	104,594	52.2%
P05	286,098	18,151	6.3%	93,845	32.8%	174,102	60.9%
P06	590,071	210,866	35.7%	248,085	42.1%	131,120	22.2%
P08	537,150	87,279	16.2%	211,896	39.4%	237,975	44.3%
P09	328,278	31,988	9.7%	121,003	36.9%	175,287	53.4%
P11	125,327	8,527	6.8%	45,755	36.5%	71,045	56.7%
P12	169,825	13,305	7.8%	60,404	35.6%	96,116	56.6%
P13	63,330	4,673	7.4%	21,153	33.4%	37,504	59.2%
P41	126,073	15,402	12.2%	62,406	49.5%	50,268	39.9%
P42	776,774	111,323	14.3%	301,500	38.8%	363,951	46.9%
P43	242,040	11,818	4.9%	77,582	32.1%	152,640	63.1%
P45	157,872	11,696	7.4%	53,588	33.9%	92,588	58.6%
P47	129,417	7624	5.8%	34,895	27.0%	86,898	67.1%
P48	71,938	6,126	8.5%	24,362	33.9%	41,450	57.6%
P49	451,697	49,163	10.9%	207,737	46.0%	194,797	43.1%
P50	807,621	65,257	8.1%	325,310	40.1%	417,054	51.6%
P72	1,061,928	306,336	28.8%	461,677	43.5%	293,908	27.7%
P73	181,633	19,324	10.6%	66,018	36.3%	96,291	53.0%
P74	339,052	31,368	9.3%	126,465	37.3%	181,219	53.4%
P75	208,110	8,390	4.0%	59,792	28.7%	139,928	67.2%
P76	33,373	2,526	7.6%	11,764	35.3%	19,083	57.2%
P78	62,210	4,352	7.0%	25,070	40.3%	32,788	52.7%
P79	3,133,774	393,309	12.6%	1,158,027	37.0%	1,582,438	50.5%
P81	710,916	66,244	9.3%	251,637	35.4%	393,035	55.3%
P82	258,510	42,180	16.3%	109,813	42.5%	106,517	41.2%

Table: H44. TENURE BY VEHICLES AVAILABLE [15] - Universe: Occupied housing units

Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data