NATIONAL ACCIDENT SAMPLING SYSTEM (NASS)

Analytical User's Manual
1979 FILE

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U.S. Department of Transportation
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National Center for Statistics and Analysis
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NASS/SAS AND NASS/TPL

User's Guide

1979

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Section 1

NASS/SAS

1.1 Introduction

The Statistical Analysis System (SAS) is a highly flexible statistical package that provides, in addition to an excellent array of statistical procedures, a high level programming language for creating and modifying data and producing reports, a statistical programming language for efficient matrix manipulation, and data management facilities. This data management capability gives the knowledgeable user many of the features of the relational database model without the high overhead typically associated with database systems.

SAS for NASS has been implemented by storing the 1979 NASS master file as a SAS data base. This data base is made up of five individual SAS data sets, one for each of the five NASS record types. In the language of the relational database model, these five SAS data sets are "relations" (although not in normal form and having a specified order for the observations in each "relation"). Through the use of SAS commands such as MERGE and KEEP, relational database concepts such as "join" and "projection" can be effected.

These relational database capabilities in SAS allow the hierarchical structure of the NASS master file to be fully explored by the data analyst. Using an appropriate set of SAS commands within a DATA step, an analyst can create a new SAS data set containing information from several levels of the NASS hierarchy, e.g., driver and occupant data. Since the structure of the SAS data base is not pre-defined, it is possible to combine the data

from the five NASS record types in any way that is supportable from the data elements contained in these records. Sub-section 1.4 contains a description of SAS MACRO commands that have been defined to allow users to easily create new data sets that exploit the NASS data hierarchy. The MACROs form a rudimentary NASS "user language" which will be augmented as future needs dictate.

1.2 SAS Data Base Contents

The variables in the NASS/SAS data base are named by the data collection form identifier for that data field. The SAS data base is generally an exact representation of the data contained on the NASS master file. The only exceptions are the following:

- A01, etc. (PSU number) are called H01 (for Header variable); similarly for H02-05.
- H02 is also represented separately as H02A (the sequential portion) and H02B (the initial stratification).
- The vehicle number (V06, D06, and O06) is called H06 and is found only on the vehicle, driver and occupant data sets.
- H07 is the PSU inflation factor; H08 is the national inflation factor; both are stored as decimal values, and have an output format of 8.2. See Appendix A
- Year of accident (A06) is called H09; like all header variables except H06, it is found in all SAS data sets.
- Numeric variables for which 9, 99, etc. represents "unknown" are recoded to the SAS special missing value .U ("dot-u"); numeric variables for which 8, 98, etc. represents "not applicable" are recoded to .A; and a value of 97 for P66 or D24 ("not tested" in regards to blood alcohol level) has been recoded to .T.
- A11 (sampling interval) is stored as a decimal value, and has an output format of 6.2.
- Hour of day (time of accident, A18) is stored as a SAS time value, and has an output format of HHMM5.

- The accident data set contains the variable SHORT indicating that a short vehicle form was completed for a non-towaway accident.

- P19 and 022 (variables which were deleted in 1979) are not found in the SAS data base.

All variables in the SAS data sets are numeric unless the data field contains valid non-numeric characters.

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). The user is encouraged to invoke PROC CONTENTS for a more detailed look at the SAS data sets for 1979 NASS.

1.3 Executing NASS/SAS

A standard job stream (stored in a CMS file called N79SAS JCL A) for use with the Informatics XMIT command is shown below for your reference. This is the job stream used by NCSA analysts.

```
/*SETUP        DEVICE=MD11,ID=NCHS54
/*RESOURCE     MAXCORE=320K,MAX3330=1
// EXEC SAS,REGION=320K
//NASS DD DSN=NASS.ANALYSIS.MAST79.SAS.V4.FEB0481,DISP=SHR
//SYSIN DD *
/*INSERT MACLIB SAS A

     *THESE MACROS MUST BE CHANGED AS APPROPRIATE;
MACRO MACID 1979 ANALYSIS FILE CASES, FEB0481 %
     *THE NEXT TWO MACROS SHOULD BE CHANGED TOGETHER;
     *TO REFLECT THE WEIGHTING FACTOR USED IN THE;
     *PROC FREQS AND TO CHANGE THE TITLE ACCORDINGLY;
MACRO MACWGT H08  %
MACRO MACTITLE WEIGHTED BY NATIONAL INFLATION FACTOR H08 %

=PARAM
```

Note: The user inserts the MACRO named FILEID in his/her SAS program (e.g., in a TITLE statement) to identify the file being used in the printed output. On the Informatics System the NCSA user would create a file of SAS source statements using the CMS editor (e.g., MYJOB SAS A) and then queue this program for execution by sending it to the OS batch system:

XMIT N79SAS USING MYJOB SAS A

The USING clause effects a substitution for the =PARAM lline in the job stream. Section 1.6 below offers examples of job submissions.

1.4 The SAS MACRO Facility

The MACRO facility in SAS allows the user to define a segment of SAS statements or parts of statements (of any length) and then to refer to this segment at any subsequent point in the SAS job. This facility has several uses:

- it allows one to save effort when coding SAS programs with repetitions;
- it allows one to group frequently changed items to the beginning of the SAS source statements where they can easily be changed (e.g., the MACRO called _FILEID in the job stream N79SAS JCL A); or
- it allows one to define single word commands to evoke a complex series of SAS DATA and PROC steps.

It is the latter usage which is most interesting for NASS/SAS users since it allows them to use pre-defined MACRO commands as a kind of primitive "user language." Other MACROs embedded within these MACRO commands allow the user to pass symbolic parameters to the MACRO command in order to control processing. These pre-defined NASS/SAS MACROs are referenced in the job stream on the previous page as the CMS file MACLIB SAS A (which is INSERTed into the job stream after the SYSIN DD). When the user concatenates his/her SAS source statements to these MACROs in the SYSIN stream, he/she will see the following at the beginning of the SAS log for that job:

```
OPTIONS NOSOURCE;     *----------MACEXACT----------;
OPTIONS NOSOURCE;     *----------MACMED----------;
OPTIONS NOSOURCE;     *----------MACAIS----------;
OPTIONS NOSOURCE;     *----------MACSAMF----------;
OPTIONS NOSOURCE;     *----------MACMERG1----------;
OPTIONS NOSOURCE;     *----------MACMERG2----------;
OPTIONS NOSOURCE;     *----------MACMERG3----------;
OPTIONS NOSOURCE;     *----------MACPRINT----------;
OPTIONS NOSOURCE;     *----------MACMOD----------;
```

This indicates that the MACROs listed were available for use during that SAS job. Any of these MACROs which are used will have documentation printed.

The following is an example of what the user would see if he/she had used the NASS/SAS MACRO called MACEXACT:

```
261
262          *--------------------TAKE A RANDOM SAMPLE OF 300 ACCIDENTS----------------;
263       %MACRO _DSIN  NASS.ACCIDENT  %
264       %MACRO _DSOUT  ACC_SAMP  %
265       %MACRO _NSAMP  300  %
8         *+++++++++++++++++++++++++++++++++M A C E X A C +++++++++++++++++++++++++++++++++* 1-%MACEXACT
9         *I                                                                               I 1-%MACEXACT
10        *I THIS MACRO CREATES A SAS DATASET CONTAINING AN EXACT SIZED RANDOM SAMPLE OF   I 1-%MACEXACT
11        *I OBSERVATIONS FROM ANOTHER SAS DATASET, KEEPING ALL VARIABLES. USE OF THIS     I 1-%MACEXACT
12        *I %MACRO REQUIRES PRIOR SPECIFICATION OF                                        I 1-%MACEXACT
13        *I                                                                               I 1-%MACEXACT
14        *I       %MACRO _DSIN  X                                                         I 1-%MACEXACT
15        *I       %MACRO _DSOUT  Y                                                        I 1-%MACEXACT
16        *I       %MACRO _NSAMP  Z                                                        I 1-%MACEXACT
17        *I                                                                               I 1-%MACEXACT
18        *I            WHERE  X  IS THE SAS DATASET BEING SAMPLED FROM  (DEFAULT: _LAST_) I 1-%MACEXACT
19        *I                   Y  IS THE SAS DATASET CONTAINING THE RANDOM SAMPLE          I 1-%MACEXACT
20        *I                      (DEFAULT: _DATA_)                                        I 1-%MACEXACT
21        *I                   Z  IS THE SAMPLE SIZE (NO DEFAULT)                          I 1-%MACEXACT
22        *I                                                                               I 1-%MACEXACT
23        *+++++++++++++++++++++++++++++++++++++++++++++++KAPPA SYSTEMS, INC. 20SEP79+++++++; 1-%MACEXACT
          *                                                                                  1-%MACEXACT
          *OPTIONS NOMACROGEN;                                                               1-%MACEXACT

NOTE: DATA SET WORK.ACC_SAMP HAS 300 OBSERVATIONS AND 52 VARIABLES, 105 OBS/TRK.
NOTE: THE DATA STATEMENT USED 1.66 SECONDS AND 136K.

266       %MACEXACT
```

Note the use of several conventions: all pre-defined MACRO commands begin with MAC and all MACROs used as symbolic parameters within the MACRO command begin with an underscore (these MACROs, such as _NSAMP should not be confused with SAS automatic variables such as _N_).

The MACRO file available to NASS/SAS users currently contains the following MACROs:

MACEXACT	Creates an exact sized random sample of observations
MACMED	Report of weighted medians for selected NASS variables
MACAIS	Tables of selected NASS accident level variables by most severe injury for the accident

MACSAMP	Creates an approximate-sized (percentage) random sample of NASS accidents
MACMERG1	Merges NASS driver and occupant data sets
MACMERG2	Merges a NASS vehicle data set with driver or occupant level data sets
MACMERG3	Merges an accident level data set with any other NASS SAS data set(s)
MACPRINT	Prints the first 20 records of any NASS SAS data set (called by MACMERG1, MACMERG2, MACMERG3, and MACAGG)
MACAGG	Aggregates any NASS non-accident level data set to the accident level

Other MACROs will be defined as required. The following pages give the more detailed documentation for each of the above MACROs.

```
*****************************************************************************
********** M A S S / S A S   M A C R O   F I L E **********
*****************************************************************************;


+-----------------------------M A C S A M P-------------------------------+
I                                                                           I
I THIS MACRO RANDOMLY SELECTS ACCIDENTS ON ANY MERGED OR UNMERGED MASS/SAS  I
I DATASET.  THE FOLLOWING MACRO DECLARATION MUST BE MADE PRIOR TO USING     I
I MACSAMP:                                                                  I
I                                                                           I
I                  MACRO _SAMPLE  Y  %                                      I
I                                                                           I
I                       WHERE  Y  IS THE SAMPLE PERCENTAGE (RANGE: 0 - 100) I
I                                                                           I
I     NOTE:  IF MACSAMP IS USED OUTSIDE THE MERGING MACROS, BE SURE TO FOLLOW I
I            THE SET STATEMENT WITH A BY STATEMENT (SPECIFYING H01 AND H02). I
I                                                                           I
+-------------------------------------------KAPPA SYSTEMS, INC. 10APR79---;


+-----------------------------M A C M E R G 1-----------------------------+
I                                                                           I
I THIS MACRO PERFORMS A MERGE OF DRIVER RECORD INFO ONTO THE OCCUPANT RECORD I
I OF THE DRIVER.  THE FOLLOWING MACRO DECLARATIONS MUST BE MADE PRIOR TO USING I
I MACMERG1:                                                                 I
I                                                                           I
I                  MACRO _DSNAME  V  %                                      I
I                  MACRO _DROP    X  %                                      I
I                  MACRO _SAMPLE  Y  %                                      I
I                  MACRO _INSERT  Z  %                                      I
I                                                                           I
I                       WHERE  V  IS THE NAME OF THE DATASET BEING CREATED  I
I                              X  IS THE LIST OF VARIABLES TO BE DROPPED     I
I                              Y  IS THE SAMPLE PERCENTAGE (RANGE: 0-100)    I
I                              Z  ARE ANY NEEDED PROGRAM STATEMENTS          I
I                                                                           I
I     NOTE:  TO SELECT THE MERGED DRIVER/OCCUPANT RECORDS OF DRIVERS ONLY, USE I
I            THE PROGRAM STATEMENT   IF DR   IN THE _INSERT MACRO.          I
I                                                                           I
+-------------------------------------------KAPPA SYSTEMS, INC. 14APR79---;


+-----------------------------M A C M E R G 2-----------------------------+
I                                                                           I
I THIS MACRO PERFORMS A MERGE OF VEHICLE RECORDS WITH DRIVER OR OCCUPANT     I
I RECORDS, OR WITH THE DATASET CREATED BY MACMERG1.  THE FOLLOWING MACRO     I
I DECLARATIONS MUST BE MADE PRIOR TO USING MACMERG2:                        I
I                                                                           I
I                  MACRO _DSNAME  V  %                                      I
I                  MACRO _MERGE   W  %                                      I
I                  MACRO _DROP    X  %                                      I
I                  MACRO _SAMPLE  Y  %                                      I
I                  MACRO _INSERT  Z  %                                      I
I                                                                           I
I                       WHERE  V  IS THE NAME OF THE DATASET BEING CREATED  I
I                              W  IS THE NAME OF THE DATASET TO BE MERGED    I
I                                 WITH THE VEHICLE DATASET (OCCUPANT, DRIVER, I
I                                 OR THE DATASET CREATED BY MACMERG1)       I
I                              X  IS THE LIST OF VARIABLES TO BE DROPPED     I
I                              Y  IS THE SAMPLE PERCENTAGE (RANGE: 0-100)    I
I                              Z  ARE ANY NEEDED PROGRAM STATEMENTS          I
I                                                                           I
I     NOTE:  MACMERG2 PRESERVES ANY SUBSETTING OR SAMPLING ALREADY DONE ON THE I
I            DATASET BEING MERGED WITH VEHICLE.                             I
I                                                                           I
+-------------------------------------------KAPPA SYSTEMS, INC. 14APR79---;
```

```
+-------------------------------MACMERG3-------------------------------+
I                                                                       I
I THIS MACRO PERFORMS A MERGE OF ACCIDENT, OR ANY ACCIDENT-LEVEL DATASET I
I (I.E., AS CREATED BY MACAGG), WITH ANY MASS/SAS DATASET OR WITH ONE OR TWO I
I ACCIDENT-LEVEL DATASETS.                                              I
I                                                                       I
I THE FOLLOWING MACRO DECLARATIONS MUST BE MADE PRIOR TO USING MACMERG3: I
I                                                                       I
I                  MACRO _DSNAME  V  %                                  I
I                  MACRO _MERGE   W  %                                  I
I                  MACRO _DROP    X  %                                  I
I                  MACRO _SAMPLE  Y  %                                  I
I                  MACRO _INSERT  Z  %                                  I
I                                                                       I
I                      WHERE  V  IS THE NAME OF THE DATASET BEING CREATED I
I                             W  ARE THE NAMES OF THE DATASETS TO BE MERGED I
I                             X  IS THE LIST OF VARIABLES TO BE DROPPED  I
I                             Y  IS THE SAMPLE PERCENTAGE (RANGE: 0-100) I
I                             Z  ARE ANY NEEDED PROGRAM STATEMENTS       I
I                                                                       I
I     NOTE:  FOLLOWING ONE OR BOTH OF THE DATASET NAMES IN THE _MERGE MACRO I
I            WITH THE CODE   (IN=XXX)   WHERE XXX IS A UNIQUE VARIABLE NAME, I
I            WILL ALLOW YOU TO SUBSET THE DATASET BEING CREATED TO INCLUDE I
I            ONLY SELECTED OBSERVATIONS AND/OR TO PRESERVE A PRIOR SUBSETTING. I
I            THIS IS DONE BY USING PROGRAM STATEMENTS OF THE FORM   IF XXX I
I            IN THE _INSERT MACRO.                                      I
I                                                                       I
+-----------------------------------------------KAPPA SYSTEMS, INC. 14APR79---;
```

```
+-------------------------------MACPRINT-------------------------------+
I                                                                       I
I THIS MACRO PRINTS THE FIRST 20 RECORDS OF ANY MASS/SAS DATASET, BY ACCIDENT. I
I THE FOLLOWING MACRO DECLARATION MUST BE MADE PRIOR TO USING MACPRINT: I
I                                                                       I
I                  MACRO _DSNAME  V  %                                  I
I                                                                       I
I                      WHERE  V  IS THE NAME OF THE DATASET BEING PRINTED I
I                                                                       I
+-----------------------------------------------KAPPA SYSTEMS, INC. 05APR79---;
```

```
+-------------------------------MACAGG-------------------------------+
I                                                                       I
I THIS MACRO PERFORMS AN AGGREGATION OF NON-OCCUPANT RECORDS OR OF VEHICLE- I
I RELATED RECORDS (VEHICLE, DRIVER, OCCUPANT, OR ANY COMBINATION THEREOF) TO I
I PRODUCE AN ACCIDENT-LEVEL DATASET (I.E., ONE WHICH CONTAINS ONE RECORD PER I
I ACCIDENT).  THE AGGREGATION IS CONTROLLED BY USER SUPPLIED PROGRAM STATE- I
I MENTS.                                                                I
I                                                                       I
I THE FOLLOWING MACRO DECLARATIONS MUST BE MADE PRIOR TO USING MACAGG:  I
I                                                                       I
I                  MACRO _DSNAME  V  %                                  I
I                  MACRO _DROP    X  %                                  I
I                  MACRO _SAMPLE  Y  %                                  I
I                  MACRO _SET     S  %                                  I
I                  MACRO _AGG     T  %                                  I
I                  MACRO _INITIAL U  %                                  I
I                                                                       I
I                      WHERE  V  IS THE NAME OF THE DATASET BEING CREATED I
I                             X  IS THE LIST OF VARIABLES TO BE DROPPED  I
I                             Y  IS THE SAMPLE PERCENTAGE (RANGE: 0-100) I
I                             S  IS THE NAME OF THE DATASET BEING AGGREGATED I
I                             T  ARE THE PROGRAM STATEMENTS NEEDED TO PERFORM I
I                                THE AGGREGATION OF MULTIPLE RECORDS TO THE I
I                                ACCIDENT LEVEL                         I
I                             U  ARE THE PROGRAM STATEMENTS NEEDED TO   I
I                                INITIALIZE THE AGGREGATION VARIABLES USED I
I                                IN THE _AGG MACRO, WHEN BEGINNING TO PROCESS I
I                                RECORDS FOR A NEW ACCIDENT             I
I                                                                       I
+-----------------------------------------------KAPPA SYSTEMS, INC. 14APR79---;
```

```
*-------------------------------M A C E X A C T-------------------------------*
I                                                                              I
I THIS MACRO CREATES A SAS DATASET CONTAINING AN EXACT SIZED RANDOM SAMPLE OF  I
I OBSERVATIONS FROM ANOTHER SAS DATASET, KEEPING ALL VARIABLES. USE OF THIS    I
I MACRO REQUIRES PRIOR SPECIFICATION OF                                        I
I                                                                              I
I      MACRO _DSIN  X                                                          I
I      MACRO _DSOUT  Y                                                         I
I      MACRO _NSAMP  Z                                                         I
I                                                                              I
I           WHERE  X  IS THE SAS DATASET BEING SAMPLED FROM  (DEFAULT: _LAST_) I
I                  Y  IS THE SAS DATASET CONTAINING THE RANDOM SAMPLE          I
I                     (DEFAULT: _DATA_)                                        I
I                  Z  IS THE SAMPLE SIZE (NO DEFAULT)                          I
I                                                                              I
*-----------------------------------------KAPPA SYSTEMS, INC. 20SEP79------;

*-------------------------------M A C M E D-------------------------------*
I                                                                          I
I THIS MACRO PRODUCES A REPORT CONTAINING THE WEIGHTED MEDIANS FOR SELECTED I
I VARIABLES FROM ONE OF THE NASS/SAS DATA SETS. THESE WEIGHTED MEDIANS ARE  I
I GIVEN FIRST FOR EACH PSU AND THEN FOR THE NATION AS A WHOLE. USE OF THIS  I
I MACRO REQUIRES PRIOR SPECIFICATION OF                                     I
I                                                                          I
I      MACRO _SASBASE  W                                                   I
I      MACRO _DSN  X                                                       I
I      MACRO _VARS  Y                                                      I
I      MACRO _FILEID  Z                                                    I
I                                                                          I
I           WHERE  W  IS THE NAME OF THE SAS DATA BASE  (DEFAULT: NASS)    I
I                  X  IS THE NAME OF THE NASS/SAS DATA SET (NO DEFAULT)    I
I                  Y  IS THE LIST OF VARIABLES FOR WHICH WEIGHTED MEDIANS ARE I
I                     DESIRED  (NO DEFAULT)                                I
I                  Z  IS THE FILE IDENTIFICATION, SUCH AS                  I
I                                                                          I
I                        RELEASED 1979 CASES, 21APR80                      I
I                                                                          I
I                     (NO DEFAULT, SPECIFIED IN THE JCL FILE OR BY USER)    I
I                                                                          I
*-----------------------------------------KAPPA SYSTEMS, INC. 16MAY80---;

*-------------------------------M A C A I S-------------------------------*
I                                                                          I
I THIS MACRO PRODUCES TABLES OF SELECTED ACCIDENT LEVEL VARIABLES BY THE    I
I DERIVED VARIABLE  MAX_AIS  WHICH REPRESENTS THE MAXIMUM INJURY TO ANY PEDES- I
I TRIAN OR OCCUPANT.  USE OF THIS MACRO REQUIRES PRIOR SPECIFICATION OF     I
I                                                                          I
I      MACRO _SASBASE  U                                                   I
I      MACRO _ACC  V                                                       I
I      MACRO _VARS  W                                                      I
I      MACRO _FORMAT  X                                                    I
I      MACRO _INSERT  Y                                                    I
I      MACRO _FILEID  Z                                                    I
I                                                                          I
I           WHERE  U  IS THE NAME OF THE SAS DATA BASE  (DEFAULT: NASS)    I
I                  V  IS THE NAME OF THE ACCIDENT LEVEL SAS DATA SET       I
I                     (DEFAULT: _SASBASE.ACCIDENT)                         I
I                  W  IS THE LIST OF SELECTED VARIABLES  (NO DEFAULT)      I
I                  X  IS THE LIST OF FORMATS FOR SELECTED VARIABLES        I
I                     (USER OPTION / NO DEFAULT)                           I
I                  Y  ARE ANY NEEDED PROGRAM STATEMENTS  (USER OPTION   NO I
I                     DEFAULT)                                             I
I                  Z  IS THE FILE IDENTIFICATION, SUCH AS                  I
I                                                                          I
I                        RELEASED 1979 CASES, 21APR80                      I
I                                                                          I
I                     (NO DEFAULT, SPECIFIED IN THE JCL FILE OR BY USER)    I
I                                                                          I
*-----------------------------------------KAPPA SYSTEMS, INC. 20MAY80---;
```

1.5 Guidelines for the Efficient Use of SAS

The efficient use of SAS requires a knowledge of the manner in which SAS stores and accesses its data sets and the processes involved in DATA and PROC steps. This short section is intended to indicate areas where efficiency considerations may play a part; it is not intended to supplant a thorough study of the SAS User's Guide and other related documents. In fact most of the ideas presented here are covered in the SAS Technical Report entitled "Using SAS for Large Data Sets" (A-104).

Concerns about computer efficiency when using SAS must always be balanced against the cost associated with the data analyst's or programmer's time. In general, one of the reasons for favoring SAS over a high level, procedural language such as COBOL for most data analytic tasks is that it makes programmers more efficient with a minimal (and often without any) sacrifice in computer efficiency. The NASS/SAS data base is not really that large (23141 records), and great concern with processing efficiency is not warranted. Nevertheless, there should be some attention paid to this matter when expending computer resources. The guidelines offered in this sub-section are covered in five categories:

- use of syntax-checking runs:
- use of samples and subsets;
- use of intermediate data set storage for checkpoint/ restart;
- minimizing unneeded passes through the data; and
- knowing alternative ways of producing a given result.

Unless the SAS job is very simple (e.g. it does not have any DATA steps and uses a PROC with which the user is very familiar) it is wise to use a syntax-checking run prior to processing data with the program. A syntax error which occurs in the final PROC or DATA step after a good deal of cost has been incurred in building the necessary temporary SAS data sets is extremely wasteful. While a syntax-checking run does take some

analyst time, and will not detect logic errors (i.e., the program runs, but not correctly) it is generally time well spent since even experienced programmers rarely write error-free code of any complexity. In SAS, using an

```
OPTIONS  OBS = 0;
```

statement at the beginning of the SAS source statements causes the SAS supervisor to check all statements in the program for syntax errors. Eliminating any volume setup card(s) and using DUMMY OS data sets is advisable for a syntax-checking run.

Since a syntax check will not detect logic errors, it may be wise to test complex or costly jobs with a sample of data after the syntax-checking run. The user may simply sample by selecting the first N (e.g. 250) records in the SAS data set by putting

```
OPTIONS  OBS = 250;
```

in an appropriate place among the SAS source statements. Alternatively, an approximate or exact sized random sample may be drawn by using MACSAMP or MACEXACT. In any case, be sure to observe hierarchical structure of the data base (i.e., 250 vehicle records will not match 250 accident records; use a MERGE command to carry a selection or sampling at one level of the hierarchy to another level).

As a general rule, one should use subsets (e.g. all accidents involving a fatality), or samples, of records whenever possible. If a subset will be required anyway, do it as soon in the SAS job as possible to avoid processing unnecessary records. SAS generally stores data sets as members of a direct access OS data set, using its own access method. From the user point of view, that access is essentially sequential (although it is possible to effect direct access of SAS data sets through the primary key, observation number). Thus any activity in a DATA or PROC step will usually process the entire data set. Using subsets or samples (the latter even for final results if it is

statistically acceptable) means that fewer records are being processed and thus less computer cost incurred.

Subsets of variables, effected by use of the KEEP and DROP commands, are also important for minimizing costs. As for subsets of observations, subsets of variables should be established as soon in the SAS job as possible.

One way of avoiding the costs of re-running a SAS job which failed to produce the correct/desired output is to save intermediate SAS data sets in permanent rather than temporary OS data sets. These intermediate data sets are then available as checkpoints from which the user may restart his/her job. It is often feasible for a group of analysts and programmers to share a single OS data set of moderate size (10 to 20 cylinders) for use as (semi-) permanent workspace with SAS. Reasonable care in keeping this workspace free of old/unneeded SAS data sets will make a valuable cost avoidance tool available for the entire group. While such a disk allocation would be desirable (especially on an on-line disk pack) it is also possible to store SAS data sets in an OS tape file.

One major restriction in the use of such tape-based SAS data sets is that only one SAS data set may be accessed in a single DATa or PROC step (although different steps may access different SAS data sets). One inexpensive way to avoid this limitation is to copy all (or selected) SAS data sets from a given tape-based SAS data base to temporary disk storage with the statement:

```
PROC COPY IN = ddname    OUT = WORK;
```

Any number of SAS data sets may then be accessed in a single DATA or PROC step.

Since SAS will generally process the entire SAS data set whenever it is accessed for a DATA or PROC step, it is wise to avoid unnecessary passes through the data. As an example, it is possible to use a SET command

and a RETAINED variable to apply a subsetting of the accident data set to the other four NASS/SAS data sets. This single pass through the data could replace up to four passes using a MERGE command in each of four DATA steps.

A similar point can be made with regard to the SORTing of SAS data sets. The powerful BY feature of SAS requires that the data set being processed is SORTed by the BY variables. It is for this reason that the NASS/SAS data base is maintained in a sort order that facilitates exploration of the NASS hierarchical structure (i.e., by H01, H02, H06, etc.). Production of arithmetic means for one or more variables by light conditions(A19) however, would require a SORTing of the data set unless the user was aware that neither PROC SUMMARY nor PROC CHART requires prior sorting to produce means for subsets of observations. Another point in regard to SORTing a data set, if it is required, is that it should be done to as fine a level as will ever be needed. It makes no sense to first SORT the data by A19 and then later by A19 and A20 (atmospheric conditions) when the latter SORT alone would suffice.

Therefore, one very important guideline for efficient SAS processing is to avoid any unnecessary passes through the data sets. For example, there seems to be a tendency for novice SAS programmers to place multiple DATA steps of the form

```
DATA ACCIDENT;
SET NASS.ACCIDENT;
```

in their jobs. Assuming that the NASS/SAS data base is on disk, such a copy accomplishes nothing; all SAS procedures can process NASS/SAS data sets directly.

As a final point, nothing does more for improving the efficiency of SAS programming that the study of training materials and examination of the results of past efforts. For example, both reading and observation support the idea that a subsetting IF in a DATA step should be placed as early in

the step as possible (e.g., right after the SET statement). Similarly, study will show that there are at least five ways of producing an aggregated data set in SAS:

- a DATA step
- PROC FREQ
- PROC SUMMARY
- PROC MEANS
- PROC UNIVARIATE

Experience and further study will also indicate which of these methods are most efficient for given classes of problems. It has been found, for example, that the costs of using PROC SUMMARY escalate rapidly for more than three CLASS variables, especially if any of these variables has many levels.

1.6 Examples

The use of 1979 NASS/SAS is illustrated with two examples. The SAS source statements for both examples are as follows:

```
TITLE1 USING THE NASS/SAS DATA BASE OF &FILEID;

PROC FORMAT;
     VALUE FA19F  . = MISSING
                  .U = UNKNOWN
                  1 = DAYLIGHT
                  2 = DARK
                  3 = LIGHTED
                  4 = DAWN
                  5 = DUSK;
     VALUE FA20F  . = MISSING
                  .U = UNKNOWN
                  1 = NORMAL
                  2 = RAINING
                  3 = SLEETING
                  4 = SNOWING
                  5 = FOG
                  6 = OTHER;

     *--------------------------------EXAMPLE 1--------------------------------;
PROC FREQ      DATA = NASS.ACCIDENT;
     FORMAT A19 FA19F.      A20 FA20F.;
     TABLES A19 * A20;
TITLE3 EXAMPLE 1: A SIMPLE CROSS-TABULATION;
TITLE4;

     *--------------------------------EXAMPLE 2--------------------------------;
%MACRO _VARS  A19      A20  %
%MACRO _FORMAT  A19 FA19F.      A20 FA20F.  %
%MACRO _TITLES
TITLE3 EXAMPLE 2: USING A PRE-DEFINED NASS/SAS MACRO TO CROSS-TABULATE TWO VARIA
BLES BY MOST SEVERE INJURY IN THE ACCIDENT;
TITLE4;
%
%MACRO
```

The first example is a single cross-tabulation of light and atmospheric conditions, using user defined formats to label the values for these variables. No special options were used in producing the table. Output from this request

is shown on the following page. (See Section 2.4 for this example as done in NASS/TPL.)

The second example produces tables of light conditions and atmospheric conditions by most severe injury to any pedestrian or occupant in the accident. These tables are weighted using the national inflation factor (H08) and are produced by the NASS/SAS MACRO called MACAIS. Cutput for this example is shown on the two pages following the output from example one.

EXAMPLE II A SIMPLE CROSS-TABULATION

TABLE OF A19 BY A20

A19 LIGHT CONDITIONS A20 ATMOSPHERIC CONDITIONS

FREQUENCY / PERCENT / ROW PCT / COL PCT	UNKNOWN	NORMAL	RAINING	SLEETING	SNOWING	FOG	OTHER	TOTAL
UNKNOWN	2	5	0	0	1	1	0	9
	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	
DAYLIGHT	8	1557	256	12	66	20	3	1914
	.	45,93	7,55	0,35	1,95	0,59	0,09	56,46
	.	81,35	13,38	0,63	3,45	1,04	0,16	
	.	57,81	51,72	57,14	58,93	44,44	60,00	
DARK	1	520	88	4	10	14	0	636
	.	15,34	2,60	0,12	0,29	0,41	0,00	18,76
	.	81,76	13,84	0,63	1,57	2,20	0,00	
	.	19,17	17,78	19,05	8,93	31,11	0,00	
LIGHTED	9	526	125	3	33	7	2	696
	.	15,52	3,69	0,09	0,97	0,21	0,06	20,53
	.	75,57	17,96	0,43	4,74	1,01	0,29	
	.	19,40	25,25	14,29	29,46	15,56	40,00	
DAWN	0	32	7	0	2	3	0	44
	.	0,94	0,21	0,00	0,06	0,09	0,00	1,30
	.	72,73	15,91	0,00	4,55	6,82	0,00	
	.	1,18	1,41	0,00	1,79	6,67	0,00	
DUSK	1	77	19	2	1	1	0	100
	.	2,27	0,56	0,06	0,03	0,03	0,00	2,95
	.	77,00	19,00	2,00	1,00	1,00	0,00	
	.	2,84	3,84	9,52	0,89	2,22	0,00	
TOTAL		2712	495	21	112	45	5	3390
		80,00	14,60	0,62	3,30	1,33	0,15	100,00

USING THE NASS/SAS DATA BASE OF ALL 1979 CASES, AS OF 08JUL80

12:19 WEDNESDAY, SEPTEMBER 17, 1980

EXAMPLE 21 USING A PRE-DEFINED NASS/SAS MACRO TO CROSS-TABULATE TWO VARIABLES BY MOST SEVERE INJURY IN THE ACCIDENT

TABLE OF A19 BY MAX_AIS

A19 LIGHT CONDITIONS MAX_AIS MAXIMUM PEDESTRIAN OR OCCUPANT INJURY

FREQUENCY
ROW PCT

A19	UNKN SEVERITY	UNKNOWN	NOT APPLIED	NO DATA	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	MAXIMUM	TOTAL
UNKNOWN	0 .	2486 .	6095 .	0 .	2507 .	0 .	0 .	0 .	0 .	0 .	
DAYLIGHT	34817 .	415484 .	2507518 .	1608 .	1133761 79.33	183125 12.81	75984 5.31	22565 1.58	9988 0.70	3975 0.28	1429500
DARK	21254 .	135636 .	478819 .	0 .	283390 63.29	76936 20.01	44997 11.70	6898 1.79	7368 1.92	4953 1.29	384541
LIGHTED	14934 .	393711 .	711059 .	4380 .	469345 79.73	64109 10.89	42211 7.17	7366 1.25	3591 0.61	2083 0.35	588704
DARK	1446 .	11324 .	12575 .	0 .	28469 82.16	2960 8.54	1856 5.36	748 2.16	110 0.32	505 1.46	34649
DUSK	283 .	42180 .	107396 .	0 .	46132 73.11	9796 15.52	5968 9.46	972 1.54	0 0.00	235 0.37	63103
TOTAL	.	.	.	.	1921298	336926	170917	38548	21056	11752	2500497

USING THE NASS/SAS DATA BASE OF ALL 1979 CASES, AS OF 08JUL80

12:19 WEDNESDAY, SEPTEMBER 17, 1980

EXAMPLE 2: USING A PRE-DEFINED NASS/SAS MACRO TO CROSS-TABULATE TWO VARIABLES BY MOST SEVERE INJURY IN THE ACCIDENT

TABLE OF A20 BY MAX_AIS

A20 ATMOSPHERIC CONDITIONS MAX_AIS MAXIMUM PEDESTRIAN OR OCCUPANT INJURY

FREQUENCY ROW PCT	UNKNOWN	NOT APPLIND	DATA	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	MAXIMUM	TOTAL
UNKNOWN	0 .	18784 .	49764 .	0 .	4756 .	0 .	0 .	0 .	0 .	
NORMAL	58092 .	905064 .	2973505 .	1608 .	1500883 75.11	290655 14.55	148779 7.26	33630 1.69	18606 0.93	9491 0.47	1998304
RAINING	13564 .	141089 .	560693 .	2786 .	208078 80.48	37897 11.38	18941 5.69	4859 1.46	1875 0.56	1494 0.43	333093
SLEETING	833 .	906 .	20246 .	0 .	10287 82.69	0 0.00	2155 17.32	0 0.00	0 0.00	0 0.00	12442
SNOWING	143 .	34051 .	170899 .	1594 .	101072 95.30	2864 2.70	1213 1.14	0 0.00	575 0.54	337 0.32	106062
FOG	1792 .	13865 .	49352 .	0 .	38198 84.63	3640 8.06	2817 6.25	0 0.00	0 0.00	479 1.06	85136
OTHER	0 .	4463 .	0 .	0 .	531 16.53	1870 58.25	810 25.22	0 0.00	0 0.00	0 0.00	3210
TOTAL	.	.	.	1919049	336926	170917	88548	21056	11752	2498247

Section 2

NASS/TPL

2.1 Introduction

The Table Producing Language (TPL) is a specialized package of computer programs designed to facilitate production of statistical tabulations. While it is not a statistical package in the sense that it does not support complex inferential statistical procedures or multivariate methods, it is unsurpassed in the flexibility it offers in producing various multidimensional data tables. These tables are structured in the way frequently seen in Bureau of Census and Bureau of Labor Statistics reports. It is the latter agency which developed and maintains TPL. If the user has a need to produce complex tabular arrays from the NASS data base, in camera ready form, then TPL is probably the best tool.

2.2 The TPL Codebook and Data File

Requests for tabular output from TPL require two components: the TPL data file and the TPL codebook. The former is an exact copy of the NASS master file except that dummy records have been added to the data file to provide TPL with the complete hierarchical structure it requires. The codebook itself is compiled and stored for use, probably on the same storage volume as the data file. For TPL, the NASS hierarchical structure is represented with the accident record at the top (0) level. Pedestrian, vehicle and driver are at the middle (1) level, and occupant is the bottom (2) level. TPL requires that the data file contain all records at any level; in the case of NASS, this requires the creation of many dummy records for pedestrian (since few accidents involve any pedestrian records) and a few dummy records for vehicle and driver where there were more pedestrians than vehicles. Similarly, dummy occupant records were needed to handle situations where there was no occupant record in the NASS master file for a particular vehicle, or where there were dummy records for vehicle and driver.

The data file is arranged in the following hierarchical order:

A case begins with the accident record, followed by the level 1 records for the first vehicle (which means vehicle and driver, and the first pedestrian if there is one, otherwise a dummy pedestrian record). All occupant records for the first vehicle then follow (or a dummy occupant record if required). Then the second vehicle level 1 records are followed by all occupants for that vehicle. This pattern continues until the next accident record begins a new case. To summarize, once a case is begun by the accident record, it is followed by all records at level 1 and at least one record at level 2; this level-1/level-2 pattern is repeated for the remainder of the case. Dummy records are present in the file as required to complete the hierarchy.

2.3 Executing NASS/TPL

A copy of the standard job stream for use with the XMIT command at Informatics is shown below:

```
/*SETUP      DEVICE=MD11,ID=NCHSS4
/*RESOURCE   MAXCORE=384K,MAX3330=1
//*PROCLIB DSN=USER.TPL.V4.PROCLIB
// EXEC TPL6ENTB,CBPREFX=NASS,CBN='ANALYSIS.V4.TPL79',
// PARM.TPL='FREE=5000',CORE=384K
//TPL.FILE2 DD DSN=NASS.ANALYSIS.V4.TPL79.CBOBJ.V35,
// DISP=SHR,VOL=SER=NCHSS4,UNIT=3330-1
//TPL.INPUT2 DD DSN=NASS.ANALYSIS.V4.TPL79.FEB0481,DISP=OLD
//TPL.REQUEST DD *
=PARAM
```

All data items, except for those listed below, are defined as control variables to TPL, most with individual values explicitly labeled. The following NASS/TPL data items are defined as observation variables:

A11	Sampling Interval
A14	Number of Vehicle Forms Submitted
A13	Number of Pedestrian or Non-motorist Forms Submitted
APP_DATE COM_DATE REL_DATE SUB_DATE	Case Selection Dates
V07	Number of Occupant Forms Submitted
V43	Vehicle Curb Weight
V44	Vehicle Cargo Weight
V46	Total Delta_V
V47	Longitudinal Delta_V
V48	Lateral Delta_V
V49	Energy Absorption

Note that data items are labeled, if possible, by the data collection form identifier. In general, the TPL codebook is a faithful representation of the NASS master file. The user is referred to the codebook for any additional details on NASS/TPL.

The NASS/TPL user is advised to pay particular attention to Chapter 17 in the TPL Users Guide which discusses the processing rules governing TPL table requests from a hierarchical data file. Simply stated, unless the user specifies differently, NASS/TPL will usually tabulate at the lowest level of the hierarchy (i.e., at the occupant level). It is also suggested that the SELECT statement may be used to eliminate dummy records (especially for pedestrian variables) prior to producing tables; for this purpose any variable on the record past position 7 (i.e., past the 'record number' variable) may be used for selection. While most dummy records are at the pedestrian level, it should be noted that a small number (21) of vehicle and driver, and a somewhat higher number (68) of occupant records are dummies.

2.4 Examples

The use of 1979 NASS/TPL is illustrated with two examples. The TPL statements needed for these examples are as follows:

```
USE NASS;
TABLE EXAMPLE1: ACCIDENT, A19, A20;
TABLE EXAMPLE2: ACCIDENT, A30 BY A31 THEN A32 THEN A33 THEN TOTAL,
                A19 THEN TOTAL;
```

Example 1, which presents the same information as Example 1 for NASS/SAS, is a tabulation of accident records by two accident variables. Since TPL automatically tabulates control variables (such as A19 and A20) at the lowest level of the hierarchy (in this case at the occupant level) it is necessary to add the record name "accident" to the wafer specification of the table request. While this example has not done so, it is easy to add row or column totals with the "THEN TOTAL" construct as applied in Example 2 for NASS/TPL. Also, the "percent toggles" may be used to add these figures to the table, or to replace the counts with percents.

Example 2 was constructed to illustrate some of the unique capabilities of TPL for producing tabular displays. In this example, four variables (A30, A31, A32 and A33) are crossed with variable A19. Totals have been added for both rows and columns. Note that although the rows represent several variables, the column totals only account for the sum across any one of those variables. Note also the use of the record name "accident" in the wafer to ensure that the tabulation takes place at the accident level. Finally, notice that the variables A30 and A31 are crossed with each other, whereas the other two variables are concatenated in the row dimension. It is this capability to cross and concatenate multiple variables within a single dimension which makes TPL a unique tabulation package.

EXAMPLE I

ACCIDENT

	ATMOSPHERIC CONDITIONS							
	MISSING	NORMAL	RAINING	SLEETING	SNOWING	FOG	OTHER	UNKNOWN
LIGHT CONDITIONS								
DAYLIGHT.....	-	1,557	256	12	66	20	3	8
DARK.....	-	520	80	4	10	14	-	1
DARK NOT LIGHTED.....	-	526	125	3	33	7	2	9
DAWN.....	-	32	7	-	2	3	-	-
DUSK.....	-	77	19	2	1	1	-	1
UNKNOWN.....	-	5	-	-	1	1	-	2

- Data not available.

EXAMPLE2

ACCIDENT

	LIGHT CONDITIONS							Total
	MISSING	DAYLIGHT	DARK	DARK BUT LIGHTED	DAWN	DUSK	UNKNOWN	
ROADWAY ALIGNMENT A								
STRAIGHT								
ROADWAY PROFILE A								
LEVEL	-	1,383	348	519	31	70	6	2,357
GRADE	-	256	88	99	5	12	-	460
HILLCREST	-	22	5	6	-	1	-	34
SAG	-	9	2	4	-	1	-	16
CURVE								
ROADWAY PROFILE A								
LEVEL	-	148	121	43	5	6	2	325
GRADE	-	92	65	32	3	9	-	201
HILLCREST	-	5	2	-	-	-	-	7
SAG	-	6	6	2	-	2	1	17
UNKNOWN								
ROADWAY PROFILE A								
LEVEL	-	1	-	-	-	-	-	1
SURFACE TYPE A								
CONCRETE	-	184	55	56	5	8	1	309
BITUMINOUS	-	1,710	566	683	38	91	8	3,056
SLAG,GRAVEL,STONE	-	16	8	1	1	1	-	27
DIRT	-	9	8	3	-	1	-	21
OTHER	-	2	-	2	-	-	-	4
UNKNOWN	-	1	-	-	-	-	-	1
SURFACE CONDITION A								
DRY	-	1,380	438	463	23	66	3	2,373
WET	-	357	142	167	13	27	1	707
SNOW,SLUSH	-	44	12	21	-	3	3	83
ICE	-	127	39	49	8	4	-	227
OTHER	-	4	4	2	-	-	-	14
UNKNOWN	-	6	2	3	-	1	2	14
Total	-	1,922	637	705	44	101	9	3,418

- Data not available.

APPENDIX A
Use of Inflation Factors

APPENDIX A

Use of The Inflation Factors

The inflation factors in the 1979 NASS Analysis File may be used to estimate population totals for either a primary sampling unit or entire country. The variable H07 on the accident level is the PSU inflation factor; the variable H08 on the accident level is the national inflation factor.

To use these weighting factors in a SAS job, the analyst would probably be performing some type of frequency distribution analysis. Below are two examples of performing a weighted frequency distribution. The statements "WEIGHT H07 " and "WEIGHT H08" perform the weighting function in the PROC FREQ.

PSU Inflation Factor Example:

```
PROC FREQ;
  TABLES A12; WEIGHT H07;
```

The above statements would give a frequency distribution for First Harmful Event weighted by the PSU inflation factor. Ideally, the data would have been subset to include only one PSU's accident data.

National Inflation Factor Example:

```
PROC FREQ;
  TABLES A12 A16; WEIGHT H08;
```

The above statements would give a frequency distribution for First Harmful Event (A12) and Police Reported Accident Severity (A16), each weighted by the national inflation factor. This job would give national population estimates for each of the variables.

These inflation factors are a function of the accident's stratification, sampling interval and PSU number. The means for calculating these inflation factors is given in the four parts below:

PART 1: Calculate W1

```
IF A10 EQ 'A' or 'D' or 'G' or 'H' or 'K' or 'L' THEN W1 = 25;
IF A10 EQ 'E' THEN W1 = 18;
IF A10 EQ 'B' THEN W1 = 15;
IF A10 EQ 'F' THEN W1 = 12;
IF A10 EQ 'I' THEN W1 =  8;
IF A10 EQ 'C' or 'M' THEN W1 = 5;
IF A10 EQ 'J' THEN W1 = 2;
IF A10 EQ 'N' THEN W1 = 1;
```

PART 2: Calculate W2

```
IF A01 EQ 9 THEN W2 -  6.291;
IF A01 EQ 4 THEN W2 = 84.874;
IF A01 EQ 6 THEN W2 = 36.656;
IF A01 EQ 1 THEN W2 = 299.211;
IF A01 EQ 5 THEN W2 = 72.469;
IF A01 EQ 7 THEN W2 = 126.166;
IF A01 EQ 8 THEN W2 = 144.216;
IF A01 EQ 3 THEN W2 = 234.731;
IF A01 EQ 10 THEN W2 = 231.348;
```

PART 3: Calculate H07

```
IF A01 EQ 9 THEN H07  = 12 x A11/W1;
ELSE H07  = A11/W1;
```

PART 4: Calculate H08

```
H08 = H07 x W2
```

In order to use the weighting factors H07 AND H08 in a TPL job, a "compute" statement is necessary to create the weighted variable for the duration of the job. For example, to tabulate a weighted national total for our table called "EXAMPLE1" we would need the following TPL source code.

```
USE NASS;
COMPUTE WA19 = A19 * H08;
COMPUTE WA20 = A20 * H08;
TABLE EXAMPLE1:  WA19, WA20;
```

APPENDIX B
SAS Data Set Contents

CONTENTS OF SAS DATASET: ACCIDENT

VARIABLE	TYPE	FORMAT	LABEL
H01	NUM		PSU NUMBER
H02	CHAR		CASE NUMBER
H02A	NUM		SEQUENCE NUMBER
H02S	CHAR		STRATIFICATION
H03	NUM		RECORD NUMBER
H04	NUM		TRANSACTION CODE
H05	NUM		VERSION NUMBER
H07	NUM	6.2	PSU INFLATION FACTOR
H08	NUM	6.2	NATIONAL INFLATION FACTOR
H09	NUM		YEAR OF ACCIDENT
A07	NUM		MONTH OF ACCIDENT
A08	NUM		DAY OF WEEK
A09	NUM		INVESTIGATING POLICE AGENCY
A10	CHAR		STRATIFICATION (A)
A11	NUM	6.2	SAMPLING INTERVAL
A12	NUM		FIRST HARMFUL EVENT
A13	NUM		RELATION TO ROADWAY (LOCATION OF F.H.E.)
A14	NUM		NUMBER OF VEHICLE FORMS SUBMITTED
A15	NUM		NUMBER OF PED/NONMOTOR FORMS SUBMITTED
A16	NUM		POLICE REPORTED ACCIDENT SEVERITY
A17	NUM		INVOLVEMENT OF HIT & RUN IN ACCIDENT
A18	NUM	HHMMS.	HOUR OF DAY
A19	NUM		LIGHT CONDITIONS
A20	NUM		ATMOSPHERIC CONDITIONS
A21	NUM		AREA TYPE
A22	NUM		ROAD TA-1 CLASSIFICATION
A23	NUM		CLASS TRAFFICWAY
A24	NUM		ROADWAY SECTION TYPE
A25	NUM		NUMBER OF TRAVEL LANES (A)
A26	NUM		TRAFFICWAY DIVISION AND MEDIAN TYPE (A)
A27	NUM		ACCESS CONTROL (A)
A28	NUM		DIRECTION OF TRAVEL FLOW (A)
A29	NUM		SHOULDER PRESENCE (A)
A30	NUM		ROADWAY ALIGNMENT (A)
A31	NUM		ROADWAY PROFILE (A)
A32	NUM		SURFACE TYPE (A)
A33	NUM		SURFACE CONDITION (A)
A34	NUM		JUNCTION TRAFFIC CONTROLS (A)
A35	NUM		ACCIDENT OCCURRENCE IN SCHOOL ZONE (A)
A36	NUM		SPEED LIMIT (A)
A37	NUM		RESTRICTION OF RIGHT-OF-WAY AT SCENE
A38	NUM		ADDITIONAL P.O.W. RESTRICTIONS AT SCENE
A39	NUM		SIDE INTRUSION (S.S. INDICATOR)
A40	NUM		STEERING COLUMN (S.S. INDICATOR)
A41	NUM		ROOF INTRUSION (S.S. INDICATOR)
A42	NUM		MOTORCYCLE (S.S. INDICATOR)
A43	NUM		TRUCK UNDERRIDE (S.S. INDICATOR)
[illegible]	[illegible]	6.2	PSU INFLATION FACTOR
[illegible]	[illegible]	6.2	NATIONAL INFLATION FACTOR
SHORT	NUM		VEHICLE SHORT FORM

CONTENTS OF SAS DATASET: PEDES

VARIABLE	TYPE	FORMAT	LABEL
H01	NUM		PSU NUMBER
H02	CHAR		CASE NUMBER
H02A	NUM		SEQUENCE NUMBER
H02B	CHAR		STRATIFICATION
H03	NUM		RECORD NUMBER
H04	NUM		TRANSACTION CODE
H05	NUM		VERSION NUMBER
H07	NUM	6.2	PSU INFLATION FACTOR
H08	NUM	6.2	NATIONAL INFLATION FACTOR
P06	NUM		PEDESTRIAN OR NONMOTORIST'S NUMBER
P07	NUM		PEDESTRIAN OR NONMOTORIST'S TYPE
P08	NUM		PEDESTRIAN OR NONMOTORIST'S AGE
P09	NUM		PEDESTRIAN OR NONMOTORIST'S SEX
P10	NUM		PEDESTRIAN OR NONMOTORIST'S HEIGHT
P11	NUM		PEDESTRIAN OR NONMOTORIST'S WEIGHT
P12	NUM		PURPOSE OF TRIP (P)
P13	NUM		MONTHS CYCLING EXPERIENCE
P14	NUM		PEDESTRIAN OR NONMOTORIST'S LOCATION
P15	NUM		PEDESTRIAN'S ACTION
P16	NUM		TREATMENT - MORTALITY (P)
P17	NUM		HOSPITAL STAY (P)
P18	NUM		WORKING DAYS LOST (P)
P20	NUM		RELATION OF INTERVIEWEE TO PED/NONMOTOR
P21	CHAR		OIC BODY REGION (FIRST, P)
P22	CHAR		ASPECT (FIRST, P)
P23	CHAR		LESION (FIRST, P)
P24	CHAR		SYSTEM/ORGAN (FIRST, P)
P25	NUM		AIS SEVERITY (FIRST, P)
P26	NUM		INJURY SOURCE (FIRST, P)
P27	NUM		SOURCE OF DATA (FIRST, P)
P28	CHAR		OIC BODY REGION (SECOND,P)
P29	CHAR		ASPECT (SECOND, P)
P30	CHAR		LESION (SECOND, P)
P31	CHAR		SYSTEM/ORGAN (SECOND, P)
P32	NUM		AIS SEVERITY (SECOND, P)
P33	NUM		INJURY SOURCE (SECOND, P)
P34	NUM		SOURCE OF DATA (SECOND, P)
P35	CHAR		OIC BODY REGION (THIRD, P)
P36	CHAR		ASPECT (THIRD, P)
P37	CHAR		LESION (THIRD, P)
P38	CHAR		SYSTEM/ORGAN (THIRD, P)
P39	NUM		AIS SEVERITY (THIRD, P)
P40	NUM		INJURY SOURCE (THIRD, P)
P41	NUM		SOURCE OF DATA (THIRD, P)
P42	CHAR		OIC BODY REGION (FOURTH, P)
P43	CHAR		ASPECT (FOURTH, P)
P44	CHAR		LESION (FOURTH, P)
P45	CHAR		SYSTEM/ORGAN (FOURTH, P)
P46	NUM		AIS SEVERITY (FOURTH, P)
P47	NUM		INJURY SOURCE (FOURTH, P)
P48	NUM		SOURCE OF DATA (FOURTH, P)
P49	CHAR		OIC BODY REGION (FIFTH, P)
P50	CHAR		ASPECT (FIFTH, P)
P51	CHAR		LESION (FIFTH, P)
P52	CHAR		SYSTEM/ORGAN (FIFTH, P)

CONTENTS OF SAS DATASET: PEDES

VARIABLE	TYPE	FORMAT	LABEL
P53	NUM		AIS SEVERITY (FIFTH, P)
P54	NUM		INJURY SOURCE (FIFTH, P)
P55	NUM		SOURCE OF DATA (FIFTH, P)
P56	CHAR		OIC BODY REGION (SIXTH, P)
P57	CHAR		ASPECT (SIXTH, P)
P58	CHAR		LESION (SIXTH, P)
P59	CHAR		SYSTEM/ORGAN (SIXTH, P)
P60	NUM		AIS SEVERITY (SIXTH, P)
P61	NUM		INJURY SOURCE (SIXTH, P)
P62	NUM		SOURCE OF DATA (SIXTH, P)
P63	NUM		INJURY SEVERITY (POLICE RATING, P)
P64	NUM		TRAFFIC VIOLATION CHARGED - PED/NONMOTOR
P65	NUM		ALCOHOL INVOLVEMENT (P)
P6	NUM		MEASURED BLOOD ALCOHOL LEVEL (P)
H09	NUM		YEAR OF ACCIDENT

CONTENTS OF SAS DATASET: VEHICLE

VARIABLE	TYPE	FORMAT	LABEL
H01	NUM		PSU NUMBER
H02	CHAR		CASE NUMBER
H02A	NUM		SEQUENCE NUMBER
H02B	CHAR		STRATIFICATION
H03	NUM		RECORD NUMBER
H04	NUM		TRANSACTION CODE
H05	NUM		VERSION NUMBER
H06	NUM		VEHICLE NUMBER
H07	NUM	6.2	PSU INFLATION FACTOR
H08	NUM	6.2	NATIONAL INFLATION FACTOR
V07	NUM		NUMBER OF OCCUPANT FORMS SUBMITTED
V08	NUM		VEHICLE ROLE
V09	NUM		POLICE INDICATED MANNER OF LEAVING SCENE
V10	NUM		VEHICLE MODEL YEAR
V11	NUM		VEHICLE MAKE
V12	NUM		VEHICLE MODEL
V13	NUM		VEHICLE TYPE
V14	NUM		TOWED TRAILING UNIT
V15	NUM		OBJECT CONTACTED (HIGHEST)
V16	NUM		DIRECTION OF FORCE (HIGHEST)
V17	CHAR		DEFORMATION LOCATION (HIGHEST)
V18	CHAR		SPECIFIC HORZONTAL LOCATION (HIGHEST)
V19	CHAR		SPECIFIC VERTICAL LOCATION (HIGHEST)
V20	CHAR		TYPE OF DAMAGE DISTRIBUTION (HIGHEST)
V21	NUM		DEFORMATION EXTENT GUIDE (HIGHEST)
V22	NUM		OBJECT CONTACTED (SECONDARY)
V23	NUM		DIRECTION OF FORCE (SECONDARY)
V24	CHAR		DEFORMATION LOCATION (SECONDARY)
V25	CHAR		SPECIFIC HORZONTAL LOCATION (SECONDARY)
V26	CHAR		SPECIFIC VERTICAL LOCATION (SECONDARY)
V27	CHAR		TYPE OF DAMAGE DISTRIBUTION (SECONDARY)
V28	NUM		DEFORMATION EXTENT GUIDE (SECONDARY)
V29	NUM		DOCUMENTATION OF MORE THAN TWO CDCS
V30	NUM		NUMBER OF VIN CHARACTERS
V31	CHAR		VEHICLE IDENTIFICATION NUMBER
V32	NUM		REGISTRATION OF VEHICLE
V33	NUM		VEHICLE SPECIAL USE (THIS TRIP)
V34	NUM		ODOMETER READING
V35	NUM		PASSENGER COMPARTMENT INTEGRITY
V36	NUM		PASSENGER COMPARTMENT INTRUSION
V37	NUM		MAGNITUDE OF INTRUSION
V38	NUM		FIRE OCCURRENCE
V39	NUM		TYPE OF MOST SEVERE IMPACT
V40	NUM		ROLLOVER INVOLVEMENT
V41	NUM		JACKKNIFE INVOLVEMENT
V42	NUM		SUBMISSION OF POT. SAFETY PROB. BULLETIN
V43	NUM		VEHICLE CURB WEIGHT
V44	NUM		VEHICLE CARGO WEIGHT
V45	NUM		REPORTED SOURCE OF CARGO WEIGHT
V46	NUM		TOTAL DELTA V
V47	NUM		LONGITUDINAL COMPONENT OF DELTA V
V48	NUM		LATERAL COMPONENT OF DELTA V
V49	NUM		ENERGY ABSORPTION
V50	NUM		ESTIMATED TRAVEL SPEED
H09	NUM		YEAR OF ACCIDENT

CONTENTS OF SAS DATASET: DRIVER

VARIABLE	TYPE	FORMAT	LABEL
H01	NUM		PSU NUMBER
H02	CHAR		CASE NUMBER
H02A	NUM		SEQUENCE NUMBER
H02B	CHAR		STRATIFICATION
H03	NUM		RECORD NUMBER
H04	NUM		TRANSACTION CODE
H05	NUM		VERSION NUMBER
H06	NUM		VEHICLE NUMBER
H07	NUM	6.2	PSU INFLATION FACTOR
H08	NUM	6.2	NATIONAL INFLATION FACTOR
D07	NUM		NUMBER OF OCCUPANTS THIS MOTOR VEHICLE
D08	NUM		DRIVER PRESENCE IN VEHICLE
D09	NUM		MONTHS DRIVING EXP. THIS CLASS VEHICLE
D10	NUM		ESTIMATED MILEAGE THIS VEHICLE
D11	NUM		PURPOSE OF TRIP (D)
D12	NUM		FREQUENCY DRIVING ROAD
D13	NUM		DRIVER EDUCATION
D14	NUM		LICENSE STATUS THIS CLASS OF VEHICLE
D15	NUM		LICENSE RESTRICTION
D16	NUM		ADDITIONAL LICENSE RESTRICTION
D17	NUM		SPEEDING VIOLATION CHARGED
D18	NUM		D.W.I. VIOLATION CHARGED
D19	NUM		RECKLESS DRIVING VIOLATION CHARGED
D20	NUM		DRIVING W/SUSP./REV. LICENSE CHARGED
D21	NUM		OTHER VIOLATION CHARGED
D22	NUM		UNKNOWN VIOLATION CHARGED
D23	NUM		ALCOHOL INVOLVEMENT (D)
D24	NUM		MEASURED BLOOD ALCOHOL LEVEL (D)
D25	NUM		PREVIOUS SPEEDING CONVICTIONS
D26	NUM		PREVIOUS MOVING VIOLATIONS CONVICTIONS
D27	NUM		PREVIOUS D.W.I. CONVICTIONS
D28	NUM		PREVIOUS SUSPENSIONS AND REVOCATIONS
D29	NUM		PREVIOUS ACCIDENTS
D30	NUM		NUMBER OF TRAVEL LANES (D)
D31	NUM		TRAFFICWAY DIVISION AND MEDIAN TYPE (D)
D32	NUM		ACCESS CONTROL (D)
D33	NUM		DIRECTION OF TRAVEL FLOW (D)
D34	NUM		SHOULDER PRESENCE (D)
D35	NUM		ROADWAY ALIGNMENT (D)
D36	NUM		ROADWAY PROFILE (D)
D37	NUM		SURFACE TYPE (D)
D38	NUM		SURFACE CONDITION (D)
D39	NUM		JUNCTION TRAFFIC CONTROLS (D)
D40	NUM		ACCIDENT OCCURENCE IN SCHOOL ZONE (D)
D41	NUM		SPEED LIMIT (D)
H09	NUM		YEAR OF ACCIDENT

CONTENTS OF SAS DATASET: OCCUPANT

VARIABLE	TYPE	FORMAT	LABEL
H01	NUM		PSU NUMBER
H02	CHAR		CASE NUMBER
H02A	NUM		SEQUENCE NUMBER
H02B	CHAR		STRATIFICATION
H03	NUM		RECORD NUMBER
H04	NUM		TRANSACTION CODE
H05	NUM		VERSION NUMBER
H06	NUM		VEHICLE NUMBER
H07	NUM	6.2	PSU INFLATION FACTOR
H08	NUM	6.2	NATIONAL INFLATION FACTOR
007	NUM		OCCUPANT NUMBER
008	NUM		OCCUPANT'S AGE
009	NUM		OCCUPANT'S SEX
010	NUM		OCCUPANT'S HEIGHT
011	NUM		OCCUPANT'S WEIGHT
012	NUM		OCCUPANT'S ROLE
013	NUM		OCCUPANT'S SEAT POSITION
014	NUM		ENTRAPMENT
015	NUM		EJECTION
016	NUM		EJECTION AREA
017	NUM		EJECTION MEDIUM
018	NUM		MEDIUM STATUS
019	NUM		TREATMENT - MORTALITY (0)
020	NUM		HOSPITAL STAY (0)
021	NUM		WORKING DAYS LOST (0)
023	NUM		ACTIVE RESTRAINT SYSTEM - AVAILABILITY
024	NUM		ACTIVE RESTRAINT SYSTEM - USE
025	NUM		PASSIVE RESTRAINT SYSTEM
026	NUM		PASSIVE RESTRAINT DEFEATED
027	NUM		RELATION OF INTERVIEWEE TO OCCUPANT
028	CHAR		OIC BODY REGION (FIRST, 0)
029	CHAR		ASPECT (FIRST, 0)
030	CHAR		LESION (FIRST, 0)
031	CHAR		SYSTEM/ORGAN (FIRST, 0)
032	NUM		AIS SEVERITY (FIRST, 0)
033	NUM		INJURY SOURCE (FIRST, 0)
034	NUM		SOURCE OF DATA (FIRST, 0)
035	CHAR		OIC BODY REGION (SECOND, 0)
036	CHAR		ASPECT (SECOND, 0)
037	CHAR		LESION (SECOND, 0)
038	CHAR		SYSTEM/ORGAN (SECOND, 0)
039	NUM		AIS SEVERITY (SECOND, 0)
040	NUM		INJURY SOURCE (SECOND, 0)
041	NUM		SOURCE OF DATA (SECOND, 0)
042	CHAR		OIC BODY REGION (THIRD, 0)
043	CHAR		ASPECT (THIRD, 0)
044	CHAR		LESION (THIRD, 0)
045	CHAR		SYSTEM/ORGAN (THIRD, 0)
046	NUM		AIS SEVERITY (THIRD, 0)
047	NUM		INJURY SOURCE (THIRD, 0)
048	NUM		SOURCE OF DATA (THIRD, 0)
049	CHAR		OIC BODY REGION (FOURTH, 0)
050	CHAR		ASPECT (FOURTH, 0)
051	CHAR		LESION (FOURTH, 0)
052	CHAR		SYSTEM/ORGAN (FOURTH, 0)

CONTENTS OF SAS DATASET: OCCUPANT

VARIABLE	TYPE	FORMAT	LABEL
053	NUM		AIS SEVERITY (FOURTH, O)
054	NUM		INJURY SOURCE (FOURTH, O)
055	NUM		SOURCE OF DATA (FOURTH, O)
056	CHAR		OIC BODY REGION (FIFTH, O)
057	CHAR		ASPECT (FIFTH, O)
058	CHAR		LESION (FIFTH, O)
059	CHAR		SYSTEM/ORGAN (FIFTH, O)
060	NUM		AIS SEVERITY (FIFTH, O)
061	NUM		INJURY SOURCE (FIFTH, O)
062	NUM		SOURCE OF DATA (FIFTH, O)
063	CHAR		OIC BODY REGION (SIXTH, O)
064	CHAR		ASPECT (SIXTH, O)
065	CHAR		LESION (SIXTH, O)
066	CHAR		SYSTEM/ORGAN (SIXTH, O)
067	NUM		AIS SEVERITY (SIXTH, O)
068	NUM		INJURY SOURCE (SIXTH, O)
069	NUM		SOURCE OF DATA (SIXTH, O)
070	NUM		INJURY SEVERITY (POLICE RATING, O)
H09	NUM		YEAR OF ACCIDENT

APPENDIX C

TPL Codebook

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  SS CODEBOOK
  CFM=FB LRECL=123     BLKSIZE=1230
01  ACCIDENT RECORD A03 = '1' LEVEL 0
  02 A01 'PSU NUMBER' CON 2
        (DALLAS = 01
         ALABAMA = 02
         ARKANSAS = 03
         FLORIDA = 04
         ERIE = 05
         DELAWARE = 06
         MUSKEGON = 07
         ULSTER = 08
         CHICAGO = 09
         WASHINGTON = 10)
  02 A02 'CASE NUMBER' GROUP
    03 A02A 'SEQUENCE NUMBER' CON 3 (001:999)
    03 A02B 'STRATIFICATION' CON 1
         ( = 'A' = 'B' = 'C' = 'D' = 'E' = 'F' = 'G'
           = 'H' = 'I' = 'J' = 'K' = 'L' = 'M' = 'N' )
  02 A03 'RECORD NUMBER' CON 1 ( = '1')
  02 FILLER 1
  02 A05 'VERSION NUMBER' CON 1 (= '2')
  02 A06 'YEAR OF ACCIDENT' CON 1 (8:9)
  02 A07 'MONTH OF ACCIDENT' CON 2
        (JANUARY = 01
         FEBRUARY = 02
         MARCH = 03
         APRIL = 04
         MAY = 05
         JUNE = 06
         JULY = 07
         AUGUST = 08
         SEPTEMBER = 09
         OCTOBER = 10
         NOVEMBER = 11
         DECEMBER = 12)
  02 A08 'DAY OF WEEK' CON 1
        (SUNDAY = 1
         MONDAY = 2
         TUESDAY = 3
         WEDNESDAY = 4
         THURSDAY = 5
         FRIDAY = 6
         SATURDAY = 7
         UNKNOWN = 9)
  02 FILLER 8
  02 A12 'FIRST HARMFUL EVENT' CON 2
        ('HEAD-ON' = 01
         'REAR-END' = 02
          ANGLE = 03
         'SIDE-END SWIPE' = 04
         'OTHER COLLISION TYPE' = 09
         'UNKNOWN COLLISION TYPE' = 09
          PEDESTRIAN = 11
          PEDACYCLIST = 12
         'OTHER NONMOTORIST' = 13
         'VEHICLE NOT IN TRANSPORT' = 31
```

```
          'TREE LESS THAN 50CM CIRCUM' = 32
          'TREE GREATER THAN 50CM CIRCUM' = 33
          'POLE FIXED' = 34
          'POLE BREAKAWAY DID' = 35
          'POLE BREAKAWAY DONT' = 36
          'MOVEABLE OBJ' = 37
          'CULVERT,RR TRACKS,CURB' = 38
          'ABUTMENT,WALL,SUPPORT' = 39
           EMBANKMENT = 40
          'BUILDING,RIGID' = 41
          'BUILDING,FRAMED' = 42
          'BRIDGE RAIL' = 43
          'GUARD RAIL' = 44
          'IMPACT ATTENUATOR' = 45
           GROUND = 46
          'MEDIAN BARRIER' = 47
           'TRAIN' = 48
          'OTHER STATIONARY OBJ' = 49
           ANIMAL = 51
          'TRAILER DISCONNECTED IN TRANSPORT' = 52
           TRAIN = 53
          'OTHER NONSTATIONARY OBJECT' = 59
           OVERTURNED = 61
          'FIRE OR EXPLOSION' = 62
           JACKKNIFED = 63
           IMMERSION = 64
          'OTHER NONCOLLISION' = 69  )
  02 A13 'RELATION TO ROADWAY' CON 1
         ('ON ROADWAY' = 1
          'ON SHOULDER' = 2
          'IN MEDIAN' = 3
          'ON ROADSIDE' = 4
          'OUTSIDE RIGHT OF WAY' = 5
          'OFF ROADWAY' = 6
          'IN PARKING LANE' = 7
           UNKNOWN = 9
          MISSING = ' '    )
  02 A14 'NUMBER OF VEHICLE FORMS SUBMITTED' OBS UNSIGNED 2
  02 A15 'NUMBER OF PEDESTRIAN AND NONMOTORIST FORMS SUBMITTED'
         OBS UNSIGNED 2
  02 A16 'POLICE REPORTED ACCIDENT SEVERITY' CON 1
         ( KILLED = 1
          'INCAPACITATING INJURY' = 2
          'NONINCAPACITATING INJURY' = 3
          'POSSIBLE INJURY' = 4
         'NO INJURY' = 5
           UNKNOWN = 9
          MISSING = ' '    )
  02 A17 'INVOLVEMENT OF HIT AND RUN IN ACCIDENT' CON 1
        (NO = 1
         YES = 2
         UNKNOWN = 9
         MISSING = ' '     )
  02 A18 'HOUR OF DAY' CON 4
        (0000:2359
         MIDNIGHT = 2400
         UNKNOWN = 9999
```

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```
                    MISSING = '     '     )
  02 A19 'LIGHT CONDITIONS' CON 1
        ( DAYLIGHT = 1
          DARK = 2
         'DARK BUT LIGHTED' = 3
         DAWN = 4
          DUSK = 5
          UNKNOWN = 9
         MISSING = ' '   )
  02 A20 'ATMOSPHERIC CONDITIONS' CON 1
        ('NORMAL' = 1
         RAINING = 2
         SLEETING = 3
         SNOWING = 4
         FOG = 5
         'OTHER' = 6
         UNKNOWN = 9
         MISSING = ' '    )
  02 A21 'AREA TYPE' CON 1
        (RURAL = 1
         URBAN = 2
         UNKNOWN = 9
         MISSING = ' '    )
  02 A22 'ROAD TA-1 CLASSIFICATION' CON 2
        ( INTERSTATE = 01
         'OTHER FEDERAL AID PRIMARY' = 02
         'FEDERAL AID SECONDARY' = 03
         'FEDERAL AID URBAN ARTERIAL' = 04
         'FEDERAL AID URBAN COLLECTOR' = 05
         'NONFED AID ARTERIAL' = 06
         'NONFED AID COLLECTOR' = 07
         'NONFED AID LOC' = 08
          UNKNOWN = 99
         MISSING = '   '    )
  02 A23 'CLASS TRAFFICWAY' CON 2
        ( INTERSTATE = 01
         'OTHER LIMITED ACCESS' = 02
         'OTHER U S ROUTE' = 03
         'OTHER STATE ROUTE' = 04
         'OTHER MAJOR ARTERY' = 05
         'COUNTRY ROAD' = 06
         'LOCAL ROAD' = 07
         'OTHER ROAD' = 08
          UNKNOWN = 99
                    MISSING = '   '    )
  02 A24 'ROADWAY SECTION TYPE' CON 2
        ('NON-JUNCTION' = 01
         'THREE LEG INTERSECTION' = 02
         'FOUR LEG INTERSECTION' = 03
         'MORE THAN FOUR' = 04
         'INTERSECTION RELATED' = 05
         'INTERCHANGE AREA' = 06
         'DRIVEWAY, ALLEY' = 07
         'RAILROAD CROSSING' = 08
          UNKNOWN = 99
                    MISSING = '   '    )
  02 A25 'NUMBER OF TRAVEL LANES A' CON 1
```

```
        (ONE = 1
         TWO = 2
         THREE = 3
         FOUR = 4
         FIVE = 5
         SIX = 6
         ' SEVEN OR MORE' = 7
         UNKNOWN = 9
         MISSING = ' '     )
 02 A26 'TRAFFIC DIVISION AND MEDIAN TYPE A' CON 1
       (UNDIVIDED = 1
        'PAVED FLUSH' = 2
        CURBED = 3
        'UNPAVED UNCURBED' = 4
        'MEDIAN BAR' = 5
        'OTHER' = 6
        UNKNOWN = 9
        MISSING = ' '   )
 02 A27 'ACCESS CONTROL A' CON 1
       (FULL = 1
        PARTIAL = 2
        UNCONTROLLED = 3
        UNKNOWN = 9
        MISSING = ' '   )
 02 A28 'DIRECTION OF TRAVEL FLOW A' CON 1
       ('ONE WAY' = 1
        'TWO WAY' = 2
        UNKNOWN = 9
        MISSING = ' '   )
 02 A29 'SHOULDER PRESENCE A' CON 1
       ('NO SHOULDER' = 1
        'ONE SHOULDER' = 2
        'TWO SHOULDERS' = 3
        UNKNOWN = 9
        MISSING = ' '   )
 02 A30 'ROADWAY ALIGNMENT A' CON 1
       (STRAIGHT = 1
        CURVE = 2
        UNKNOWN = 9
        MISSING = ' '   )
 02 A31 'ROADWAY PROFILE A' CON 1
       ('LEVEL' = 1
        GRADE = 2
        HILLCREST = 3
        SAG = 4
        UNKNOWN = 9
        MISSING = ' '   )
 02 A32 'SURFACE TYPE A' CON 1
       (CONCRETE = 1
        BITUMINOUS = 2
        'BRICK,BLOCK' = 3
        'SLAG,GRAVEL,STONE' = 4
        DIRT = 5
        'OTHER' = 6
        UNKNOWN = 9
        MISSING = ' '   )
 02 A33 'SURFACE CONDITION A' CON 1
```

```
        (DRY = 1
         WET = 2
         'SNOW,SLUSH' = 3
         ICE = 4
         'OTHER' = 5
         UNKNOWN = 9
                   MISSING = ' '  )
 02 A34 'JUNCTION TRAFFIC CONTROLS A' CON 1
       ('NO CONTROL' = 1
        'CONTROL NOT FUNCTIONING' = 2
        'TRAFFIC SIGN' = 3
        'STOP,YIELD SIGN' = 4
        'RR CROSSING' = 5
        'OTHER' = 6
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
                   MISSING = ' '  )
 02 A35 'ACCIDENT OCCURRENCE IN SCHOOL ZONE A' CON 1
       (NO = 1
       YES = 2
       UNKNOWN = 9
                  MISSING = ' '  )
 02 A36 'SPEED LIMIT A' CON 2
      (00:55
       UNKNOWN = 99
                  MISSING = '  '  )
 02 A37 'RESTRICTION OF RIGHT-OF-WAY' CON 1
       ('NO RESTRICTIONS' = 1
        'NARROW BRIDGE' = 2
        'PREVIOUS ACCIDENT' = 3
        MAINTENANCE = 4
        'ROAD IMMERSION' = 5
         'OTHER' = 6
         UNKNOWN = 9
                   MISSING = ' '  )
 02 A38 'ADDITIONAL RESTRICTION' CON 1
       ('PREVIOUS ACCIDENT' = 3
        MAINTENANCE = 4
        'ROAD IMMERSION' = 5
        'OTHER' = 6
        'MORE THAN TWO' = 7
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
                  MISSING = ' '  )
 02 A39 'SIDE INTRUSION' CON 1
       (YES = 1
        NO = 2
        MISSING = ' ' )
 02 A40 'STEERING COLUMN' CON 1
       (YES = 1
        NO = 2
       MISSING = ' ' )
 02 A41 'ROOF INTRUSION' CON 1
       (YES = 1
        NO = 2
       MISSING = ' ' )
 02 A42 'MOTORCYCLE' CON 1
```

```
        (YES = 1
         NO = 2
         MISSING = ' ' )
  02 A43 'TRUCK UNDERRIDE' CON 1
        (YES = 1
         NO = 2
        MISSING = ' ' )
  02 H07 'PSU INFLATION FACTOR' 085 UNSIGNED 8
  02 H08 'NATIONAL INFLATION FACTOR' 085 UNSIGNED 8
  02 FILLER 8
  02 SHORT 'SHORT VEHICLE FORM INDICATOR' CON 1
    (NO = 0
     YES = 1)
  02 FILLER 35
01  PEDESTRIAN RECORD P03 = '2' LEVEL 1
  02 P01 'PSU NUMBER' CON 2
        (DALLAS = 01
         ALABAMA = 02
         ARKANSAS = 03
         FLORIDA = 04
         ERIE = 05
         DELAWARE = 06
         MUSKEGON = 07
         ULSTER = 08
         CHICAGO = 09
         WASHINGTON = 10)
  02 P02 'CASE NUMBER' GROUP
    03 P02A 'SEQUENCE NUMBER' CON 3 (001:999)
    03 P02B 'STRATIFICATION' CON 1
          ( = 'A' = 'B' = 'C' = 'D' = 'E' = 'F' ='G'
            = 'H' = 'I' = 'J' = 'K' = 'L' = 'M' = 'N' )
  02 P03 'RECORD NUMBER' CON 1 ( = '2')
  02 FILLER 1
  02 P05 'VERSION NUMBER' CON 1 ( = '2' = '*')
  02 P06 'PEDESTRIAN OR NONMOTORIST NUMBER' CON 2
        (01:99)
  02 P07 'PEDESTRIAN OR NONMOTORIST TYPE' CON 1
        (PEDESTRIAN = 1
         BICYCLIST = 2
         'OTHER CYCLIST' = 3
         'ANIMAL RELATED' = 4
         'OTHER NONMOTORIST' = 5
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' ' )
  02 P08 'PEDESTRIAN OR NONMOTORIST AGE' CON 2
        (00:97
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  ' )
  02 P09 'PEDESTRIAN OR NONMOTORIST SEX' CON 1
        (MALE = 1
         FEMALE = 2
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' ' )
  02 P10 'PEDESTRIAN OR NONMOTORIST HEIGHT' CON 2
        (00:98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  ' )
```

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  J2 P11 'PEDESTRIAN OR NONMOTORIST WEIGHT' CON 3
        (000:998
         UNKNOWN = 999
         'DUMMY RECORD' = '***'              MISSING = '   '  )
  02 P12 'PURPOSE OF TRIP P' CON 2
        ('TO PLACE OF WORK' = 01
         'WORK-REL BUSINESS' = 02
         CONVENTION = 03
         'CIVIC/EDUC/REL' = 04
         'EAT MEAL' = 05
         'MEDICAL OR DENTAL' = 06
         SHOPPING = 07
         'FAMILY OR PERSONAL BUSINESS' = 08
         'VISIT FRIEND' = 09
         'PLEASURE DRIVE' = 10
         SIGHTSEEING = 11
         ENTERTAINMENT = 12
         RECREATION = 13
         VACATION = 14
         'CHANGE OF VEHICLE' = 15
         'CHANGE MEANS TRANSPORTATION' = 16
         'EXCHANGE OF PASS' = 17
         'RETURN HOME' = 18
         LODGING = 19
         'OTHER SOCIAL' = 20
         'OTHER PURPOSE' = 21
         'NOT APPLICABLE' = 96
         UNKNOWN = 99
         'DUMMY RECORD' = '**'               MISSING = '   '  )
  02 P13 'MONTHS CYCLING EXPERIENCE' CON 2
        (00:60
         'GREATER THAN FIVE YEARS' = 61
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'               MISSING = '   '  )
  02 P14 'PEDESTRIAN OR NONMOTORIST LOCATION' CON 2
        ('VEH NT IN TRAN ON TRAFFICWAY' = 01
         'VEH NT IN TRAN OFF TRAFFICWAY' = 02
         'VEH NOT TRAN LOC UNKOWN' = 03
         'INTERSEC-IN CROSSWALK' = 04
         'INTERSEC ON SIDEWALK' = 05
         'INTERSEC ON ROADWAY' = 06
         'INTERSEC LOC UNKNOWN' = 07
         'NONINTERSECTION IN CROSSWALK' = 08
         'NONINTERSECTION ON SIDEWALK' = 09
         'NONINTERSECTION ON BIKE PATH' = 10
         'NONINTERSECTION ON ROADWAY' = 11
         'NONINTERSECTION OFF ROADWAY' = 12
         UNKNOWN = 99
         'DUMMY RECORD' = '**'               MISSING = '   '  )
  02 P15 'PEDESTRIAN ACTION' CON 2
        ('PEDESTRIAN STRUCK VEHICLE' = 01
         'DART-OUT MIDBLOCK' = 02
         'INTERSEC DASH' = 03
         'VEHICLE TURNING,PED NOT RUNNING' = 04
         'INTERSEC RELATED' = 05
         'STOP VEH MIDBLOCK' = 06
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          'VEHICLE BACKING' = 07
          'DISABLED VEH RELATED' = 08
          'STRUCK VEH OUT-OF CONTROL' = 09
          'OTHER' = 10
          'NOT APPLICABLE' = 98
          UNKNOWN = 99
          'DUMMY RECORD' = '**'              MISSING = '  '    )
  02 P16 'TREATMENT MORTALITY P' CON 1
        (FATAL = 1
         HOSPITALIZATION = 2
         'TRANSPORTED AND RELEASED' = 3
         'OTHER' = 4
         'NO TREATMENT' = 5
         UNKNOWN = 9
         'DUMMY RECORD' = '*'            MISSING = ' '   )
  02 P17 'HOSPITAL STAY P' CON 2
        (00:30
         '31 DAYS OR MORE' = 31
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'            MISSING = '  '   )
  02 P18 'WORKING DAYS LOST P' CON 2
        (00:30
         '31 DAYS OR MORE' = 31
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'            MISSING = '  '   )
  02 FILLER 1
  02 P20 'RELAT INTERVIEWEE TO PED,NONMOT' CON 1
        ('NO INTERVIEW' = 1
         'SAME PERSON' = 2
         'OTHER ACC INVOLVED PERSON' = 3
         'RELATIVE,FRIEND' = 4
         'OTHER UNINVOLVED PERSON' = 5
         'ONE ACC INVOLVED PERSON' = 6
         'NO ACC INVOLVED PERSON' = 7
         UNKNOWN = 9
         'DUMMY RECORD' = '*'            MISSING = ' ' )
  02 P21 'O.I.C. BODY REGION(FIRST P)' CON 1
        ('HEAD-SKULL' = 'H'
         FACE = 'F'
         NECK = 'N'
         SHOULDER = 'S'
         'UPPER EXTREMITIES' = 'X'
         ARM = 'A'
         ELBOW = 'E'
         FOREARM = 'R'
         'WRIST-HAND' = 'W'
         CHEST = 'C'
         ABDOMEN = 'M'
         BACK = 'B'
         'PELVIC-HIP' = 'P'
         'LOWER EXTREMITIES' = 'Y'
         THIGH = 'T'
         KNEE = 'K'
         LEG = 'L'
         'ANKLE-FOOT' = 'O'
```

```
          'WHOLE BODY' = 'O'
          'INJURED, UNKNOWN REGION' = 'U'
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'                MISSING = ' '   )
 02 P22 'ASPECT(FIRST P)' CON 1
        ('RIGHT' = 'R'
         'LEFT' = 'L'
         BILATERAL = 'B'
         CENTRAL = 'C'
         ANTERIOR = 'A'
         POSTERIOR = 'P'
         SUPERIOR = 'S'
         INFERIOR = 'I'
         'WHOLE REGION' = 'W'
        'INJURED, UNKNOWN ASPECT' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                MISSING = ' '   )
 02 P23 'LESION(FIRST P)' CON 1
        (LACERATION = 'L'
         CONTUSION = 'C'
         ABRASION = 'A'
         FRACTURES = 'F'
         PAIN = 'P'
         CONCUSSION = 'K'
         HEMORRHAGE = 'H'
         AVULSION = 'V'
         RUPTURE = 'R'
         SPRAINS = 'S'
         DISLOCATIONS = 'D'
         CRUSHING = 'N'
         AMPUTATION = 'M'
         BURN = 'B'
         ASPHYXIA = 'X'
         'OTHER' = 'O'
         'INJURED, UNKNOWN LESION' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                MISSING = ' '   )
 02 P24 'SYSTEM/ORGAN(FIRST P)' CON 1
        (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'J'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
```

```
          MUSCLES = 'M'
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'R'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P25 'AIS SEVERITY(FIRST P)' CON 1
        ('MINOR INJURY' = 1
          'MODERATE INJURY' = 2
          'SEVERE INJURY' = 3
          'SERIOUS INJURY' = 4
          'CRITICAL INJURY' = 5
          MAXIMUM = 6
          'INJURED, UNKNOWN SEVERITY' = 7
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P26 'INJURY SOURCE(FIRST P)' CON 2
        (WINDSHIELD = 01
          MIRROR = 02
          'STEERING ASSEMBLY' = 03
          'ADD-ON EQUIPMENT' = 04
          'INSTRUMENT PANEL' = 05
          'OTHER FRONT OBJECT' = 09
          'SIDE INTERIOR SURFACE' = 11
          'SIDE HARDWARE' = 12
          'ROOF PILLAR SUPPORTS' = 13
          'WINDOW GLASS,FRAME' = 14
          'OTHER SIDE OBJECT' = 19
          'SEAT,BACK SUPPORT' = 21
          'BELT RESTRAINT SYSTEM' = 22
          'HEAD RESTRAINT' = 23
          'AIR CUSHION' = 24
          'OTHER OCCUPANT' = 25
          'INTERIOR LOOSE OBJECT' = 26
          'OTHER INTERIOR OBJECT' = 29
          'FRONT HEADER' = 31
          'REAR HEADER' = 32
          'ROOF SIDE RAILS' = 33
          'ROOF,CONVERTIBLE TOP' = 34
          FLOOR = 41
          'FLOOR TRANSMISSION LEVER' = 42
          'PARKING BRAKE' = 43
          'FOOT CONTROLS' = 44
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
```

```
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 99
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'          MISSING = '  '  )
  02 P27 'SOURCE OF DATA(FIRST P)' CON 1
        ('AUTOPSY RECORDS' = 1
         'MEDICAL OR HOSPITAL RECORDS' = 2
         'TREATING PHYSICIAN' = 3
         INTERVIEWEE = 4
         'EMS PERSONNEL' = 5
         POLICE = 6
         'OTHER SOURCE' = 7
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 P28 'OIC BODY REGION(SECOND P)' CON 1
        ('HEAD-SKULL' = 'H'
         FACE = 'F'
         NECK = 'N'
         SHOULDER = 'S'
         'UPPER EXTREMITIES' = 'X'
         ARM = 'A'
         ELBOW = 'E'
         FOREARM = 'R'
         'WRIST-HAND' = 'W'
         CHEST = 'C'
         ABDOMEN = 'M'
         BACK = 'B'
         'PELVIC-HIP' = 'P'
         'LOWER EXTREMITIES' = 'Y'
         THIGH = 'T'
         KNEE = 'K'
         LEG = 'L'
         'ANKLE-FOOT' = 'O'
         'WHOLE BODY' = 'D'
         'INJURED, UNKNOWN REGION' = 'U'
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 P29 'ASPECT(SECOND P)' CON 1
        ('RIGHT' = 'R'
         'LEFT' = 'L'
         BILATERAL = 'B'
         CENTRAL = 'C'
         ANTERIOR = 'A'
         POSTERIOR = 'P'
         SUPERIOR = 'S'
```

```
          INFERIOR = 'I'
          'WHOLE REGION' = 'W'
          'INJURED, UNKNOWN ASPECT' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 P30 'LESION(SECOND P)' CON 1
        (LACERATION = 'L'
         CONTUSION = 'C'
         ABRASION = 'A'
         FRACTURES = 'F'
         PAIN = 'P'
         CONCUSSION = 'K'
         HEMORRHAGE = 'H'
         AVULSION = 'V'
         RUPTURE = 'R'
         SPRAINS = 'S'
         DISLOCATIONS = 'D'
         CRUSHING = 'N'
         AMPUTATION = 'M'
         BURN = 'B'
         ASPHYXIA = 'X'
         'OTHER' = 'O'
         'INJURED, UNKNOWN LESION' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 P31 'SYSTEM/ORGAN(SECOND P)' CON 1
        (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'Q'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
         MUSCLES = 'M'
         INTEGUMENTARY = 'I'
         'ALL SYSTEMS IN REGION' = 'W'
         'INJURED, UNKNOWN SYSTEM' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 P32 'AIS SEVERITY(SECOND P)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
```

```
          MAXIMUM = 6
          'INJURED, UNKNOWN SEVERITY' = 7
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P33 'INJURY SOURCE(SECOND P)' CON 2
        (WINDSHIELD = 01
          MIRROR = 02
          'STEERING ASSEMBLY' = 03
          'ADD-ON EQUIPMENT' = 04
          'INSTRUMENT PANEL' = 05
          'OTHER FRONT OBJECT' = 09
          'SIDE INTERIOR SURFACE' = 11
          'SIDE HARDWARE' = 12
          'ROOF PILLAR SUPPORTS' = 13
          'WINDOW GLASS,FRAME' = 14
          'OTHER SIDE OBJECT' = 19
          'SEAT,BACK SUPPORT' = 21
          'BELT RESTRAINT SYSTEM' = 22
          'HEAD RESTRAINT' = 23
          'AIR CUSHION' = 24
          'OTHER OCCUPANT' = 25
          'INTERIOR LOOSE OBJECT' = 26
          'OTHER INTERIOR OBJECT' = 29
          'FRONT HEADER' = 31
          'REAR HEADER' = 32
          'ROOF SIDE RAILS' = 33
          'ROOF,CONVERTIBLE TOP' = 34
          FLOOR = 41
          'FLOOR TRANSMISSION LEVER' = 42
          'PARKING BRAKE' = 43
          'FOOT CONTROLS' = 44
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 89
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
```

```
        'DUMMY RECORD' = '**'          MISSING = '  '  )
 02 P34 'SOURCE OF DATA(SECOND P)' CON 1
       ('AUTOPSY RECORDS' = 1
        'MEDICAL OR HOSPITAL RECORDS' = 2
        'TREATING PHYSICIAN' = 3
        INTERVIEWEE = 4
        'EMS PERSONNEL' = 5
        POLICE = 6
        'OTHER SOURCE' = 7
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'           MISSING = ' '  )
 02 P35 'OIC BODY REGION(THIRD P)' CON 1
       ('HEAD-SKULL' = 'H'
        FACE = 'F'
        NECK = 'K'
        SHOULDER = 'S'
        'UPPER EXTREMITIES' = 'X'
        ARM = 'A'
        ELBOW = 'E'
        FOREARM = 'R'
        'WRIST-HAND' = 'W'
        CHEST = 'C'
        ABDOMEN = 'M'
        BACK = 'B'
        'PELVIC-HIP' = 'P'
        'LOWER EXTREMITIES' = 'Y'
        THIGH = 'T'
        KNEE = 'K'
        LEG = 'L'
        'ANKLE-FOOT' = 'O'
        'WHOLE BODY' = 'O'
        'INJURED, UNKNOWN REGION' = 'U'
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'           MISSING = ' '  )
 02 P36 'ASPECT(THIRD P)' CON 1
       ('RIGHT' = 'R'
        'LEFT' = 'L'
        BILATERAL = 'B'
        CENTRAL = 'C'
        ANTERIOR = 'A'
        POSTERIOR = 'P'
        SUPERIOR = 'S'
        INFERIOR = 'I'
        'WHOLE REGION' = 'W'
        'INJURED, UNKNOWN ASPECT' = 'U'
        'NOT APPLICABLE' = 8
        'UNKNOWN IF INJURED' = 9
        'DUMMY RECORD' = '*'           MISSING = ' '  )
 02 P37 'LESION(THIRD P)' CON 1
       (LACERATION = 'L'
        CONTUSION = 'C'
        ABRASION = 'A'
        FRACTURES = 'F'
        PAIN = 'P'
        CONCUSSION = 'K'
```

```
          HEMORRHAGE = 'H'
          AVULSION = 'V'
          RUPTURE = 'R'
          SPRAINS = 'S'
          DISLOCATIONS = 'D'
          CRUSHING = 'N'
          AMPUTATION = 'M'
          BURN = 'B'
          ASPHYXIA = 'X'
          'OTHER' = 'O'
          'INJURED, UNKNOWN LESION' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
 02 P38 'SYSTEM/ORGAN(THIRD P)' CON 1
        (SKELETAL = 'S'
          VERTEBRAE = 'V'
          JOINTS = 'J'
          DIGESTIVE = 'D'
          LIVER = 'L'
          'NERVOUS SYSTEM' = 'N'
          BRAIN = 'B'
          'SPINAL CORD' = 'C'
          'EYES-EARS' = 'E'
          'ARTERIES-VEINS' = 'A'
          HEART = 'H'
          SPLEEN = 'Q'
          UROGENITAL = 'G'
          KIDNEYS = 'K'
          RESPIRATORY = 'R'
          'PULMONARY-LUNGS' = 'P'
          MUSCLES = 'M'
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'W'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
 02 P39 'AIS(THIRD P)' CON 1
        ('MINOR INJURY' = 1
          'MODERATE INJURY' = 2
          'SEVERE INJURY' = 3
          'SERIOUS INJURY' = 4
          'CRITICAL INJURY' = 5
          MAXIMUM = 6
          'INJURED, UNKNOWN SEVERITY' = 7
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
 02 P40 'INJURY SOURCE(THIRD P)' CON 2
        (WINDSHIELD = 01
          MIRROR = 02
          'STEERING ASSEMBLY' = 03
          'ADD-ON EQUIPMENT' = 04
          'INSTRUMENT PANEL' = 05
          'OTHER FRONT OBJECT' = 07
          'SIDE INTERIOR SURFACE' = 11
```

```
          'SIDE HARDWARE' = 12
          'ROOF PILLAR SUPPORTS' = 13
          'WINDOW GLASS,FRAME' = 14
          'OTHER SIDE OBJECT' = 19
          'SEAT,BACK SUPPORT' = 21
          'BELT RESTRAINT SYSTEM' = 22
          'HEAD RESTRAINT' = 23
          'AIR CUSHION' = 24
          'OTHER OCCUPANT' = 25
          'INTERIOR LOOSE OBJECT' = 28
          'OTHER INTERIOR OBJECT' = 29
          'FRONT HEADER' = 31
          'REAR HEADER' = 32
          'ROOF SIDE RAILS' = 33
          'ROOF,CONVERTIBLE TOP' = 34
          FLOOR = 41
          'FLOOR TRANSMISSION LEVER' = 42
          'PARKING BRAKE' = 43
          'FOOT CONTROLS' = 44
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 89
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'          MISSING = '  '  )
02 P41    'SOURCE OF DATA(THIRD P)' CON 1
         ('AUTOPSY RECORDS' = 1
          'MEDICAL OR HOSPITAL RECORDS' = 2
          'TREATING PHYSICIAN' = 3
          INTERVIEWEE = 4
          'EMS PERSONNEL' = 5
          POLICE = 6
          'OTHER SOURCE' = 7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'           MISSING = ' '  )
02 P42    'DIC BODY REGION(FOURTH P)' CON 1
```

FILE: N79ANTPL CODEBOOK A1

```
        ('HEAD-SKULL' = 'H'
         FACE = 'F'
         NECK = 'N'
         SHOULDER = 'S'
         'UPPER EXTREMITIES' = 'X'
         ARM = 'A'
         ELBOW = 'E'
         FOREARM = 'R'
         'WRIST-HAND' = 'W'
         CHEST = 'C'
         ABDOMEN = 'M'
         BACK = 'B'
         'PELVIC-HIP' = 'P'
         'LOWER EXTREMITIES' = 'Y'
         THIGH = 'T'
         KNEE = 'K'
         LEG = 'L'
         'ANKLE-FOOT' = 'O'
         'WHOLE BODY' = 'O'
         'INJURED, UNKNOWN REGION' = 'U'
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '   )
  02 P43 'ASPECT(FOURTH P)' CON 1
        ('RIGHT' = 'R'
         'LEFT' = 'L'
         BILATERAL = 'B'
         CENTRAL = 'C'
         ANTERIOR = 'A'
         POSTERIOR = 'P'
         SUPERIOR = 'S'
         INFERIOR = 'I'
         'WHOLE REGION' = 'W'
         'INJURED, UNKNOWN ASPECT' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'          MISSING = ' '   )
  02 P44 'LESION(FOURTH P)' CON 1
        (LACERATION = 'L'
         CONTUSION = 'C'
         ABRASION = 'A'
         FRACTURES = 'F'
         PAIN = 'P'
         CONCUSSION = 'K'
         HEMORRHAGE = 'H'
         AVULSION = 'V'
         RUPTURE = 'R'
         SPRAINS = 'S'
         DISLOCATIONS = 'D'
         CRUSHING = 'N'
         AMPUTATION = 'M'
         BURN = '8'
         ASPHYXIA = 'X'
         'OTHER' = 'O'
         'INJURED, UNKNOWN LESION' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
```

FILE: N79ANTPL CODEBOOK A1

```
        'DUMMY RECORD' = '*'            MISSING = ' '  )
  02 P45 'SYSTEM/ORGAN(FOURTH P)' CON 1
        (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'U'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
         MUSCLES = 'M'
         INTEGUMENTARY = 'I'
         'ALL SYSTEMS IN REGION' = 'W'
         'INJURED, UNKNOWN SYSTEM' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'            MISSING = ' '  )
  02 P46 'AIS SEVERITY(FOURTH P)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
         'INJURED, UNKNOWN SEVERITY' = 7
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'            MISSING = ' '  )
  02 P47 'INJURY SOURCE(FOURTH P)' CON 2
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'BAD DATA' = ' 7'
         'BAD DATA' = ' 8'
         'OTHER FRONT OBJECT' = 09
         'SIDE INTERIOR SURFACE' = 11
         'SIDE HARDWARE' = 12
         'ROOF PILLAR SUPPORTS' = 13
         'WINDOW GLASS,FRAME' = 14
         'OTHER SIDE OBJECT' = 19
         'SEAT,BACK SUPPORT' = 21
         'BELT RESTRAINT SYSTEM' = 22
         'HEAD RESTRAINT' = 23
         'AIR CUSHION' = 24
         'OTHER OCCUPANT' = 25
         'INTERIOR LOOSE OBJECT' = 26
         'OTHER INTERIOR OBJECT' = 29
```

```
        'FRONT HEADER' = 31
        'REAR HEADER' = 32
        'ROOF SIDE RAILS' = 33
        'ROOF,CONVERTIBLE TOP' = 34
        FLOOR = 41
        'FLOOR TRANSMISSION LEVER' = 42
        'PARKING BRAKE' = 43
        'FOOT CONTROLS' = 44
        BACKLIGHT = 51
        'BACKLIGHT STORAGE RACK,DOOR' = 52
        'OTHER REAR OBJECT' = 59
        'HOOD, OCCUPANT VEHICLE' = 61
        'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
        'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
        'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
        'BUMPER, OTHER VEHICLE' = 71
        'HOOD EDGE, OTHER VEHICLE' = 72
        'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
        'HOOD, OTHER VEHICLE' = 74
        'HOOD ORNAMENT, OTHER VEHICLE' = 75
        'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
        'SIDE SURFACE, OTHER VEHICLE' = 77
        'SIDE MIRRORS, OTHER VEHICLE' = 78
        'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
        'REAR SURFACE, OTHER VEHICLE' = 80
        'UNDERCARRIAGE, OTHER VEHICLE' = 81
        GROUND = 86
        'OTHER VEHICLE OR OBJECT' = 87
        'UNKNOWN VEHICLE OR OBJECT' = 89
        'NONCONTACT INJURY SOURCE' = 90
        'INJURED, UNKNOWN SOURCE' = 97
        'NOT APPLICABLE' = 98
        'UNKNOWN IF INJURED' = 99
        'DUMMY RECORD' = '**'           MISSING = '  '  )
02 P48  'SOURCE OF DATA(FOURTH P)' CON 1
       ('BAD DATA' = 0
        'AUTOPSY RECORDS' = 1
        'MEDICAL OR HOSPITAL RECORDS' = 2
        'TREATING PHYSICIAN' = 3
        INTERVIEWEE = 4
        'EMS PERSONNEL' = 5
        POLICE = 6
        'OTHER SOURCE' = 7
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'            MISSING = ' '  )
02 P49  'OIC BODY REGION(FIFTH P)' CON 1
       ('HEAD-SKULL' = 'H'
        FACE = 'F'
        NECK = 'N'
        SHOULDER = 'S'
        'UPPER EXTREMITIES' = 'X'
        ARM = 'A'
        ELBOW = 'E'
        FOREARM = 'R'
        'WRIST-HAND' = 'W'
        CHEST = 'C'
```

```
          ABDOMEN = 'M'
          BACK = '8'
          'PELVIC-HIP' = 'P'
          'LOWER EXTREMITIES' = 'Y'
          THIGH = 'T'
          KNEE = 'K'
          LEG = 'L'
          'ANKLE-FOOT' = 'O'
          'WHOLE BODY' = 'O'
          'INJURED, UNKNOWN REGION' = 'U'
          'BAD DATA' = 0
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P50 'ASPECT(FIFTH P)' CON 1
        ('RIGHT' = 'R'
          'LEFT' = 'L'
          BILATERAL = 'B'
          CENTRAL = 'C'
          ANTERIOR = 'A'
          POSTERIOR = 'P'
          SUPERIOR = 'S'
          INFERIOR = 'I'
          'WHOLE REGION' = 'W'
          'INJURED, UNKNOWN ASPECT' = 'U'
          'BAD DATA' = 2
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P51 'LESION(FIFTH P)' CON 1
        (LACERATION = 'L'
          CONTUSION = 'C'
          ABRASION = 'A'
          FRACTURES = 'F'
          PAIN = 'P'
          CONCUSSION = 'K'
          HEMORRHAGE = 'H'
          AVULSION = 'V'
          RUPTURE = 'R'
          SPRAINS = 'S'
          DISLOCATIONS = 'D'
          CRUSHING = 'N'
          AMPUTATION = 'M'
          BURN = 'B'
          ASPHYXIA = 'X'
          'OTHER' = 'O'
          'INJURED, UNKNOWN LESION' = 'U'
          'BAD DATA' = 2
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P52 'SYSTEM/ORGAN(FIFTH P)' CO' 1
        (SKELETAL = 'S'
          VERTEBRAE = 'V'
          JOINTS = 'J'
          DIGESTIVE = 'D'
          LIVER = 'L'
```

```
          'NERVOUS SYSTEM' = 'N'
          BRAIN = 'B'
          'SPINAL CORD' = 'C'
          'EYES-EARS' = 'E'
          'ARTERIES-VEINS' = 'A'
          HEART = 'H'
          SPLEEN = 'Q'
          UROGENITAL = 'G'
          KIDNEYS = 'K'
          RESPIRATORY = 'R'
          'PULMONARY-LUNGS' = 'P'
          MUSCLES = 'M'
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'W'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'BAD DATA' = 5
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'            MISSING = ' '   )
  02 P53 'AIS SEVERITY(FIFTH P)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
         'INJURED, UNKNOWN SEVERITY' = 7
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'            MISSING = ' '   )
  02 P54 'INJURY SOURCE(FIFTH P)' CON 2
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'OTHER FRONT OBJECT' = 09
         'SIDE INTERIOR SURFACE' = 11
         'SIDE HARDWARE' = 12
         'ROOF PILLAR SUPPORTS' = 13
         'WINDOW GLASS,FRAME' = 14
         'OTHER SIDE OBJECT' = 19
         'SEAT,BACK SUPPORT' = 21
         'BELT RESTRAINT SYSTEM' = 22
         'HEAD RESTRAINT' = 23
         'AIR CUSHION' = 24
         'OTHER OCCUPANT' = 25
         'INTERIOR LOOSE OBJECT' = 26
         'OTHER INTERIOR OBJECT' = 29
         'FRONT HEADER' = 31
         'REAR HEADER' = 32
         'ROOF SIDE RAILS' = 33
         'ROOF,CONVERTIBLE TOP' = 34
         FLOOR = 41
         'FLOOR TRANSMISSION LEVER' = 42
         'PARKING BRAKE' = 43
         'FOOT CONTROLS' = 44
```

```
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 89
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'          MISSING = '  '  )
  02 P55 'SOURCE OF DATA(FIFTH P)' CON 1
        ('AUTOPSY RECORDS' = 1
          'MEDICAL OR HOSPITAL RECORDS' = 2
          'TREATING PHYSICIAN' = 3
          INTERVIEWEE = 4
          'EMS PERSONNEL' = 5
          POLICE = 6
          'OTHER SOURCE' = 7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 P56 'OIC BODY REGION(SIXTH P)' CON 1
        ('HEAD-SKULL' = 'H'
          FACE = 'F'
          NECK = 'N'
          SHOULDER = 'S'
          'UPPER EXTREMITIES' = 'X'
          ARM = 'A'
          ELBOW = 'E'
          FOREARM = 'R'
          'WRIST-HAND' = 'W'
          CHEST = 'C'
          ABDOMEN = 'M'
          BACK = 'B'
          'PELVIC-HIP' = 'P'
          'LOWER EXTREMITIES' = 'Y'
          THIGH = 'T'
          KNEE = 'K'
          LEG = 'L'
          'ANKLE-FOOT' = 'O'
          'WHOLE BODY' = 'O'
```

```
        'INJURED, UNKNOWN REGION' = 'U'
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P57 'ASPECT(SIXTH P)' CON 1
       ('RIGHT' = 'R'
        'LEFT' = 'L'
        BILATERAL = 'B'
        CENTRAL = 'C'
        ANTERIOR = 'A'
        POSTERIOR = 'P'
        SUPERIOR = 'S'
        INFERIOR = 'I'
        'WHOLE REGION' = 'W'
        'INJURED, UNKNOWN ASPECT' = 'U'
        'NOT APPLICABLE' = 8
        'UNKNOWN IF INJURED' = 9
        'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P58 'LESION(SIXTH P)' CON 1
       (LACERATION = 'L'
        CONTUSION = 'C'
        ABRASION = 'A'
        FRACTURES = 'F'
        PAIN = 'P'
        CONCUSSION = 'K'
        HEMORRHAGE = 'H'
        AVULSION = 'V'
        RUPTURE = 'R'
        SPRAINS = 'S'
        DISLOCATIONS = 'D'
        CRUSHING = 'N'
        AMPUTATION = 'M'
        BURN = 'B'
        ASPHYXIA = 'X'
        'OTHER' = 'O'
        'INJURED, UNKNOWN LESION' = 'U'
        'NOT APPLICABLE' = 8
        'UNKNOWN IF INJURED' = 9
        'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 P59 'SYSTEM/ORGAN(SIXTH P)' CON 1
       (SKELETAL = 'S'
        VERTEBRAE = 'V'
        JOINTS = 'J'
        DIGESTIVE = 'D'
        LIVER = 'L'
        'NERVOUS SYSTEM' = 'N'
        BRAIN = 'B'
        'SPINAL CORD' = 'C'
        'EYES-EARS' = 'E'
        'ARTERIES-VEINS' = 'A'
        HEART = 'H'
        SPLEEN = 'Q'
        UROGENITAL = 'G'
        KIDNEYS = 'K'
        RESPIRATORY = 'R'
        'PULMONARY-LUNGS' = 'P'
        MUSCLES = 'M'
```

```
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'R'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 P60 'AIS SEVERITY(SIXTH P)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
         'INJURED, UNKNOWN SEVERITY' = 7
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 P61 'INJURY SOURCE(SIXTH P)' CON 2
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'OTHER FRONT OBJECT' = 09
         'SIDE INTERIOR SURFACE' = 11
         'SIDE HARDWARE' = 12
         'ROOF PILLAR SUPPORTS' = 13
         'WINDOW GLASS,FRAME' = 14
         'OTHER SIDE OBJECT' = 19
         'SEAT,BACK SUPPORT' = 21
         'BELT RESTRAINT SYSTEM' = 22
         'HEAD RESTRAINT' = 23
         'AIR CUSHION' = 24
         'OTHER OCCUPANT' = 25
         'INTERIOR LOOSE OBJECT' = 26
         'OTHER INTERIOR OBJECT' = 29
         'FRONT HEADER' = 31
         'REAR HEADER' = 32
         'ROOF SIDE RAILS' = 33
         'ROOF,CONVERTIBLE TOP' = 34
         FLOOR = 41
         'FLOOR TRANSMISSION LEVER' = 42
         'PARKING BRAKE' = 43
         'FOOT CONTROLS' = 44
         BACKLIGHT = 51
         'BACKLIGHT STORAGE RACK,DOOR' = 52
         'OTHER REAR OBJECT' = 59
         'HOOD, OCCUPANT VEHICLE' = 61
         'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
         'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
         'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
         'BUMPER, OTHER VEHICLE' = 71
         'HOOD EDGE, OTHER VEHICLE' = 72
         'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
         'HOOD, OTHER VEHICLE' = 74
         'HOOD ORNAMENT, OTHER VEHICLE' = 75
         'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
```

```
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 89
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'          MISSING = ' '  )
  02 P62 'SOURCE OF DATA(SIXTH P)' CON 1
        ('AUTOPSY RECORDS' = 1
         'MEDICAL OR HOSPITAL RECORDS' = 2
         'TREATING PHYSICIAN' = 3
         INTERVIEWEE = 4
         'EMS PERSONNEL' = 5
         POLICE = 6
         'OTHER SOURCE' = 7
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 P63 'INJURY SEVERITY POLICE RATING P' CON 1
        (KILLED = 1
         'INCAPACITATING INJURY' = 2
         'NONINCAPACITATING INJURY' = 3
         'POSSIBLE INJURY' = 4
         'NO INJURY' = 5
         'BAD DATA' = 8
         UNKNOWN = 9
          'DUMMY RECORD' = '*'          MISSING = ' ' )
  02 P64 'TRAF VIOL AGAINST PED P' CON 1
        ('BAD DATA' = 0
         YES = 1
         NO = 2
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 P65 'ALCOHOL INVOLVEMENT' CON 1
        ('BAD DATA' = 0
         'NO,TEST NOT GIVEN' = 1
         'NO,TEST GIVEN' = 2
         'YES,TEST NOT GIVEN' = 3
         'YES,TEST GIVEN' = 4
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 P66 'MEASURED BLOOD ALCOHOL LEVEL' CON 2
        (00:96
         'NOT TESTED' = 97
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = ' '  )
  02 FILLER 35
1  VEHICLE RECORD LEVEL 1
  02 V01 'PSU NUMBER' CON 2
        (DALLAS = 01
         ALABAMA = 02
```

```
          ARKANSA = 03
          FLORIDA = 04
          ERIE = 05
          DELAWARE = 06
          MUSKEGON = 07
          ULSTER = 08
          CHICAGO = 09
          WASHINGTON = 10)
  02 V02 'CASE NUMBER' GROUP
    03 V02A 'SEQUENCE NUMBER' CON 3 (0001:999)
    03 V02B 'STRATIFICATION' CON 1
          ( = 'A' = 'B' = 'C' = 'D' = 'E' = 'F' = 'G'
            = 'H' = 'I'  = 'J' = 'K' = 'L' = 'M' = 'N' )
  02 V03 'RECORD NUMBER' CON 1 ( = '3')
  02 FILLER 1
  02 V05 'VERSION NUMBER' CON 1 ( = '2' = '*')
  02 V06 'VEHICLE NUMBER' CON 2 (01:99)
  02 V07 'NUMBER OF OCCUPANT FORMS SUBMITTED' OBS UNSIGNED 2
  02 V08 'VEHICLE ROLE' CON 1
        ('STRIKING UNIT' = 1
         'STRUCK UNIT' = 2
         'BOTH STRIKING AND STRUCK' = 3
         'NON-COLLISION' = 4
         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V09 'POLICE INDICATED MANNER OF LEAVING SCENE' CON 1
        (DRIVEN = 1
         TOWED = 2
         ABANDONED = 3
         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V10 'VEHICLE MODEL YEAR' CON 2
        (00:98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'             MISSING = '  '  )
  02 V11 'VEHICLE MAKE' CON 3
        (UNKNOWN = 000
        001:999
       'DUMMY RECORD' = '***'              MISSING  =  '  '  )
  02 V12 'VEHICLE MODEL' CON 2
        (UNKNOWN = 00
       01:99
       'DUMMY RECORD' = '**'               MISSING  =  '  '  )
  02 V13 'VEHICLE TYPE' CON 2
        ('2-DOOR PASS CAR' = 01
         '4-DOOR PASS CAR' = 02
         'STATION WAGON' = 03
         CONVERTIBLE = 04
         'ON/OFF ROAD VEHICLE' = 05
         'CAR,PICKUP BODY' = 06
         'OTHER TYPE AUTO' = 08
         'UNKNOWN TYPE AUTO' = 09
         PICKUP = 11
         VAN = 12
         'STATION WAGON TRUCK BASED' = 13
         'SINGLE UNIT TRUCK' = 14
         'SINGLE UNIT TRUCK' = 15
```

```
        'SINGLE UNIT TRUCK' = 16
        'SINGLE UNIT TRUCK' = 19
        'TWO UNIT TRUCK' = 21
        'MULTI-UNIT TRUCK' = 22
        'TRUCK-TRACT ONLY' = 23
        'UNKNOWN TRUCK TYPE' = 29
        'SCHOOL BUS' = 31
        'INTERCITY BUS' = 32
        'URBAN BUS' = 33
        'OTHER BUS' = 36
        'UNKNOWN BUS TYPE' = 39
        MOTORCYCLE = 41
        'MO-PED' = 42
        'OTHER' = 46
        'UNKNOWN TYPE MOTORCYCLIST' = 49
        SNOWMOBILES = 51
        'FARM VEHICLES' = 52
        'DUNE,SWAMP BUG' = 53
        'CONSTRUCTION EQUIPMENT' = 54
        'EMERGENCY VEHICLE' = 55
        'LARGE LIMOUSINE' = 56
        'SELF-PROPELLED CAMPER' = 57
        'FIRE TRUCK' = 58
        UNKNOWN = 99
        'DUMMY RECORD' = '**'
02 V14 'TOWED TRAILING UNIT' COM 1          MISSING = ' '  )
      (NONE = 1
        'TRAVEL CAMPER/TRAILER' = 2
        'OTHER CAR TRAILER' = 3
        'FIFTH WHEEL TRAILER' = 4
        'TRUCK TRAILER' = 5
        'BOAT TRAILER' = 6
        'OTHER' = 7
        UNKNOWN = 9
        'DUMMY RECORD' = '*'
02 V15 'OBJECT CONTACTED (HIGHEST)' COM 2   MISSING = ' '  )
      (01:30
        'VEHICLE NOT IN TRANSPORT' = 31
        'TREE(TO 50 CM)' = 32
        'TREE(OVER 50 CM)' = 33
        'POLE-FIXED' = 34
        'POLE-BREAKAWAY-DID' = 35
        'POLE-BREAKAWAY-DIDNT' = 36
        'MOVABLE OBJECT' = 37
        'CULVERT,RR TRACKS, CURB' = 38
        'ABUTMENT,WALL,SUPPORT' = 39
        EMBANKMENT = 40
        'BUILDING-RIGID' = 41
        'BUILDING-FRAMED' = 42
        'BRIDGE RAIL' = 43
        'GUARD RAIL' = 44
        'IMPACT ATTENUATOR' = 45
        GROUND = 46
        'MEDIAN BARRIER' = 47
        'TRAIN' = 48
        'OTHER STATIONARY OBJECT' = 49
        ANIMAL = 51
```

```
          'TRAILER,DISCONECTED' = 52
          TRAIN = 53
          'OTHER NONSTATIONARY OBJECT' = 59
          71:96
          'OTHER' = 97
          'NOT APPLICABLE' = 98
          UNKNOWN = 99
          'DUMMY RECORD' = '**'                MISSING = '  '  )
  02 V16 'DIRECTION OF FORCE (HIGHEST)' CON 2
        (NONHORIZ = 00
          '1 O CLOCK' = 01
          '2 O CLOCK' = 02
          '3 O CLOCK' = 03
          '4 O CLOCK' = 04
          '5 O CLOCK' = 05
          '6 O CLOCK' = 06
          '7 O CLOCK' = 07
          '8 O CLOCK' = 08
          '9 O CLOCK' = 09
          '10 O CLOCK' = 10
          '11 O CLOCK' = 11
          '12 O CLOCK' = 12
          'NOT APPLICABLE' = 98
          UNKNOWN = 99
          'DUMMY RECORD' = '**'                MISSING = '  '  )
  02 V17 'DEFORMATION LOCATION (HIGHEST)' CON 1
        (FRONT = 'F'
          'RIGHT SIDE' = 'S'
          'BACK SIDE' = 'B'
          'LEFT SIDE' = 'L'
          TOP = 'T'
          UNDERCARRIAGE= 'U'
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V18 'SPECIFIC HORIZONTAL LOCATION (HIGHEST)' CON 1
        (DISTRIBUTED = 'D'
          'LEFT' = 'L'
          'CENTER' = 'C'
          'RIGHT' = 'R'
          'SIDE FRONT' = 'F'
          'SIDE CENTER' = 'P'
          'SIDE REAR' = 'B'
          'SIDE OR END(F+P OR L+C)' = 'Y'
          'SIDE OR END(P+B OR C+R)' = 'Z'
          'NOT APPLICABLE' = 6
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V19 'SPECIFIC VERTICAL LOCATION (HIGHEST)' CON 1
        ('ALL' = 'A'
          'TOP OF FRAME TOP' = 'H'
          'BELOW BELT LINE' = 'E'
          'BELT LINE AND ABOVE' = 'J'
          MIDDLE = 'M'
          LOW = 'L'
          UNDERCARRIAGE = 'X'
          'NOT APPLICABLE' = 6
```

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         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V20 'TYPE OF DAMAGE DISTRIBUTION (HIGHEST)' CON 1
        ('WIDE IMPACT AREA' = 'W'
         'NARROW IMP AREA' = 'N'
         SIDESWIPE = 'S'
         ROLLOVER = 'O'
         'OVERHANGING STRUCTURE' = 'A'
         CORNER = 'E'
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V21 'DEFORMATION EXTENT GUIDE (HIGHEST)' CON 2
        (ONE = 01
         TWO = 02
         THREE = 03
         FOUR = 04
         FIVE = 05
         SIX = 06
         SEVEN = 07
         EIGHT = 08
         NINE = 09
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'              MISSING = '  '  )
  02 V22 'OBJECT CONTACTED (SECONDARY)' CON 2
        (01:30
         'VEHICLE NOT IN TRANSPORT' = 31
         'TREE(TO 50 CM)' = 32
         'TREE(OVER 50 CM)' = 33
         'POLE-FIXED' = 34
         'POLE-BREAKAWAY-DID' = 35
         'POLE-BREAKAWAY-DIDNT' = 36
         'MOVABLE OBJECT' = 37
         'CULVERT,RR TRACKS, CURB' = 38
         'ABUTMENT,WALL, SUPPORT' = 39
         EMBANKEMENT = 40
         'BUILDING-RIGID' = 41
         'BUILDING-FRAMED' = 42
         'BRIDGE RAIL' = 43
         'GUARD RAIL' = 44
         'IMPACT ATTENUATR' = 45
         GROUND = 46
         'MEDIAN BARRIER' = 47
         'TRAIN' = 48
         'OTHER STATIONARY OBJECT' = 49
         ANIMAL = 51
         'TRAILER,DISCONECTED' = 52
         TRAIN = 53
         'OTHER NONSTATIONARY OBJECT' = 59
         71:96
         'OTHER' = 97
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'              MISSING = '  '  )
  02 V23 'DIRECTION OF FORCE (SECONDARY)' CON 2
        (NONHORIZ = 00
```

```
          '1 O CLOCK' = 01
          '2 O CLOCK' = 02
          '3 O CLOCK' = 03
          '4 O CLOCK' = 04
          '5 O CLOCK' = 05
          '6 O CLOCK' = 06
          '7 O CLOCK' = 07
          '8 O CLOCK' = 08
          '9 O CLOCK' = 09
          '10 O CLOCK' = 10
          '11 O CLOCK' = 11
          '12 O CLOCK' = 12
          'NOT APPLICABLE' = 98
          UNKNOWN = 99
          'DUMMY RECORD' = '**'              MISSING = '  '  )
  02 V24 'DEFORMATION LOCATION (SECONDARY)' CON 1
        (FRONT = 'F'
          'RIGHT SIDE' = 'R'
          'BACK SIDE' = 'B'
          'LEFT SIDE' = 'L'
          TOP = 'T'
          UNDERCARRIAGE = 'U'
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'             MISSING = ' '  )
  02 V25 'SPECIFIC HORIZONTAL LOCATION (SECONDARY)' CON 1
        (DISTRIBUTED = 'D'
          'LEFT' = 'L'
          'CENTER' = 'C'
          'RIGHT' = 'R'
          'SIDE FRONT' = 'F'
          'SIDE CENTER' = 'P'
          'SIDE REAR' = 'B'
          'SIDE OR END(F+P OR L+C)' = 'Y'
          'SIDE OR END(P+B OR C+R)' = 'Z'
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'             MISSING = ' '  )
  02 V26 'SPECIFIC VERTICAL LOCATION (SECONDARY)' CON 1
        ('ALL' = 'A'
          'TOP OF FRAME TOP' = 'H'
          'BELOW BELT LINE' = 'E'
          'BELT LINE AND ABOVE' = 'G'
          MIDDLE = 'M'
          LOW = 'L'
          UNDERCARRIAGE = 'X'
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'             MISSING = ' '  )
  02 V27 'TYPE OF DAMAGE DISTRIBUTION (SECONDARY)' CON 1
        ('SIDE IMPACT AREA' = 'I'
          'NARROW IMP AREA' = 'N'
          SIDESWIPE = 'S'
          ROLLOVER = 'O'
          'OVERHANGING STRUCTURE' = 'A'
          CORNER = 'E'
          'NOT APPLICABLE' = 8
```

```
        UNKNOWN = 9
        'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V28 'DEFORMATION EXTENT GUIDE (SECONDARY)' CON 2
       (ONE = 01
        TWO = 02
        THREE = 03
        FOUR = 04
        FIVE = 05
        SIX = 06
        SEVEN = 07
        EIGHT = 08
        NINE = 09
        'NOT APPLICABLE' = 98
        UNKNOWN = 99
        'DUMMY RECORD' = '**'             MISSING = '  '  )
  02 V29 'MORE THAN TWO CDCS' CON 1
       (YES = 1
        NO = 2
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V30 'NUMBER OF VIN CHARACTERS' CON 2
       (00:98
        UNKNOWN = 99
        'DUMMY RECORD' = '**'             MISSING = ' '  )
  02 FILLER 7
  02 V32 'REGISTRATION OF VEHICLE' CON 1
       ('NOT REGISTERED' = 1
        'IN STATE' = 2
        'OUT-OF STATE' = 3
        'OTHER REGISTRATION' = 4
         UNKNOWN = 9
        'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V33  'VEHICLE SPECIAL USE' CON 1
       (NONE = 1
        'SCHOOL RELATED' = 2
        'EMERGENCY RELATED' = 3
        UNKNOWN = 9
        'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 V34 'ODOMETER READING' CON 3
       (002:997
       'LESS THAN 1,500 MILES' = 001
        'NOT APPLICABLE' = 998
        UNKNOWN = 999
        'DUMMY RECORD' = '***'             MISSING = '   '  )
  02 V35 'PASSENGER COMPARTMENT INTEGRITY' CON 2
       ('NO  INTEGRITY LOSS' = 01
        WINDSHIELD = 02
        DOOR = 03
        ROOF = 04
        'WINDSHIELD,DOOR' = 05
        'WINDSHIELD,ROOF' = 06
        'DOOR AND ROOF' = 07
        'WINDSHIELD,DOOR,ROOF' = 08
        'NOT APPLICABLE' = 98
        UNKNOWN = 99
        'DUMMY RECORD' = '**'             MISSING = '  '  )
```

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```
  02 V36 'PASSENGER COMPARTMENT INTRUSION' CON 2
        (NONE = 01
         FRONT = 02
         'RIGHT SIDE' = 03
         'LEFT SIDE' = 04
         REAR = 05
         BOTTOM = 06
         TOP = 07
         'TWO OR MORE' = 08
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'            MISSING = '  ' )
  02 V37 'MAGNITUDE OF INTRUSION' CON 1
        ('LESS THAN 5 CM' = 1
         'BETWEEN 5, 15 CM' = 2
         'GREATER THAN 15 CM' = 3
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'             MISSING = ' ' )
  02 V38 'FIRE OCCURRENCE' CON 1
        ('NO FIRE' = 1
         'IN VEHICLE,MINOR' = 2
         'IN VEHICLE,MAJOR' = 3
         'EXTERNAL TO VEHICLE, MINOR' = 4
         'EXTERNAL TO VEHICLE, MAJOR' = 5
         'ORIGIN UNKNOWN' = 6
         'BAD DATA' = 7
         'UNKNOWN OCCURRENCE' = 9
         'DUMMY RECORD' = '*'             MISSING = ' ' )
  02 V39 'TYPE OF MOST SEVERE IMPACT' CON 2
        ('HEAD-ON' = 01
         'REAR-END,STRIKING' = 02
         'REAR-END,STRUCK' = 03
         'ANGLE,STRIKING' = 04
         'ANGLE,STRUCK,L' = 05
         'ANGLE,STRUCK,R' = 06
         'END-SIDE SWIPE' = 07
         'FRONT IMPACT' = 08
         'SIDE IMPACT' = 09
         'REAR IMPACT' = 10
         'IMPACT,PED-NONMOTORIST' = 11
         'OTHER IMPACT' = 12
         'BAD DATA' = 90
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'            MISSING = '  ' )
  02 V40 'ROLLOVER INVOLVEMENT' CON 1
        (YES = 1
         NO = 2
         'BAD DATA' = 7
         UNKNOWN = 9
         'DUMMY RECORD' = '*'             MISSING = ' ' )
  02 V41 'JACKKNIFE INVOLVEMENT' CON 1
        ('BAD DATA' = 0
         YES = 1
         NO = 2
         UNKNOWN = 9
```

```
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          'DUMMY RECORD' = '*'              MISSING = ' '   )
   02 V42 'POTENTIAL SAFETY PROBLEM BULLETIN' CON 1
         (YES = 1
          NO = 2
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
   02 V43 'VEHICLE CURB WEIGHT' OBS 3
   02 V44 'VEHICLE CARGO WEIGHT' OBS 3
   02 V45 'REPORTED SOURCE OF CARGO WEIGHT' CON 1
         ('NO CARGO' = 1
          MEASURED = 2
          ESTIMATED = 3
          'RATED CAPACITY' = 4
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
   02 V46 'TOTAL DELTA V' OBS UNSIGNED 3
   02 V47 'LONGITUDINAL DELTA V' OBS EBCDIC SIGN 4
   02 V48 'LATERAL DELTA V' OBS EBCDIC SIGN 4
   02 V49 'ENERGY ABSORBTION' OBS UNSIGNED 4
   02 V50 'ESTIMATED TRAVEL SPEED' CON 2
         (STOPPED = 00
        01:96
          'GREATER THAN 97MPH' = 97
          UNKNOWN = 99
          'DUMMY RECORD' = '**'             MISSING  =  '   '   )
   02 FILLER 28
01   DRIVER RECORD LEVEL 1
   02 D01 'PSU NUMBER' CON 2
         (DALLAS = 01
          ALABAMA = 02
          ARKANSAS = 03
          FLORIDA = 04
          ERIE = 05
          DELAWARE = 06
          MUSKEGON = 07
          ULSTER = 08
          CHICAGO = 09
          WASHINGTON = 10)
   02 D02 'CASE NUMBER' GROUP
     03 D02A 'SEQUENCE NUMBER' CON 3 (001:999)
     03 D02B 'STRATIFICATION' CON 1
           ( = 'A' = 'B' = 'C' = 'D' = 'E' = 'F' = 'G'
             = 'H' = 'I' = 'J' = 'K' = 'L' ='M' = 'N' )
   02 D03 'RECORD NUMBER' CON 1 ( = '4')
   02 FILLER 1
   02 D05 'VERSION NUMBER' CON 1 ( = '2' = '*')
   02 D06 'VEHICLE NUMBER' CON 2 (01:99)
   02 D07 'NUMBER OF OCCUPANTS THIS MOTOR VEHICLE' CON 2
         (00:94
          UNKNOWN = 99
          'DUMMY RECORD' = '**'             MISSING = '   '   )
   02 D08 'DRIVER PRESENCE IN VEHICLE' CON 1
         (YES = 1
          NO = 2
          'BAD DATA' = 8
          'DUMMY RECORD' = '*'     )
   02 D09 'MONTHS DRIVING EXPERIENCE THIS CLASS OF VEHICLE' CON 2
```

```
        (00:60
        'GREATER THAN FIVE YEARS' = 61
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D10 'ESTIMATED MILEAGE THIS VEHICLE' CON 3
       (002:996
        'LESS THAN 150 MILES' = 001
        'GREATER THAN 99,650 MILES' = 997
        'NOT APPLICABLE' = 998
        UNKNOWN = 999
        'DUMMY RECORD' = '***'             MISSING = '   '  )
  02 D11 'PURPOSE OF TRIP D' CON 2
        ('TO PLACE OF WORK ' =01
         'WORK-REL BUSINESS' = 02
         CONVENTION = 03
         'CIVIC/EDUC/REL' = 04
         'EAT A MEAL' = 05
         'MEDICAL OR DENTAL' = 06
         SHOPPING = 07
         'FAMILY OR PERSONAL BUSINESS' = 08
         'VISIT FRIEND' = 09
         'PLEASURE DRIVE' = 10
         SIGHTSEEING = 11
         ENTERTAINMENT = 12
         RECREATION = 13
         VACATION = 14
         'CHANGE OF VEHICLE' = 15
         'CHANGE MEANS TRANSPORTATION' = 16
         'EXCHANGE PASS' = 17
         'RETURN HOME' = 18
         LODGING = 19
         'OTHER SOCIAL' = 20
         'OTHER PURPOSE' = 21
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'             MISSING = '  '  )
  02 D12 'FREQUENCY DRIVING ROAD' CON 1
        (DAILY = 1
         WEEKLY = 2
         MONTHLY = 3
         'LESS THAN ONCE A MONTH' = 4
         'FIRST TIME ON ROAD' = 5
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D13 'DRIVER EDUCATION' CON 1
        ('NO FORMAL' = 1
         'IN TRAINING' = 2
         'HIGH SCHOOL' = 3
         'COMMERCIAL' = 4
         'OTHER' = 5
         'TWO OR MORE TYPES' = 6
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D14 'LICENSE STATUS' CON 1
```

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```
        ('VALID LICENSE' = 1
         'NO LICENSE' = 2
         'SUSPENDED/REVOKED' = 3
         'EXPIRED LICENSE' = 4
         'LEARNERS PERMIT' = 5
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D15 'LICENSE RESTRICTION' CON 1
      ('NO RESTRICTION' = 1
       'GLASSES/CONTACT LENS' = 2
       'DAYLIGHT ONLY' = 3
       'HANDICAP RELATED' = 4
       'ACTIVITY RESTRICTION' = 5
       'OTHER RESTRICTION' = 6
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D16 'ADDITIONAL LICENSE RESTRICTIO' CON 1
      ('DAYLIGHT ONLY' = 3
       'HANDICAP RELATED' = 4
       'ACTIVITY RESTRICTION' = 5
       'OTHER RESTRICITION' = 6
       'TWO OR MORE' = 7
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D17 'TRAFFIC VIOLATION CHARGED SPEEDING' CON 1
      (YES = 1
       NO = 2
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D18 'TRAFFIC VIOLATION CHARGED DRIVING WHILE INTOXICATED' CON 1
      (YES = 1
       NO = 2
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D19 'TRAFFIC VIOLATION CHARGED RECKLESS DRIVING' CON 1
      (YES = 1
       NO = 2
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D20 'TRAFFIC VIOLATION CHARGED SUSPENDED OR REVOKED LICENSE' CON 1
      (YES = 1
       NO = 2
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 D21 'TRAFFIC VIOLATION CHARGED OTHER VIOLATION' CON 1
      (YES = 1
       NO = 2
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                    MISSING = ' '   )
```

```
  02 D22 'TRAFFIC VIOLATION CHARGED UNKNOWN VIOLATION' CON 1
         (YES = 1
          NO = 2
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D23 'ALCOHOL INVOLVEMENT D' CON 1
         ('NO,TEST NOT GIVEN' = 1
          'NO,TEST GIVEN' = 2
          'YES,TEST NOT GIVEN' = 3
          'YES,TEST GIVEN' = 4
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D24 'MEASURED BLOOD ALCOHOL LEVEL D' CON 2
         (00:96
          'NOT TESTED' = 97
          'NOT APPLICABLE' = 98
          UNKNOWN = 99
          'DUMMY RECORD' = '**'             MISSING = '  '  )
  02 D25 'PREVIOUS SPEEDING CONVICTIONS' CON 1
         (0:7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D26 'PREVIOUS OTHER MOVING VIOLATION CONVICTIONS' CON 1
         (0:7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D27 'PREVIOUS DRIVING WHILE INTOXICATED CONVICTIONS' CON 1
         (0:7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D28 'PREVIOUS RECORDED SUSPENSIONS AND REVOCATIONS' CON 1
         (0:7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D29 'PREVIOUS ACCIDENTS' CON 1
         (0:7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D30 'NUMBER OF TRAVEL LANES D' CON 1
         (ONE = 1
          TWO = 2
          THREE = 3
          FOUR = 4
          FIVE = 5
          SIX = 6
          'GREATER THAN SEVEN' = 7
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D31 'TRAFFICWAY DIVISION AND MEDIAN TYPE D' CON 1
         (UNDIVIDED = 1
```

```
          'PAVED FLUSH' = 2
          CURBED = 3
          'UNPAVED,UNCURBED' = 4
          'MEDIAN BARRIER' = 5
          'OTHER' = 6
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D32 'ACCESS CONTROL D' CON 1
        (FULL = 1
          PARTIAL = 2
          UNCONTROLLED = 3
          UNKNOWN = 4
          'BAD DATA' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D33 'DIRECTION OF TRAVEL FLOW D' CON 1
        ('ONE WAY' = 1
          'TWO WAY' = 2
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D34 'SHOULDER PRESENCE D' CON 1
        ('NO SHOULDER' = 1
          'LEFT SHOULDER' = 2
          'RIGHT SHOULDERS' = 3
          'LEFT AND RIGHT SHOULDERS' = 4
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D35 'ROADWAY ALIGNMENT D' CON 1
        (STRAIGHT = 1
          'CURVE RIGHT' = 2
          'CURVE LEFT' = 3
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D36 'ROADWAY PROFILE D' CON 1
        ('LEVEL' = 1
          'POSITIVE GRADE' = 2
          'NEGATIVE GRADE' = 3
          HILLCREST = 4
          SAG = 5
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D37 'SURFACE TYPE D' CON 1
        (CONCRETE = 1
          BITUMINOUS = 2
          'BRICK,BLOCK' = 3
          'SLAG,GRAVEL,STONE' = 4
          DIRT = 5
          'OTHER' = 6
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
  02 D38 'SURFACE CONDITION D' CON 1
        (DRY = 1
          WET = 2
          'SNOW,SLUSH' = 3
          ICE = 4
          'OTHER' = 5
          UNKNOWN = 9
          'DUMMY RECORD' = '*'              MISSING = ' '  )
```

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```
  02 D39 'JUNCTION TRAFFIC CONTROLS D' CON 1
        ('NO CONTROL' = 1
         'CONTROLS NOT FUNCTIONING' = 2
         'TRAF SIGN' = 3
         'STOP,YIELD SIGN' = 4
         'RR CROSSING' = 5
         'OTHER' = 6
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 D40 'ACCIDENT OCCURRENCE IN SCHOOL ZONE D' CON 1
        (NO = 1
         YES = 2
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 D41 'SPEED LIMIT D' CON 2
        (00:55
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  '  )
  02 FILLER 70
01  OCCUPANT RECORD 003 = '5' LEVEL 2
  02 001 'PSU NUMBER' CON 2
        (DALLAS = 01
         ALABAMA = 02
         ARKANSAS = 03
         FLORIDA = 04
         ERIE = 05
         DELAWARE = 06
         MUSKEGON = 07
         ULSTER = 08
         CHICAGO = 09
         WASHINGTON = 10)
  02 002 'CASE NUMBER' GROUP
    03 002A 'SEQUENCE NUMBER' CON 3 (001:999)
    03 002B 'STRATIFICATION' CON 1
          ( = 'A' = 'B' = 'C' = 'D' = 'E' = 'F' = 'G'
            = 'H' = 'I' = 'J' = 'K' = 'L' = 'M' = 'N' )
  02 003 'RECORD NUMBER' CON 1 ( = '5')
  02 FILLER 1
  02 005 'VERSION NUMBER' CON 1 ( = '2' = '*')
  02 006 'VEHICLE NUMBER' CON 2 (01:99)
  02 007 'OCCUPANT NUMBER' CON 2 (01:99)
  02 008 'OCCUPANT AGE' CON 2
        (01:96
         'LESS THAN ONE YEAR' = 00
         'OLDER THAN 97' = 97
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  ' )
  02 009 'OCCUPANT SEX' CON 1
        (MALE = 1
         FEMALE = 2
         UNKNOWN = 9
         'DUMMY RECORD' = '*'          MISSING = ' '  )
  02 010 'OCCUPANT HEIGHT' CON 2
        (00:50
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  '  )
```

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```
02 011 'OCCUPANT WEIGHT' CON 3
       (000:998
        UNKNOWN = 999
        'DUMMY RECORD' = '***'          MISSING = '   ' )
02 012 'OCCUPANT ROLE' CON 1
       (DRIVER = 1
        PASSENGER = 2
        UNKNOWN = 9
        'DUMMY RECORD' = '*'            MISSING = ' ' )
02 013 'OCCUPANT SEAT POSITION' CON 2
       ('FRONT LEFT' = 01
        'FRONT MIDDLE' = 02
        'FRONT RIGHT' = 03
        'SECOND LEFT' = 04
        'SECOND MIDDLE' = 05
        'SECOND RIGHT' = 06
        'THIRD LEFT' = 07
        'THIRD MIDDLE' = 08
        'THIRD RIGHT' = 09
        'FRONT ADDITIONAL' = 10
        'SECOND ADDITIONAL' = 11
        'TR-TRACT SLEEP SECTION' = 12
        'OTHER ENCLOSED' = 13
        'IN/ON UNENCLOSED AREA' = 14
        'IN/ON TRAILING UNIT' = 15
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  ' )
 2 014 'ENTRAPMENT' CON 1
       ('NOT ENTRAPPED' = 1
        ENTRAPPED = 2
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'            MISSING = ' ' )
02 015 'EJECTION' CON 1
       (NONE = 1
        'PARTIAL EJECTION' = 2
        'COMPLETE EJECTION' = 3
        'UNKNOWN EJECTION' = 4
        'NOT APPLICABLE' = 8
        UNKNOWN = 9
        'DUMMY RECORD' = '*'            MISSING = ' ' )
02 016 'EJECTION AREA' CON 2
       (WINDSHIELD = 01
        'LEFT FRONT' = 02
        'RIGHT FRONT' = 03
        'LEFT REAR' = 04
        'RIGHT REAR' = 05
        REAR = 06
        ROOF = 07
        'OTHER AREA' = 08
        'NOT APPLICABLE' = 98
        UNKNOWN = 99
        'DUMMY RECORD' = '**'           MISSING = '  ' )
02 017 'EJECTION MEDIUM' CON 2
       (DOOR = 01
        'OPEN ROOF' = 02
        'FIXED WINDOW' = 03
```

```
          'ROLL DOWN TYPE' = 04
          'HINGED TYPE' = 05
          'SLIDING TYPE' = 06
          'OTHER TYPE' = 07
          'OTHER MEDIUM' = 08
          'NOT APPLICABLE' = 98
          UNKNOWN = 99
          'DUMMY RECORD' = '**'          MISSING = '  '  )
  02 018 'MEDIUM STATUS' CON 1
        (OPEN = 1
         SEPARATION = 2
         CLOSED = 3
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'           MISSING = ' '  )
  02 019 'TREATMENT MORTALITY 0' CON 1
        (FATAL = 1
         HOSPITALIZATION = 2
         'TRANSPORT REL' = 3
         'TREATMENT-OTHER' = 4
         'NO TREATMENT' = 5
         UNKNOWN = 9
         'DUMMY RECORD' = '*'           MISSING = ' '  )
  02 020 'HOSPITAL STAY 0' CON 2
        (00:30
        'GREATER THAN 31 DAYS' = 31
         'NOT APPLICABLE' = 98
         UNKNOWN = 99
         'DUMMY RECORD' = '**'          MISSING = '  '  )
  02 021 'WORKING DAYS LOST 0' CON 2
       (00:30
        'GREATER THAN 31 DAYS' = 31
        'NOT APPLICABLE' = 98
        UNKNOWN = 99
        'DUMMY RECORD' = '**'           MISSING = '  '  )
  02 FILLER 1
  02 023 'ACTIVE RESTRAINT SYSTEM AVAILABILITY' CON 1
        (NONE = 1
         'LAP AND SHOULDER' = 2
         'LAP BELT' = 3
         'SHOULDER HARNESS' = 4
         HELMET = 5
         'CHILD SAFETY SEAT' = 6
         'OTHER RESTRAINT' = 7
         UNKNOWN = 9
         'DUMMY RECORD' = '*'           MISSING = ' '  )
  02 024 'ACTIVE RESTRAINT SYSTEM USE' CON 1
        (NONE = 1
         'LAP AND SHOULDER' = 2
         'LAP BELT' = 3
         'SHOULDER HARNESS' = 4
         HELMET = 5
         'CHILD SAFETY SEAT' = 6
         'OTHER RESTRAINT' = 7
         UNKNOWN = 9
         'DUMMY RECORD' = '*'           MISSING = ' '  )
  02 025 'PASSIVE RESTRAINT SYSTEM' CON 1
```

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```
        (NONE = 1
         'AIR BAG-DEPLOYED' = 2
         'AIR BAG-NOT DEPLOYED' = 3
         'PASSIVE BELT' = 4
         'OTHER REST' = 5
         UNKNOWN = 9
         'DUMMY RECORD' = '*'                    MISSING = ' '   )
 02 026 'PASSIVE RESTRAINT DEFEATED' CON 1
       (NO = 1
        'BELT NOT WORN' = 2
        'AIR BAG DISCONNECTED' = 3
        'AIR BAG NOT REINSTALLED' = 4
        'OTHER RESTRAINT' = 5
        UNKNOWN = 9
        'DUMMY RECORD' = '*'                     MISSING = ' '   )
 02 027 'RELATION OF INTERVIEWEE TO OCCUPANT' CON 1
      ('NO INTERVIEW' = 1
       'SAME PERSON' = 2
       'OTHER ACC INVOLVED PERSON' = 3
       'RELATIVE/FRIEND' = 4
       'OTHER UNINVOLVED PERSON' = 5
       'ONE ACC INVOLVED PERSON' = 6
       'NO ACC INVOLVED PERSON' = 7
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                     MISSING = ' '   )
 02 028 'DIC BODY REGION(FIRST 0)' CON 1
      ('HEAD-SKULL' = 'H'
       FACE = 'F'
       NECK = 'N'
       SHOULDER = 'S'
       'UPPER EXTREMITIES' = 'X'
       ARM = 'A'
       ELBOW = 'E'
       FOREARM = 'R'
       'WRIST-HAND' = 'W'
       CHEST = 'C'
       ABDOMEN = 'M'
       BACK = 'B'
       'PELVIC-HIP' = 'P'
       'LOWER EXTREMITIES' = 'Y'
       THIGH = 'T'
       KNEE = 'K'
       LEG = 'L'
       'ANKLE-FOOT' = 'O'
       'WHOLE BODY' = 'O'
       'INJURED, UNKNOWN REGION' = 'U'
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'                     MISSING = ' '   )
 02 029 'ASPECT(FIRST 0)' CON 1
      ('RIGHT' = 'R'
       'LEFT' = 'L'
       BILATERAL = 'B'
       CENTRAL = 'C'
       ANTERIOR = 'A'
       POSTERIOR = 'P'
       SUPERIOR = 'S'
```

```
          INFERIOR = 'I'
          'WHOLE REGION' = 'W'
          'INJURED, UNKNOWN ASPECT' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 030 'LESION(FIRST 0)' CON 1
        (LACERATION = 'L'
          CONTUSION = 'C'
          ABRASION = 'A'
          FRACTURES = 'F'
          PAIN = 'P'
          CONCUSSION = 'K'
          HEMORRHAGE = 'H'
          AVULSION = 'V'
          RUPTURE = 'P'
          SPRAINS = 'S'
          DISLOCATIONS = 'D'
          CRUSHING = 'N'
          AMPUTATION = 'M'
          BURN = 'B'
          ASPHYXIA = 'X'
          'OTHER' = 'O'
          'INJURED, UNKNOWN LESION' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 031 'SYSTEM ORGAN(FIRST 0)' CON 1
        (SKELETAL = 'S'
          VERTEBRAE = 'V'
          JOINTS = 'J'
          DIGESTIVE = 'D'
          LIVER = 'L'
          'NERVOUS SYSTEM' = 'N'
          BRAIN = 'B'
          'SPINAL CORD' = 'C'
          'EYES-EARS' = 'E'
          'ARTERIES-VEINS' = 'A'
          HEART = 'H'
          SPLEEN = 'Q'
          UROGENITAL = 'G'
          KIDNEYS = 'K'
          RESPIRATORY = 'R'
          'PULMONARY-LUNGS' = 'P'
          MUSCLES = 'M'
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'A'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                MISSING = ' '   )
  02 032 'AIS SEVERITY(FIRST 0)' CON 1
        ('MINOR INJURY' = 1
          'MODERATE INJURY' = 2
          'SEVERE INJURY' = 3
          'SERIOUS INJURY' = 4
          'CRITICAL INJURY' = 5
```

```
          CONCUSSION = 'K'
          HEMORRHAGE = 'H'
          AVULSION = 'V'
          RUPTURE = 'R'
          SPRAINS = 'S'
          DISLOCATIONS = 'D'
          CRUSHING = 'N'
          AMPUTATION = 'M'
          BURN = 'B'
          ASPHYXIA = 'X'
          'OTHER' = 'O'
          'INJURED, UNKNOWN LESION' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 038 'SYSTEM/ORGAN(SECOND D)' CON 1
        (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'Q'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
         MUSCLES = 'M'
         INTEGUMENTARY = 'I'
         'ALL SYSTEMS IN REGION' = 'W'
         'INJURED, UNKNOWN SYSTEM' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOW IF INJURED' = 9
         'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 039 'AIS SEVERITY(SECOND D)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
         'INJURED, UNKNOWN SEVERITY' = 7
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 040 'INJURY SOURCE(SECOND D)' CON 2
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'OTHER FRONT OBJECT' = 09
```

```
          'SIDE INTERIOR SURFACE' = 11
          'SIDE HARDWARE' = 12
          'ROOF PILLAR SUPPORTS' = 13
          'WINDOW GLASS,FRAME' = 14
          'OTHER SIDE OBJECT' = 19
          'SEAT,BACK SUPPORT' = 21
          'BELT RESTRAINT SYSTEM' = 22
          'HEAD RESTRAINT' = 23
          'AIR CUSHION' = 24
          'OTHER OCCUPANT' = 25
          'INTERIOR LOOSE OBJECT' = 26
          'OTHER INTERIOR OBJECT' = 29
          'FRONT HEADER' = 31
          'REAR HEADER' = 32
          'ROOF SIDE RAILS' = 33
          'ROOF,CONVERTIBLE TOP' = 34
          FLOOR = 41
          'FLOOR TRANSMISSION LEVER' = 42
          'PARKING BRAKE' = 43
          'FOOT CONTROLS' = 44
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 89
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'          MISSING = '  '  )
  02 041  'SOURCE OF DATA(SECOND D)' CON 1
         ('AUTOPSY RECORDS' = 1
          'MEDICAL OR HOSPITAL RECORDS' = 2
          'TREATING PHYSICIAN' = 3
          INTERVIEWEE = 4
          'EMS PERSONNEL' = 5
          POLICE = 6
          'OTHER SOURCE' = 7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'           MISSING = ' '  )
```

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02 042 'DIC BODY REGION(THIRD D)' CON 1
      ('HEAD-SKULL' = 'H'
       FACE = 'F'
       NECK = 'N'
       SHOULDER = 'S'
       'UPPER EXTREMITIES' = 'X'
       ARM = 'A'
       ELBOW = 'E'
       FOREARM = 'R'
       'WRIST-HAND' = 'W'
       CHEST = 'C'
       ABDOMEN = 'M'
       BACK = 'B'
       'PELVIC-HIP' = 'P'
       'LOWER EXTREMITIES' = 'Y'
       THIGH = 'T'
       KNEE = 'K'
       LEG = 'L'
       'ANKLE-FOOT' = 'O'
       'WHOLE BODY' = 'O'
       'INJURED, UNKNOWN REGION' = 'U'
       'NOT APPLICABLE' = 8
       UNKNOWN = 9
       'DUMMY RECORD' = '*'          MISSING = ' '  )
02 043 'ASPECT(THIRD D)' CON 1
      ('RIGHT' = 'R'
       'LEFT' = 'L'
       BILATERAL = 'B'
       CENTRAL = 'C'
       ANTERIOR = 'A'
       POSTERIOR = 'P'
       SUPERIOR = 'S'
       INFERIOR = 'I'
       'WHOLE REGION' = 'W'
       'INJURED, UNKNOWN ASPECT' = 'U'
       'NOT APPLICABLE' = 8
       'UNKNOWN IF INJURED' = 9
       'DUMMY RECORD' = '*'          MISSING = ' '  )
02 044 'LESION(THIRD D)' CON 1
      (LACERATION = 'L'
       CONTUSION = 'C'
       ABRASION = 'A'
       FRACTURES = 'F'
       PAIN = 'P'
       CONCUSSION = 'K'
       HEMORRHAGE = 'H'
       AVULSION = 'V'
       RUPTURE = 'R'
       SPRAINS = 'S'
       DISLOCATIONS = 'D'
       CRUSHING = 'N'
       AMPUTATION = 'M'
       BURN = 'H'
       ASPHYXIA = 'X'
       'OTHER' = 'O'
       'INJURED, UNKNOWN LESION' = 'U'
       'NOT APPLICABLE' = 8
```

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```
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'
  02 045 'SYSTEM/ORGAN(THIRD D)' CON 1                    MISSING = ' '  )
        (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'Q'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
         MUSCLES = 'M'
         INTEGUMENTARY = 'I'
         'ALL SYSTEMS IN REGION' = 'W'
         'INJURED, UNKNOWN SYSTEM' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'
  02 046 'AIS(THIRD D)' CON 1                             MISSING = ' '  )
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
         'INJURED, UNKNOWN SEVERITY' = 7
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'
  02 047 'INJURY SOURCE(THIRD D)' CON 2                   MISSING = ' '  )
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'OTHER FRONT OBJECT' = 09
         'SIDE INTERIOR SURFACE' = 11
         'SIDE HARDWARE' = 12
         'ROOF PILLAR SUPPORTS' = 13
         'WINDOW GLASS,FRAME' = 14
         'OTHER SIDE OBJECT' = 19
         'SEAT,BACK SUPPORT' = 21
         'BELT RESTRAINT SYSTEM' = 22
         'HEAD RESTRAINT' = 23
         'AIR CUSHION' = 24
         'OTHER OCCUPANT' = 25
         'INTERIOR LOOSE OBJECT' = 29
         'OTHER INTERIOR OBJECT' = 30
         'FRONT HEADER' = 31
```

```
          'REAR HEADER' = 32
          'ROOF SIDE RAILS' = 33
          'ROOF,CONVERTIBLE TOP' = 34
          FLOOR = 41
          'FLOOR TRANSMISSION LEVER' = 42
          'PARKING BRAKE' = 43
          'FOOT CONTROLS' = 44
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 99
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'              MISSING = '  '  )
02 048    'SOURCE OF DATA(THIRD D)' CON 1
         ('AUTOPSY RECORDS' = 1
          'MEDICAL OR HOSPITAL RECORDS' = 2
          'TREATING PHYSICIAN' = 3
          INTERVIEWEE = 4
          'EMS PERSONNEL' = 5
          POLICE = 6
          'OTHER SOURCE' = 7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'               MISSING = ' '  )
02 049    'OIC BODY REGION(FOURTH D)' CON 1
         ('HEAD-SKULL' = 'H'
          FACE = 'F'
          NECK = 'N'
          SHOULDER = 'S'
          'UPPER EXTREMITIES' = 'X'
          ARM = 'A'
          ELBOW = 'E'
          FOREARM = 'R'
          'WRIST-HAND' = 'W'
          CHEST = 'C'
          ABDOMEN = 'M'
          BACK = 'B'
```

```
          'PELVIC-HIP' = 'P'
          'LOWER EXTREMITIES' = 'Y'
          THIGH = 'T'
          KNEE = 'K'
          LEG = 'L'
          'ANKLE-FOOT' = 'G'
          'WHOLE BODY' = 'O'
          'INJURED, UNKNOWN REGION' = 'U'
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'          MISSING = ' '   )
  02 050 'ASPECT(FOURTH D)' CON 1
        ('RIGHT' = 'R'
          'LEFT' = 'L'
          BILATERAL = 'B'
          CENTRAL = 'C'
          ANTERIOR = 'A'
          POSTERIOR = 'P'
          SUPERIOR = 'S'
          INFERIOR = 'I'
          'WHOLE REGION' = 'W'
          'INJURED, UNKNOWN ASPECT' = 'U'
          'BAD DATA' = 7
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'          MISSING = ' '   )
  02 051 'LESION(FOURTH D)' CON 1
        (LACERATION = 'L'
          CONTUSION = 'C'
          ABRASION = 'A'
          FRACTURES = 'F'
          PAIN = 'P'
          CONCUSSION = 'K'
          HEMORRHAGE = 'H'
          AVULSION = 'V'
          RUPTURE = 'R'
          SPRAINS = 'S'
          DISLOCATIONS = 'D'
          CRUSHING = 'N'
          AMPUTATION = 'M'
          BURN = 'B'
          ASPHYXIA = 'X'
          'OTHER' = 'O'
          'INJURED, UNKNOWN LESION' = 'U'
          'BAD DATA' = 0
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'          MISSING = ' '   )
  02 052 'SYSTEM/ORGAN(FOURTH D)' CON 1
        (SKELETAL = 'S'
          VERTEBRAE = 'V'
          JOINTS = 'J'
          DIGESTIVE = 'D'
          LIVER = 'L'
          'NERVOUS SYSTEM' = 'N'
          BRAIN = 'B'
          'SPINAL CORD' = 'C'
```

```
          'EYES-EARS' = 'E'
          'ARTERIES-VEINS' = 'A'
          HEART = 'H'
          SPLEEN = 'Q'
          UROGENITAL = 'G'
          KIDNEYS = 'K'
          RESPIRATORY = 'R'
          'PULMONARY-LUNGS' = 'P'
          MUSCLES = 'M'
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'L'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'BAD DATA' = 0
          'BAD DATA' = 1
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'          MISSING = ' '   )
02 053 'AIS SEVERITY(FOURTH D)' CON 1
       ('BAD DATA' = 0
          'MINOR INJURY' = 1
          'MODERATE INJURY' = 2
          'SEVERE INJURY' = 3
          'SERIOUS INJURY' = 4
          'CRITICAL INJURY' = 5
          MAXIMUM = 6
          'INJURED, UNKNOWN SEVERITY' = 7
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'          MISSING = ' '   )
02 054 'INJURY SOURCE(FOURTH D)' CON 2
       (WINDSHIELD = 01
          MIRROR = 02
          'STEERING ASSEMBLY' = 03
          'ADD-ON EQUIPMENT' = 04
          'INSTRUMENT PANEL' = 05
          'OTHER FRONT OBJECT' = 09
          'BAD DATA' = 10
          'SIDE INTERIOR SURFACE' = 11
          'SIDE HARDWARE' = 12
          'ROOF PILLAR SUPPORTS' = 13
          'WINDOW GLASS,FRAME' = 14
          'OTHER SIDE OBJECT' = 19
          'SEAT,BACK SUPPORT' = 21
          'BELT RESTRAINT SYSTEM' = 22
          'HEAD RESTRAINT' = 23
          'AIR CUSHION' = 24
          'OTHER OCCUPANT' = 25
          'INTERIOR LOOSE OBJECT' = 26
          'OTHER INTERIOR OBJECT' = 29
          'FRONT HEADER' = 31
          'REAR HEADER' = 32
          'ROOF SIDE RAILS' = 33
          'ROOF,CONVERTIBLE TOP' = 34
          FLOOR = 41
          'FLOOR TRANSMISSION LEVER' = 42
          'PARKING BRAKE' = 43
          'FOOT CONTROLS' = 44
```

```
          BACKLIGHT = 51
          'BACKLIGHT STORAGE RACK,DOOR' = 52
          'OTHER REAR OBJECT' = 59
          'HOOD, OCCUPANT VEHICLE' = 61
          'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
          'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
          'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 64
          'BUMPER, OTHER VEHICLE' = 71
          'HOOD EDGE, OTHER VEHICLE' = 72
          'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
          'HOOD, OTHER VEHICLE' = 74
          'HOOD ORNAMENT, OTHER VEHICLE' = 75
          'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 97
          'UNKNOWN VEHICLE OR OBJECT' = 99
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'
02 055    'SOURCE OF DATA(FOURTH D)'                    MISSING = ' '
        ('AUTOPSY RECORDS' = 1                                    CON 1
          'MEDICAL OR HOSPITAL RECORDS' = 2
          'TREATING PHYSICIAN' = 3
          INTERVIEWEE = 4
          'EMS PERSONNEL' = 5
          POLICE = 6
          'OTHER SOURCE' = 7
          'NOT APPLICABLE' = 8
          UNKNOWN = 9
          'DUMMY RECORD' = '*'
02 056    'OIC BODY REGION(FIFTH D)'                    MISSING = ' '
        ('HEAD-SKULL' = 'H'                                       CON 1
          FACE = 'F'
          NECK = 'N'
          SHOULDER = 'S'
          'UPPER EXTREMITIES' = 'X'
          ARM = 'A'
          ELBOW = 'E'
          FOREARM = 'R'
          'WRIST-HAND' = 'W'
          CHEST = 'C'
          ABDOMEN = 'M'
          BACK = 'B'
          'PELVIC-HIP' = 'P'
          'LOWER EXTREMITIES' = 'Y'
          THIGH = 'T'
          KNEE = 'K'
          LEG = 'L'
          'ANKLE-FOOT' = 'O'
          'WHOLE BODY' = 'O'
```

```
         'INJURED, UNKNOWN REGION' = 'U'
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'              MISSING = ' '   )
 02 057 'ASPECT(FIFTH D)' CON 1
       ('RIGHT' = 'R'
         'LEFT' = 'L'
         BILATERAL = 'B'
         CENTRAL = 'C'
         ANTERIOR = 'A'
         POSTERIOR = 'P'
         SUPERIOR = 'S'
         INFERIOR = 'I'
         'WHOLE REGION' = 'W'
         'INJURED, UNKNOWN ASPECT' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'              MISSING = ' '   )
 02 058 'LESION(FIFTH D)' CON 1
       (LACERATION = 'L'
         CONTUSION = 'C'
         ABRASION = 'A'
         FRACTURES = 'F'
         PAIN = 'P'
         CONCUSSION = 'K'
         HEMORRHAGE = 'H'
         AVULSION = 'V'
         RUPTURE = 'R'
         SPRAINS = 'S'
         DISLOCATIONS = 'D'
         CRUSHING = 'N'
         AMPUTATION = 'M'
         BURN = 'B'
         ASPHYXIA = 'X'
         'OTHER' = 'O'
         'INJURED, UNKNOWN LESION' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'              MISSING = ' '   )
 02 059 'SYSTEM/ORGAN(FIFTH D)' CON 1
       (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'Q'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
         MUSCLES = 'M'
```

```
          INTEGUMENTARY = 'I'
          'ALL SYSTEMS IN REGION' = 'M'
          'INJURED, UNKNOWN SYSTEM' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                    MISSING = ' '   )
  02 060 'AIS SEVERITY(FIFTH D)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
         'INJURED, UNKNOWN SEVERITY' = 7
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                    MISSING = ' '   )
  02 061 'INJURY SOURCE(FIFTH D)' CON 2
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'OTHER FRONT OBJECT' = 09
         'SIDE INTERIOR SURFACE' = 11
         'SIDE HARDWARE' = 12
         'ROOF PILLAR SUPPORTS' = 13
         'WINDOW GLASS,FRAME' = 14
         'OTHER SIDE OBJECT' = 19
         'SEAT,BACK SUPPORT' = 21
         'BELT RESTRAINT SYSTEM' = 22
         'HEAD RESTRAINT' = 23
         'AIR CUSHION' = 24
         'OTHER OCCUPANT' = 25
         'INTERIOR LOOSE OBJECT' = 26
         'OTHER INTERIOR OBJECT' = 29
         'FRONT HEADER' = 31
         'REAR HEADER' = 32
         'ROOF SIDE RAILS' = 33
         'ROOF,CONVERTIBLE TOP' = 34
         FLOOR = 41
         'FLOOR TRANSMISSION LEVER' = 42
         'PARKING BRAKE' = 43
         'FOOT CONTROLS' = 44
         BACKLIGHT = 51
         'BACKLIGHT STORAGE RACK,DOOR' = 52
         'OTHER REAR OBJECT' = 59
         'HOOD, OCCUPANT VEHICLE' = 61
         'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
         'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
         'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 64
         'BUMPER, OTHER VEHICLE' = 71
         'HOOD EDGE, OTHER VEHICLE' = 72
         'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
         'HOOD, OTHER VEHICLE' = 74
         'HOOD ORNAMENT, OTHER VEHICLE' = 75
         'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
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          'SIDE SURFACE, OTHER VEHICLE' = 77
          'SIDE MIRRORS, OTHER VEHICLE' = 78
          'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
          'REAR SURFACE, OTHER VEHICLE' = 80
          'UNDERCARRIAGE, OTHER VEHICLE' = 81
          GROUND = 86
          'OTHER VEHICLE OR OBJECT' = 87
          'UNKNOWN VEHICLE OR OBJECT' = 99
          'NONCONTACT INJURY SOURCE' = 90
          'INJURED, UNKNOWN SOURCE' = 97
          'NOT APPLICABLE' = 98
          'UNKNOWN IF INJURED' = 99
          'DUMMY RECORD' = '**'                MISSING = '  '  )
 02 062 'SOURCE OF DATA(FIFTH D)' CON 1
        ('AUTOPSY RECORDS' = 1
         'MEDICAL OR HOSPITAL RECORDS' = 2
         'TREATING PHYSICIAN' = 3
         INTERVIEWEE = 4
         'EMS PERSONNEL' = 5
         POLICE = 6
         'OTHER SOURCE' = 7
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'                 MISSING = ' '  )
 02 063 'OIC BODY REGION(SIXTH D)' CON 1
        ('HEAD-SKULL' = 'H'
         FACE = 'F'
         NECK = 'N'
         SHOULDER = 'S'
         'UPPER EXTREMITIES' = 'X'
         ARM = 'A'
         ELBOW = 'E'
         FOREARM = 'R'
         'WRIST-HAND' = 'W'
         CHEST = 'C'
         ABDOMEN = 'M'
         BACK = 'B'
         'PELVIC-HIP' = 'P'
         'LOWER EXTREMITIES' = 'Y'
         THIGH = 'T'
         KNEE = 'K'
         LEG = 'L'
         'ANKLE-FOOT' = 'O'
         'WHOLE BODY' = 'D'
         'INJURED, UNKNOWN REGION' = 'U'
         'NOT APPLICABLE' = 8
         UNKNOWN = 9
         'DUMMY RECORD' = '*'                 MISSING = ' '  )
 02 064 'ASPECT(SIXTH D)' CON 1
        ('RIGHT' = 'R'
         'LEFT' = 'L'
         BILATERAL = 'B'
         CENTRAL = 'C'
         ANTERIOR = 'A'
         POSTERIOR = 'P'
         SUPERIOR = 'S'
         INFERIOR = 'I'
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          'WHOLE REGION' = '*'
          'INJURED, UNKNOWN ASPECT' = 'U'
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'                    MISSING = ' '  )
 02 065 'LESION(SIXTH D)' CON 1
        (LACERATION = 'L'
         CONTUSION = 'C'
         ABRASION = 'A'
         FRACTURES = 'F'
         PAIN = 'P'
         CONCUSSION = 'K'
         HEMORRHAGE = 'H'
         AVULSION = 'V'
         RUPTURE = 'R'
         SPRAINS = 'S'
         DISLOCATIONS = 'D'
         CRUSHING = 'N'
         AMPUTATION = 'M'
         BURN = 'B'
         ASPHYXIA = 'X'
         'OTHER' = 'O'
         'INJURED, UNKNOWN LESION' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                    MISSING = ' '  )
 02 066 'SYSTEM/ORGAN(SIXTH D)' CON 1
        (SKELETAL = 'S'
         VERTEBRAE = 'V'
         JOINTS = 'J'
         DIGESTIVE = 'D'
         LIVER = 'L'
         'NERVOUS SYSTEM' = 'N'
         BRAIN = 'B'
         'SPINAL CORD' = 'C'
         'EYES-EARS' = 'E'
         'ARTERIES-VEINS' = 'A'
         HEART = 'H'
         SPLEEN = 'Q'
         UROGENITAL = 'G'
         KIDNEYS = 'K'
         RESPIRATORY = 'R'
         'PULMONARY-LUNGS' = 'P'
         MUSCLES = 'M'
         INTEGUMENTARY = 'I'
         'ALL SYSTEMS IN REGION' = 'W'
         'INJURED, UNKNOWN SYSTEM' = 'U'
         'NOT APPLICABLE' = 8
         'UNKNOWN IF INJURED' = 9
         'DUMMY RECORD' = '*'                    MISSING = ' '  )
 02 067 'AIS SEVERITY(SIXTH D)' CON 1
        ('MINOR INJURY' = 1
         'MODERATE INJURY' = 2
         'SEVERE INJURY' = 3
         'SERIOUS INJURY' = 4
         'CRITICAL INJURY' = 5
         MAXIMUM = 6
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          'INJURED, UNKNOWN SEVERITY' = 7
          'NOT APPLICABLE' = 8
          'UNKNOWN IF INJURED' = 9
          'DUMMY RECORD' = '*'              MISSING = ' '   )
  02 068 'INJURY SOURCE(SIXTH D)' CON 2
        (WINDSHIELD = 01
         MIRROR = 02
         'STEERING ASSEMBLY' = 03
         'ADD-ON EQUIPMENT' = 04
         'INSTRUMENT PANEL' = 05
         'OTHER FRONT OBJECT' = 09
         'SIDE INTERIOR SURFACE' = 11
         'SIDE HARDWARE' = 12
         'ROOF PILLAR SUPPORTS' = 13
         'WINDOW GLASS,FRAME' = 14
         'OTHER SIDE OBJECT' = 19
         'SEAT,BACK SUPPORT' = 21
         'BELT RESTRAINT SYSTEM' = 22
         'HEAD RESTRAINT' = 23
         'AIR CUSHION' = 24
         'OTHER OCCUPANT' = 25
         'INTERIOR LOOSE OBJECT' = 26
         'OTHER INTERIOR OBJECT' = 29
         'FRONT HEADER' = 31
         'REAR HEADER' = 32
         'ROOF SIDE RAILS' = 33
         'ROOF,CONVERTIBLE TOP' = 34
         FLOOR = 41
         'FLOOR TRANSMISSION LEVER' = 42
         'PARKING BRAKE' = 43
         'FOOT CONTROLS' = 44
         BACKLIGHT = 51
         'BACKLIGHT STORAGE RACK,DOOR' = 52
         'OTHER REAR OBJECT' = 59
         'HOOD, OCCUPANT VEHICLE' = 61
         'OUTSIDE HARDWARE, OCCUPANT VEHICLE' = 62
         'OTHER EXTERIOR SURFACE, OCCUPANT VEHICLE' = 63
         'UNKNOWN EXTERIOR OBJECT, OCCUPANT VEHICLE' = 69
         'BUMPER, OTHER VEHICLE' = 71
         'HOOD EDGE, OTHER VEHICLE' = 72
         'OTHER FRONT OF VEHICLE, OTHER VEHICLE' = 73
         'HOOD, OTHER VEHICLE' = 74
         'HOOD ORNAMENT, OTHER VEHICLE' = 75
         'WINDSHIELD,A-PILLAR, OTHER VEHICLE' = 76
         'SIDE SURFACE, OTHER VEHICLE' = 77
         'SIDE MIRRORS, OTHER VEHICLE' = 78
         'OTHER SIDE PROTRUSIONS, OTHER VEHICLE' = 79
         'REAR SURFACE, OTHER VEHICLE' = 80
         'UNDERCARRIAGE, OTHER VEHICLE' = 81
         GROUND = 88
         'OTHER VEHICLE OR OBJECT' = 87
         'UNKNOWN VEHICLE OR OBJECT' = 89
         'NON-CONTACT INJURY SOURCE' = 90
         'INJURED, UNKNOWN SOURCE' = 97
         'NOT APPLICABLE' = 98
         'UNKNOWN IF INJURED' = 99
         'DUMMY RECORD' = '**'             MISSING = ' '   )
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