

Bus Crash Causation Study

Codebook



**Federal Motor Carrier Safety Administration,
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INTRODUCTION

The Motor Carrier Safety Improvement Act of 1999 (MCSIA) mandated a study to determine the causes of, and contributing factors to, crashes involving commercial motor vehicles. The MCSIA directed the Secretary of the U.S. Department of Transportation (DOT) to transmit the results of the study to Congress. The DOT's Federal Motor Carrier Safety Administration (FMCSA) transmitted a report to Congress on the Large Truck Crash Causation Study (LTCCS) in March 2006 and a report to Congress on the Bus Crash Causation Study (BCCS) in P qxgo dgt."422; . This codebook corresponds to the BCCS.

DATA COLLECTION

The FMCSA regulates buses defined as vehicles designed or used to transport 9 to 15 people (including the driver) for compensation or more than 15 people for any purpose. The BCCS database includes more than 400 data elements collected on each crash that included at least 1 bus and at least 1 fatality or injury. Northeastern New Jersey was selected as the data collection site for the following reasons: a high volume and wide variety of bus traffic; a high level of interest in bus crashes expressed by Federal, State, and local New Jersey government officials; and a strong State bus safety program. The study did not include crashes involving New Jersey transit buses or school buses transporting children from home to school, because FMCSA does not regulate these vehicle types. However, the only exception was to include transit and school buses if the crash involved at least one fatality. The standard *KABCOU injury-coding* scheme classifies the crash severity for the cases included in the BCCS. Table 1 shows the available levels. Crashes eligible for inclusion in the BCCS were assigned a "K", "A", or "B" injury.

Table 1. KABCOU Injury Scale

Code	Definition
K	Fatal Injury
A	Incapacitating Injury
B	Non-Incapacitating Injury
C	Possible Injury
O	No Injury
U	Unknown

Data collection included crashes occurring from January 1, 2005 to December 31, 2006; the BCCS database includes information on 40 buses involved in 39 crashes occurring in New Jersey during the 24-month study period. The discussion of the BCCS data found in the report to Congress includes only whole numbers and the analysis did not include weighted data, due to the small sample of 39 crashes.

FMCSA-employed researchers conducted the BCCS in conjunction with State commercial motor vehicle inspectors, New Jersey law enforcement, and public safety agencies. Crash site investigations began as soon as possible after the crash to ensure data quality.

Similar to the methodology used in the LTCCS, the BCCS methodology focused on pre-crash factors. An FMCSA researcher was notified by State and local police agencies when a crash

occurred. Data collection was performed at each crash site by a two-person team, consisting of a trained researcher and a New Jersey State bus inspector who conducted a North American Standard Level 1 inspection of the bus and bus driver involved in the crash. The researcher and bus inspector collected driver, passenger, and witness interviews at the crash scene. Crash forms were used to record extensive data, including the following:

- Location, time, date, and sequence of the crash event and collision measurements.
- Bus and bus driver inspection results.
- Roadway, weather, and traffic conditions.
- Pre-crash events.
- Driver age, sex, physical characteristics, and injury severity.
- Driver use of drugs or alcohol.

Additional interview data collected by telephone from the motor carrier responsible for the bus and from the drivers of other vehicles involved in the crash after leaving the crash scene were captured. Researchers also reviewed police crash reports, hospital records, and coroners' reports for fatal crashes. The researcher often revisited a crash scene to refine scene diagrams and search for additional data. Crash case data were provided to FMCSA crash experts for coding, and FMCSA New Jersey Division and headquarters staff reviewed difficult cases before cases were included in the electronic study database.

Table 2. BCCS Data Files

Data Set Name	# Records	Level	Unique Record Identifier
BusDriverInterview	40	Vehicle/Driver	Case_Number, Vehicle_Number
Crash	39	Crash	Case_Number
CrashAssessment	65	Vehicle	Case_Number, Vehicle_Number
DriverAssessment	72	Driver	Case_Number, Vehicle_Number
ExteriorBus	40	Bus Vehicle	Case_Number, Vehicle_Number
GeneralVehicle	78	Vehicle	Case_Number, Vehicle_Number
MotorCarrier	37	Vehicle/Driver	Case_Number, Vehicle_Number
NonMotoristAssessment	10	Nonmotorist	Case_Number, NM_number
NonMotoristInterview	7	Nonmotorist	Case_Number, NM_number

STRUCTURE OF DATA FILES

The BCCS data are supplied in nine data sets. The data were originally collected using a complex relational data system, and then formatted into analysis data sets, which preserve many aspects of the original relational design. Table 2 identifies the data files, the level at which the data in each file were collected, and the variable names that can be used to uniquely identify a record in each data file. The level at which the data are recorded simply corresponds to the entity each record in the particular data file pertains to. Some files have one record per crash, one record per vehicle, or one record per driver. Other data files contain information at a more detailed level and may have multiple records per vehicle. For example, the GeneralVehicle data file includes one record for each vehicle.

DOCUMENTATION PROVIDED BY CODEBOOK

This codebook provides a complete listing of every variable and every code level in each data file (except for the record identifier variables that are repeated in each data file). For each variable in a data file, the codebook provides the code values stored in the data file, the label associated with each code value, the data storage type, the storage length of the variable, and the format entry, if any. The codebook documents all records in the file.

Figure 1. Codebook Listing Example

Variable Name	Format	Type	Length
Rollover ①	BDI3f ②	Numeric ③	8 ④
Survey Question: Did this vehicle rollover during the crash?			
⑤ Code	Label ⑥		
0	No		
1	Yes		
9	Unknown		

Figure 1 provides an example of an entry for the Rollover variable in the BusDriverInterview data file.

1. The name of the variable in the SAS file.
2. The name of the format associated with the variable. This format is stored in the FORMAT.SASB7CAT file that is supplied along with the SAS data files. Not all variables have associated formats in the FORMAT.SASB7CAT file.
3. The storage type of the variable. Data are stored either as Numeric or Char (Char) data.
4. The storage length in bytes for the variable. Storage of numeric variables range in length from three to eight bytes.
5. The code value stored in the data file. This is the actual value stored. In the case of Char variables that do not have an associated format, the codebook shows asterisks (*) for the code that is stored and the stored Char, string is shown as the Label.
6. The label for each code value.

Codebook – BusDriverInterview Data Set

BusDriverInterview Data Set

The BusDriverInterview data set contains all the Bus Driver Interview-related information for each of the buses involved in a crash. This material is provided as one record per bus. The BusDriverInterview data set contains the variables Case_Number and Vehicle_Number. Vehicle_Number is assigned to each vehicle in an accident. Each record is uniquely identified by Case_Number and Vehicle_Number. Case_Number and Vehicle_Number should be used to merge the BusDriverInterview data set with vehicle level data sets. Case_Number and Vehicle_Number should also be used to merge the BusDriverInterview data set with the Occupant data set.

Variable Name	Format	Type	Length
Rollover	BDI3f	Numeric	8

Survey Question: Did this vehicle rollover during the crash?

Code	Label
0	No
1	Yes
9	Unknown

Variable Name	Format	Type	Length
Rollover_Began	BDI4f	Numeric	8

Survey Question: Rollover began?

Code	Label
0	No rollover
1	On roadway
2	On shoulder
3	On roadside or median
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Rollover_Cause	BDI5f	Numeric	8

Survey Question: Rollover cause?

Code	Label
0	No rollover
1	Cargo shift (specify)
2	Other vehicle (specify vehicle number)
3	Contact with object (specify)

- 7 Not applicable
- 8 Other cause (specify)
- 9 Unknown

Variable Name	Format	Type	Length
Direction_Of_Roll	BDI6f	Numeric	8

Survey Question: Rollover cause?

- | Code | Label |
|------|-----------------------------------|
| 0 | No rollover |
| 1 | Toward the right (passenger side) |
| 2 | Toward the left (driver side) |
| 3 | End-over-end |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
One_Quater_Turns	BDI7f	Numeric	8

Survey Question: Number of quarter turns?

- | Code | Label |
|------|----------------|
| 00 | No rollover |
| 1-76 | Value |
| 77 | Not applicable |
| 99 | Unknown |

Variable Name	Format	Type	Length
Contact_Plane	BDI8f	Numeric	8

Survey Question: Which plane was in contact with the ground at final rest?

- | Code | Label |
|------|----------------|
| 0 | No rollover |
| 1 | Left side |
| 2 | Right side |
| 3 | Top |
| 4 | Wheels |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Fire	BDI9f	Numeric	8

Survey Question: Did this vehicle have a fire?

Code	Label
0	No
1	Yes
9	Unknown

Variable Name	Format	Type	Length
Fire_1st_Seen	BDI10f	Numeric	8

Survey Question: Fire started or smoke was first seen?

Code	Label
0	No fire
1	Under the hood
2	Behind the instrument panel
3	In the passenger compartment
4	In the trunk/cargo area
5	Under the vehicle
6	From other involved vehicle
7	Tire/wheel area
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Start_In_Elec_Sys	BDI11f	Numeric	8

Survey Question: Fire started in electrical system?

Code	Label
0	No
1	Yes (specify) Fire started in electrical system
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Start_In_Fuel_Sys	BDI12f	Numeric	8

Survey Question: Fire started with the fuel system?

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Which_Part_Of_Fuel_Sys	BDI13f	Numeric	8

Survey Question: Which part of fuel system may have been involved?

Code	Label
0	Not applicable
1	Fuel tank
2	Fuel lines
3	Engine compartment, specify
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Yrs_Driving_A_Bus	BDI16f	Numeric	8

Survey Question: Years driving a bus in the U.S.?

Code	Label
00	Not applicable
1-98	Value
99	Unknown

Variable Name	Format	Type	Length
Yrs_Driving_This_Type_Of_Bus	BDI17f	Numeric	8

Survey Question: Years driving this type of bus?

Code	Label
00	Not applicable
1-98	Value
99	Unknown

Variable Name	Format	Type	Length
Source_Of_Driver_Training	BDI18f	Numeric	8

Survey Question: Primary Source of Driver Training?

Code	Label
0	None
1	Driving school
2	Company
3	Military
4	Community college, etc
5	Training, source unknown
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Time_Since_Training	\$5.	Char	5

Survey Question: Time since completion of training?

Code	Label
*	Value
97/97	Not applicable
99/99	Unknown

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Non_CD_Lic_Status	BDI20f	Numeric	8

Survey Question: Non-CDL license status?

Code	Label
NO VALID LICENSE	
0	Not licensed
1	Suspended
2	Revoked
3	Expired
4	Canceled or denied
VALID LICENSE	
5	Valid
6	License permit
7	Temporary
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Lic_Restrictions	BDI21f	Numeric	8

Survey Question: Any license restrictions?

Code	Label
0	No restrictions
1	Yes, specify
9	Unknown

Variable Name	Format	Type	Length
Class_Of_Lic	BDI22f	Numeric	8

Survey Question: CDL class of license?

Code	Label
1	A

2	B
3	C
7	Not applicable
9	Unknown

Variable Names	Format	Type	Length
CDL_Endorse_1	BDI23f	Char	1

Survey Question: CDL endorsements (first of up to 5 coded)?

Code	Label
1	H
2	N
3	P
4	T
5	X
6	F
7	Not applicable
9	Unknown

Variable Names	Format	Type	Length
CDL_Endorse_2	BDI23f	Char	1

Survey Question: CDL endorsements (second of up to 5 coded)?

Code	Label
1	H
2	N
3	P
4	T
5	X
6	F
7	Not applicable
9	Unknown

Variable Names	Format	Type	Length
CDL_Endorse_3	BDI23f	Char	1

Survey Question: CDL endorsements (third of up to 5 coded)?

Code	Label
1	H
2	N
3	P
4	T
5	X
6	F

7 Not applicable
9 Unknown

Variable Names	Format	Type	Length
CDL_Endorse_4	BDI23f	Char	1

Survey Question: CDL endorsements (fourth of up to 5 coded)?

Code	Label
1	H
2	N
3	P
4	T
5	X
6	F
7	Not applicable
9	Unknown

Variable Names	Format	Type	Length
CDL_Endorse_5	BDI23f	Char	1

Survey Question: CDL endorsements (fifth of up to 5 coded)?

Code	Label
1	H
2	N
3	P
4	T
5	X
6	F
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
CDL_Lic_Status	BDI24f	Numeric	8

Survey Question: CDL license status?

Code	Label
0	No CDL
1	Suspended
2	Revoked
3	Expired
4	Canceled or denied
5	Disqualified
6	Valid
7	License permit

8 Other not valid
9 Unknown

Variable Name	Format	Type	Length
In_Compliance_With_Endorse	BDI25f	Numeric	8

Survey Question: In compliance with license endorsements?

Code	Label
0	No endorsements
1	Endorsement(s) complied with
2	Endorsement(s) not complied with
3	Endorsement(s) compliance unknown
9	Unknown

Variable Name	Format	Type	Length
In_Compliance_With_Restrict	BDI26f	Numeric	8

Survey Question: In compliance with license restrictions?

Code	Label
0	No restrictions or not applicable
1	Restriction(s) complied with
2	Restriction(s) not complied with
3	Restriction(s) compliance unknown
9	Unknown

Variable Name	Format	Type	Length
Specify_Restrictions	BDI27f	Char	31

Survey Question: Specify restrictions:

Code	Label
*	Value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Lic_Compliance_For_This_Veh	BDI28f	Numeric	8

Survey Question: License compliance for this class of vehicle?

Code	Label
0	Not licensed
1	No license required for this class vehicle
2	No valid license for this class of vehicle
3	Valid license for this class of vehicle

4 Unknown if CDL and/or endorsement required for this vehicle
 9 Unknown

Variable Name	Format	Type	Length
NumOf_Comm_Veh_Citations	BDI29f	Numeric	8

Survey Question: Number of commercial vehicle citations during the past 5 years?

Code	Label
00	No Citations
1-98	Value
99	Unknown

Variable Name	Format	Type	Length
Num_Of_Non_Moving_Cits	BDI30f	Numeric	8

Survey Question: Number of non-moving traffic citations during the past 5 years?

Code	Label
00	No citations
1-98	Value
99	Unknown

Variable Name	Format	Type	Length
Num_Of_Moving_Cits	BDI31f	Numeric	8

Survey Question: Number of moving traffic citations during the past 5 years?

Code	Label
00	No citations
01-98	Value
99	Unknown

Variable Name	Format	Type	Length
Num_Of_Crashes_Bus	BDI32f	Numeric	8

Survey Question: Number of crashes while driving a bus during the past 5 years?

Code	Label
00	No crashes
01-98	Value
99	Unknown

Variable Name	Format	Type	Length
Num_Of_Crashes_Veh	BDI33f	Numeric	8

Survey Question: Number of crashes while driving another type of vehicle during the past 5 years?

Code	Label
00	No Crashes
01-98	Value
99	Unknown

Variable Name	Format	Type	Length
How_Paid	BDI34f	Numeric	8

Survey Question: How were you paid for this trip?

Code	Label
1	By the hour
2	By the mile
3	By the hour and mile
4	Percent of gross trip revenue
5	Combination of the above, specify
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Special_Pay_1	BDI35f	Numeric	8

Survey Question: Do you receive special payments such as, on-time performance? (First of up to 3 coded)

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Special_Pay_2	\$1.	Char	1

Survey Question: Do you receive special payments such as, safety bonus? (Second of up to 3 coded)

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Special_Pay_3	\$1.	Char	1

Survey Question: Do you receive special payments such as, other special payments?
(Third of up to 3 coded)

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
_nd_Job	BDI36f	Numeric	8

Survey Question: Do you work a second or third job?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
How_Many_Hrs_Other_Job	BDI37f	Numeric	8

Survey Question: If additional jobs, how many hours worked during preceding 36 hours?

Code	Label
00	No additional job
1-36	Number of hours worked
99	Unknown

Variable Name	Format	Type	Length
Report_2nd_Job_To_Employer	BDI38f	Numeric	8

Survey Question: Do you report second job hours to your primary employer?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Employment_Status	BDI39f	Numeric	8

Survey Question: Driver's employment status with carrier?

Code	Label
0	Not an employee
1	Full time employee
2	Part time employee
3	Casual, intermittent or occasional driver
4	Leased driver
5	Contract driver
6	Independent owner-operator contractor
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
How_Do_You_Feel	BDI40f	Numeric	8

Survey Question: How do you/did you feel overall?

Code	Label
1	Great
2	Good
3	Fair
4	Poor
5	Terrible
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Glasses_Or_Contacts	BDI41f	Numeric	8

Survey Question: Do you wear glasses or contacts??

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Lenses_Correct	BDI42f	Numeric	8

Survey Question: If you do wear glasses, what do the lenses correct?

Code	Label
1	Myopic (near sighted condition)
2	Hyperopic (far sighted condition)
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Corrected_Vision	\$5.	Char	5

Survey Question: Corrected vision level (e.g. 20/20, 20/40, etc.)?

Code	Label
*	Value
97/97	Not applicable
99/99	Unknown

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Glasses_During_Crash	BDI44f	Numeric	8

Survey Question: Were you wearing glasses or contacts at the time of the crash?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Sight_Impairment	BDI45f	Numeric	8

Survey Question: Do you have sight impairment (e.g., need to get glasses, cataracts colorblind, glaucoma)?

Code	Label
1	Yes (specify)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Hearing_Deficiency	BDI46f	Numeric	8

Survey Question: Do you have any hearing deficiencies?

Code	Label
1	Yes (specify)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Hearing_Aid	BDI47f	Numeric	8

Survey Question: Were you using a hearing aid device at the time of the crash?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Sleep_Apnea	BDI48f	Numeric	8

Survey Question: Have you ever been diagnosed with sleep apnea?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Current_Sleep_Apnea	BDI49f	Numeric	8

Survey Question: Are you currently being treated for sleep apnea?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
CPap	BDI50f	Numeric	8

Survey Question: Do you use a C-PAP machine?

Code	Label
1	Yes
7	Not applicable
2	No
9	Unknown

Variable Name	Format	Type	Length
RX_Meds	BDI51f	Numeric	8

Survey Question: Are you taking any prescription medications?

Code	Label
1	Yes (specify)
2	No
9	Unknown

Variable Name	Format	Type	Length
OTC_Meds	BDI52f	Numeric	8

Survey Question: Are you taking any over the counter medications (e.g. cold medicines, no-doze, etc)?

Code	Label
1	Yes (specify)
2	No
9	Unknown

Variable Name	Format	Type	Length
Doc_Aware_Of_Meds	BDI10f	Numeric	8

Survey Question: Is your doctor aware of all of the medications you are taking?

Code	Label
1	Yes
2	No (specify)
9	Unknown

Variable Name	Format	Type	Length
Alert_Before_Trip	BDI45f	Numeric	8

Survey Question: How alert were you just before this trip?

Code	Label
1	Very alert
2	Alert
3	Tired
4	Fatigued
5	Asleep
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Log_Book	BDI55f	Numeric	8

Survey Question: Do you keep a log book?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Over_Hours	BDI56f	Numeric	8

Survey Question: Were you over hours?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Over_Dispatch_Tight_A_Sch	BDI57f	Numeric	8

Survey Question: Does this company over dispatch or run too tight a schedule?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Relevant_To_This_Trip	BDI58f	Numeric	8

Survey Question: If your company over dispatch or runs too tight of a schedule was this relevant to this trip?

Code	Label
1	Yes (specify)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Fired_If_Refuse_Trip	BDI59f	Numeric	8

Survey Question: Has this company ever threatened to fire you for refusing a trip due to over hours or fatigue?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Disciplined_Due_To_Fatigue	BDI60f	Numeric	8

Survey Question: Have you ever been disciplined because you were off schedule due to fatigue?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
On_Call_Status	BDI61f	Numeric	8

Survey Question: Do you work on-call status?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Called_In_For_This_Trip	BDI62f	Numeric	8

Survey Question: If you were on call, were you called in for this trip?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Extent_Of_Notice	BDI63f	Numeric	8

Survey Question: Extent of advance notice (e.g. how long before the start of your trip were you called)?

Code	Label
0-96	Actual number of hours
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Interrupt_Sleep	BDI64f	Numeric	8

Survey Question: Did this call interrupt a sleep/rest period?

Code	Label
1	Yes (specify)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Dist_From_Home_To_Pick_Up	BDI65f	Numeric	8

Survey Question: Distance from home to the vehicle pick-up location?

Code	Label
0-998	Actual number of miles
999	Unknown

Variable Name	Format	Type	Length
Dist_From_Pickup_To_Pass	BDI66f	Numeric	8

Survey Question: Distance from vehicle pick-up location to site of first passenger pick-up?

Code	Label
*	Actual number of miles
999	Unknown

Variable Name	Format	Type	Length
Wait_For_Pass	\$5.	Char	5

Survey Question: If you had to wait for passengers, how long?

Code	Label
hh:mm	Actual hours and minutes

77:77 Not applicable (did not have to wait)
 99:99 Unknown

Variable Name	Format	Type	Length
Strenuous_Activities	BDI68f	Numeric	8

Survey Question: Did you participate in any recreational activities preceding the crash, which involved periods of strenuous exercise?

Code	Label
1	Yes (specify)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Household_Chores	BDI69f	Numeric	8

Survey Question: Did you perform any household chores or other activities that involved periods of strenuous labor preceding the crash?

Code	Label
1	Yes (specify)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Last_Major_Sleep	BDI70f	Numeric	8

Survey Question Where did you have your last major sleep of 4 hours or more?

Code	Label
1	Residence
2	Vehicle - stationary
3	Vehicle - moving
4	Motel
5	Truck stop or rest area sleeping room
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
How_Long_Last_Sleep	\$5.	Char	5

Survey Question: How long was your last major sleep of more than four hours?

Code	Label
hh:mm	Actual hours and minutes
77:77	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
How_Long_Ago_Last_Sleep	\$5.	Char	5

Survey Question: How long ago was your last major sleep?

Code	Label
hh:mm	Actual hours and minutes
77:77	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Time_Of_Day_You_Sleep	BDI73f	Numeric	8

Survey Question: What time of day do you typically sleep?

Code	Label
1	Primarily at night
2	Primarily during the day
3	Mixture of night and day intervals
4	No typical pattern
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
How_Long_Do_You_Sleep	\$5.	Char	5

Survey Question: How long do you typically sleep?

Code	Label
hh:mm	Actual hours and minutes

Variable Name	Format	Type	Length
Feel_After_Waking	BDI75f	Numeric	8

Survey Question: How do you normally feel after waking?

Code	Label
1	Rested
2	Fatigued
3	Drowsy
4	Irritated/upset

- 7 Not applicable
- 8 Other (specify)
- 9 Unknown

Variable Name	Format	Type	Length
Trip_Alter_Sleep	BDI76f	Numeric	8

Survey Question: Did this trip alter your normal sleep patterns (time or duration)?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Sleep_Pattern_Related_To	BDI77f	Numeric	8

Survey Question: Are your recent sleep patterns related to

- | Code | Label |
|------|-------------------|
| 1 | Work schedule |
| 2 | Social schedule |
| 3 | Personal problems |
| 4 | Family problems |
| 5 | Illness |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Feel_At_Start_Of_Trip	BDI78f	Numeric	8

Survey Question: How did you feel at the start of this trip?

- | Code | Label |
|------|----------------|
| 1 | Very alert |
| 2 | Alert |
| 3 | Tired |
| 4 | Fatigued |
| 5 | Asleep |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driving_Since_Last_Break	\$5.	Char	5

Survey Question: How many hours have you been driving since your last eight hours break?

Code	Label
hh:mm	Actual hours and minutes
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
On_Duty_Since_Last_Break	\$5.	Char	5

Survey Question: How many hours have you been on duty since your last eight hours break?

Code	Label
hh:mm	Actual hours and minutes
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
On_Duty_Last_24_Hrs	\$5.	Char	5

Survey Question: How many hours have you been on duty during the last 24 hours ?

Code	Label
hh:mm	Actual hours and minutes
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Longest_Day	\$5.	Char	5

Survey Question: During the seven-day interval preceding the crash, how many hours of work was your longest day?

Code	Label
hh:mm	Actual hours and minutes
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Shortest_Day	\$5.	Char	5

Survey Question: During the seven-day interval preceding the crash, how many hours of work was your shortest day?

Code	Label
------	-------

hh:mm	Number of hours and minutes
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Average_Day	\$5.	Char	5

Survey Question: During the seven-day interval preceding the crash, how many hours of work was your longest day?

Code	Label
hh:mm	Number of hours and minutes
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Total_Hours_In_7_Days	\$6.	Char	6

Survey Question: Total hours worked in seven days?

Code	Label
hhh:mm	Number of hours and minutes
997:97	Not applicable
999:99	Unknown

Variable Name	Format	Type	Length
Days_Worked_Since_Last_Off	BDI86f	Numeric	8

Survey Question: Number of days worked since last day off?

Code	Label
1-95	Actual number of days
96	96 days or more
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Day_Dreaming	BDI87f	Numeric	8

Survey Question: Prior to the crash, were you inattentive, day dreaming or tuned out?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Thinking_Of_Problems	BDI88f	Numeric	8

Survey Question: Prior to the crash, were you thinking of personal, family, financial employment concerns/problems/events?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Disagreement_6_Hours	BDI89f	Numeric	8

Survey Question: Had you been in a disagreement or argument within the last 6 hours?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Disagreement_12_Hours	BDI90f	Numeric	8

Survey Question: Had you been in a disagreement or argument within the last 12 hours?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Distractions	BDI91f	Numeric	8

Survey Question: Were you distracted?

Code	Label
00	No driver present
01	Not distracted
02	Looked, but did not see
03	By other occupants/passengers, specify
04	By moving object in vehicle, specify
05	While talking on phone, specify phone location and type
06	While dialing cell phone, specify phone location and type
07	While talking on CB radio

- 08 While adjusting climate control
- 09 While adjusting radio, cassette, CD, specify
- 10 While using other device/controls integral to vehicle, specify
- 11 While reading map, newspaper or magazine, specify
- 12 Distracted by outside person, object or event, specify
- 13 While eating or drinking
- 14 Smoking related
- 15 Retrieving fallen object, specify
- 16 Sleepy or fell asleep
- 17 Distracted, details unknown
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Direction_Of_Attn_Prior	BDI92f	Numeric	8

Survey Question: Driver's direction of attention prior to start of collision course?

- | Code | Label |
|------|------------------------|
| 0 | No driver present |
| 1 | Looking right |
| 2 | Looking left |
| 3 | Looking straight ahead |
| 4 | Looking rearward |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Direction_Of_Attn_After	BDI93f	Numeric	8

Survey Question: Driver's direction of attention after start of collision course?

- | Code | Label |
|------|------------------------|
| 0 | No driver present |
| 1 | Looking right |
| 2 | Looking left |
| 3 | Looking straight ahead |
| 4 | Looking rearward |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Read_Road_Signs	BDI94f	Numeric	8

Survey Question: Can you read and understand road signs and traffic control devices present?

- | Code | Label |
|------|-------|
|------|-------|

- 1 Yes
- 2 No
- 9 Unknown

Variable Name	Format	Type	Length
Comm_In_English	BDI95f	Numeric	8

Survey Question: How well can you communicate in English?

- | Code | Label |
|------|-------------|
| 0 | Not at all |
| 1 | Poorly |
| 2 | Fairly well |
| 3 | Very well |
| 4 | Excellently |

Variable Name	Format	Type	Length
Driver_Check_Traffic	BDI96f	Numeric	8

Survey Question: Did the driver check/look for traffic or nonmotorist prior to initiating action?

- | Code | Label |
|------|------------------------------------|
| 0 | No, did not look or check |
| 1 | Yes, looked and saw |
| 2 | Yes, looked, but did not recognize |
| 3 | Yes, looked, but did not see |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
After_Look_Focus_On_Destin	BDI97f	Numeric	8

Survey Question: After checking for traffic, did you focus on your intended destination?

- | Code | Label |
|------|----------------|
| 1 | Yes, specify |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Line_Of_Sight_Obstructed	BDI98f	Numeric	8

Survey Question: Was your line of sight obstructed?

Code	Label
0	No, line of sight was clear
1	Obstructed by roadway curvature
2	Obstructed by roadway grade
3	Obstructed by building
4	Obstructed by trees/shrubbery
5	Obstructed by passenger
6	Vehicle component, specify
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
View_Of_Other_Veh	BDI99f	Numeric	8

Survey Question: Was your view of the other vehicle or nonmotorist clear (not obscured by glare, etc.)?

Code	Label
0	No, view was clear - not obscured
1	View obscured by sun glare
2	View obscured by headlight glare
3	View obscured by other glare, specify
4	View obscured by rain/fog condition
5	View obscured by dark/night viewing condition
7	Not applicable
8	View obscured by other condition, specify
9	Unknown

Variable Name	Format	Type	Length
Location_Of_Other_Veh	BDI100f	Numeric	8

Survey Question: Location of other vehicle/nonmotorist prior to the maneuver (Location with respect to associated vehicle)

Code	Label
01	Left front
02	Left side
03	Left rear
04	Right front
05	Right side
06	Right rear
07	Rearward
08	Forward
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Veh_Travel_Speed	BDI101f	Numeric	8

Survey Question: Vehicle travel speed prior to start of collision path?

Code	Label
0	Stopped
1	Accelerating, did not stop
2	Constant speed, did not stop
3	Decelerating
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Veh_Stopped_Prior	BDI102f	Numeric	8

Survey Question: If stopped, period of time stopped prior to entering the start of collision course?

Code	Label
0	Did not stop
1	Rolling stop prior to proceeding
2	Stopped <1 second prior to proceeding
3	Stopped 1-2 seconds prior to proceeding
4	Stopped 3-4 seconds prior to proceeding
5	Stopped 5-10 seconds prior to proceeding
6	Stopped more than 10 seconds
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Other_Veh_Travel_Speed	BDI103f	Numeric	8

Survey Question: Other vehicle travel speed prior to start of collision path?

Code	Label
0	Stopped
1	Accelerating, did not stop
2	Constant speed, did not stop
3	Decelerating
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Other_Veh_Stopped_Prior	BDI104f	Numeric	8

Survey Question: If stopped, period of time other vehicle or nonmotorist stopped prior to start of collision course?

Code	Label
0	Did not stop
1	Rolling stop prior to proceeding
2	Stopped <1 second prior to proceeding
3	Stopped 1-2 seconds prior to proceeding
4	Stopped 3-4 seconds prior to proceeding
5	Stopped 5-10 seconds prior to proceeding
6	Stopped more than 10 seconds
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
In_A_Hurry	BDI105f	Numeric	8

Survey Question: Were you in a hurry prior to the crash occurrence?

Code	Label
1	Yes, specify why
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Other_Driver_Hurried	BDI106f	Numeric	8

Survey Question: Did the other driver/ nonmotorist appear to be in a hurry prior to crash occurrence?

Code	Label
1	Yes, specify why (in your opinion)
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Misjudge_Approach	BDI107f	Numeric	8

Survey Question: Did the driver attempt an action (turn, cross, etc.) and misjudge the approach speed of the other vehicle or nonmotorist?

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Misjudge_Gap	BDI108f	Numeric	8

Survey Question: Did the driver attempt an action (turn, cross, etc.) and misjudge the the gap distance to the the other vehicle or nonmotorist?

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Follow_Too_Close	BDI109f	Numeric	8

Survey Question: Did the driver follow too closely for conditions?

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Gap_Distance	BDI110f	Numeric	8

Survey Question: Gap distance to forward vehicle ____ Code nearest ten feet?

Code	Label
009	<10 feet
900	900 or more
997	Not applicable
999	Unknown

Variable Name	Format	Type	Length
Too_Fast	BDI111f	Numeric	8

Survey Question: Did the driver travel too fast for conditions?

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Driver_Stated_Speed	BDI112f	Numeric	8

Survey Question: Driver stated speed before start of collision course?

Code	Label
00	Stopped
01-97	Actual Speed in MPH
98	98+ MPH
99	Unknown

Variable Name	Format	Type	Length
Gap_Or_Speed_Related_To_Hurry	BDI113f	Numeric	8

Survey Question: Was either gap distance or vehicle speed related to being in a hurry?

Code	Label
1	Yes, specify
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Relative_Veh_Speeds	BDI114f	Numeric	8

Survey Question: Relative vehicle speeds?

Code	Label
1	Overtaking other vehicle
2	Being overtaken by other vehicle
3	Both vehicles traveling at constant speed/velocity
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Lane_Change	BDI115f	Numeric	8

Survey Question: Did the crash involve a lane change maneuver?

Code	Label
0	No
1	Yes, by this driver
2	Yes, by other driver
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Speed_Change_During_Lane_Chg	BDI116f	Numeric	8

Survey Question: Did you alter your vehicle s speed during the lane change maneuver?

Code	Label
1	Yes, accelerated
2	Yes, decelerated
3	No, traveling at constant velocity
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Other_Driver_Speed_Change	BDI117f	Numeric	8

Survey Question: Did the other driver alter speed during the lane change maneuver?

Code	Label
1	Yes, accelerated
2	Yes, decelerated
3	No, traveling at constant velocity
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Veh_Under_Drivers_Control	BDI118f	Numeric	8

Survey Question: Was the vehicle that hit you under the driver s control?

Code	Label
1	Vehicle under control
2	Vehicle not under control (specify)
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Driver_Avoid_Maneuvers	BDI119f	Numeric	8

Survey Question: Did the driver of the vehicle that hit you take any avoidance actions?

Code	Label
1	Yes, specify
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Work_To_Schedule	BDI122f	Numeric	8

Survey Question: Were you working to a schedule?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
On_Schedule	BDI123f	Numeric	8

Survey Question: Were you on schedule?

Code	Label
1	Ahead of schedule
2	On schedule
3	Behind schedule
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Trip_Purpose	BDI124f	Numeric	8

Survey Question: What was the purpose of the trip?

Code	Label
1	Line Run
2	Charter
3	Deadhead
4	Corner to Corner
5	Tour/Sightseeing
6	Private motor Carrier
7	Not Applicable
8	Other, Specify
9	Unknown

Variable Name	Format	Type	Length
Intended_Dist_This_Day	BDI125f	Numeric	8

Survey Question: What was the intended one-way trip distance THIS DAY?

Code	Label
0009	<10 miles
0010-8889	Actual miles

9000	9000 miles or more
9997	Not applicable
9999	Unknown

Variable Name	Format	Type	Length
Intended_Dist_Total	BDI126f	Numeric	8

Survey Question: What was the intended one-way trip distance TOTAL?

Code	Label
0009	<10 miles
0010-8889	Actual miles
9000	9000 miles or more
9997	Not applicable
9999	Unknown

Variable Name	Format	Type	Length
Max_Dist_From_Pickup	BDI127f	Numeric	8

Survey Question: What was the maximum distance the vehicle traveled or was scheduled to travel from vehicle pick-up location?

Code	Label
0000-7776	Actual miles
7777	Not applicable
9999	Unknown

Variable Name	Format	Type	Length
How_Often_Drive_This_Veh	BDI128f	Numeric	8

Survey Question: How often do you drive this vehicle?

Code	Label
1	First time
2	Rarely
3	Daily
4	Weekly
5	Monthly
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Unusual_Events	BDI129f	Numeric	8

Survey Question: Did unusual events occur prior to the crash?

Code	Label
1	Yes, specify
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Num_Of_Times_In_This_Unit	BDI130f	Numeric	8

Survey Question: Number of times you have driven this unit during the preceding three month interval?

Code	Label
01-29	Actual Value
30	30+ times
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Comfort_With_Veh	BDI131f	Numeric	8

Survey Question: How comfortable were you with this vehicle?

Code	Label
1	Very comfortable
2	Comfortable
3	Neither comfortable nor uncomfortable
4	Somewhat uncomfortable
5	Very uncomfortable
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Brakes	BDI132f	Numeric	8

Survey Question: Rate of the condition of the Brakes

Code	Label
1	Good
2	Fair
3	Moderate
4	Bad
5	Non-Functional

Variable Name	Format	Type	Length
Steering	BDI133f	Numeric	8

Survey Question: Rate of the condition of the Steering

Code	Label
1	Good
2	Fair
3	Moderate
4	Bad
5	Non-Functional

Variable Name	Format	Type	Length
Suspension	BDI134f	Numeric	8

Survey Question: Rate of the condition of the Suspension

Code	Label
1	Good
2	Fair
3	Moderate
4	Bad
5	Non-Functional

Variable Name	Format	Type	Length
Tires	BDI135f	Numeric	8

Survey Question: Rate of the condition of the Tires

Code	Label
1	Good
2	Fair
3	Moderate
4	Bad
5	Non-Functional

Variable Name	Format	Type	Length
Lights	BDI136f	Numeric	8

Survey Question: Rate of the condition of the Lights

Code	Label
1	Good
2	Fair
3	Moderate
4	Bad
5	Non-Functional

Variable Name	Format	Type	Length
Windshield_Clear	BDI137f	Numeric	8

Survey Question: Was the windshield clear of dirt and other obstructions?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Transmission_Retard	BDI138f	Numeric	8

Survey Question: Was this vehicle equipped with a transmission retarder?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Speed_Retard_Engage	BDI139f	Numeric	8

Survey Question: If the vehicle was equipped with a transmission retarder, at what speed was it engaged?

Code	Label
000-776	Actual value
777	Not applicable
999	Unknown

Variable Name	Format	Type	Length
Who_Maintains	BDI140f	Numeric	8

Survey Question: Who is responsible for maintenance of this vehicle?

Code	Label
1	Carrier of record
2	Operator
3	Dealership/Manufacturer
4	Contracted garage
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Carrier_Type	BDI145f	Numeric	8

Survey Question: Carrier type

Code	Label
1	Private - intrastate
2	Private - interstate
3	For hire - intrastate
4	For hire - interstate
5	Government
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Num_Of_Pass	BDI146f	Numeric	8

Survey Question: How many people were in the vehicle at the time of the crash?

Code	Label
0-995	Actual value
996	Driver only
997	Not applicable
999	Unknown

Variable Name	Format	Type	Length
Comfort_With_Of_Num_Of_Pass	BDI147f	Numeric	8

Survey Question: How comfortable were you with the number of passengers?

Code	Label
1	Very comfortable
2	Comfortable
3	Neither comfortable nor uncomfortable
4	Somewhat uncomfortable
5	Very uncomfortable
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Comfort_With_Pass_Beh	BDI148f	Numeric	8

Survey Question: How comfortable were you with the passengers behavior?

Code	Label
1	Very comfortable
2	Comfortable
3	Neither comfortable nor uncomfortable

- 4 Somewhat uncomfortable
- 5 Very uncomfortable
- 7 Not applicable
- 9 Unknown

Variable Name	Format	Type	Length
Driver_Transported	BDI149f	Numeric	8

Survey Question: Was the driver transported for medical care?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Num_Of_Pass_Transported	BDI150f	Numeric	8

Survey Question: Were any passengers transported for medical care?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driver_Belt_Use	BDI151f	Numeric	8

Survey Question: Type of safety belt worn by driver

- | Code | Label |
|------|-------------------------------------|
| 0 | Safety belt available, but not worn |
| 1 | Lap belt only |
| 2 | Shoulder belt only |
| 3 | Lap and shoulder belt |
| 4 | No safety belts available |
| 8 | Other, specify |
| 9 | Unknown |

Codebook – Crash Data Set

Crash Data Set

The Crash data set contains all details that are related to the crash itself, and not individual vehicles involved in the crash. There is one record per crash. The fields contained in this data set cover all the higher-level aspects of each case. The Crash data set contains the variable Case_Number. Case_Number uniquely identifies each record in this data set and should be used to merge the Crash data set with other data sets.

Variable Name	Format	Type	Length
Time_Accident	TIME8.	Numeric	8

Survey Question: Time of Accident?

Code	Label
hh:mm	Actual hour and minute
2400	Midnight
9999	Unknown

Variable Name	Format	Type	Length
Num_Vehicles		Numeric	8

Survey Question: Total of Vehicles Involved?

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Number_Buses		Numeric	8

Survey Question: Total of Buses Involved?

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Number_NonM		Numeric	8

Survey Question: Total of Non-motorists Involved?

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Codebook – CrashAssessment Data Set

CrashAssessment Data Set

The CrashAssessment data set contains assessment information for each vehicle and driver involved in the crash. One record of this information exists for each vehicle. The CrashAssessment data set contains the variables Case_Number and Vehicle_Number. Case_Number and Vehicle_Number uniquely identify each record in this data set and should be used to merge the CrashAssessment data set with other vehicle level data sets.

Variable Name	Format	Type	Length
Sequence_Of_Events1	CA3f	Numeric	8

Survey Question: Sequence of events list to characterize events in bus crashes. Note that most are not harmful events. The intent is to capture primary events (first of up to 5 coded).

Code	Label
01	LOC, reduced road friction
02	Evasive maneuver
03	Lane excursion, same direction
04	Lane excursion, opp. direction
05	Negotiate turn left
06	Negotiate turn right
07	Negotiate left turn
08	Negotiate curve right
09	Ran off road right
10	Ran off road left
11	Drift off road left
12	Drift off road right
13	Maintain heading off road
14	Return to road
15	Hit motor vehicle
16	Hit pedestrian
17	Hit bicyclist
18	Hit other nonmotorist
19	Hit fixed object
20	Hit nonfixed object
21	Tire failure
22	Brake failure
23	Other vehicle failure
24	Rollover
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Sequence_Of_Events2	\$2.	Char	2

Survey Question: Sequence of events list to characterize events in bus crashes. Note that most are not harmful events. The intent is to capture primary events (second of up to 5 coded).

Code	Label
01	LOC, reduced road friction
02	Evasive maneuver
03	Lane excursion, same direction
04	Lane excursion, opp. direction
05	Negotiate turn left
06	Negotiate turn right
07	Negotiate left turn
08	Negotiate curve right
09	Ran off road right
10	Ran off road left
11	Drift off road left
12	Drift off road right
13	Maintain heading off road
14	Return to road
15	Hit motor vehicle
16	Hit pedestrian
17	Hit bicyclist
18	Hit other nonmotorist
19	Hit fixed object
20	Hit nonfixed object
21	Tire failure
22	Brake failure
23	Other vehicle failure
24	Rollover
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Sequence_Of_Events3	\$2.	Char	2

Survey Question: Sequence of events list to characterize events in bus crashes. Note that most are not harmful events. The intent is to capture primary events (third of up to 5 coded).

Code	Label
01	LOC, reduced road friction
02	Evasive maneuver
03	Lane excursion, same direction
04	Lane excursion, opp. direction
05	Negotiate turn left
06	Negotiate turn right
07	Negotiate left turn
08	Negotiate curve right
09	Ran off road right
10	Ran off road left

- 11 Drift off road left
- 12 Drift off road right
- 13 Maintain heading off road
- 14 Return to road
- 15 Hit motor vehicle
- 16 Hit pedestrian
- 17 Hit bicyclist
- 18 Hit other nonmotorist
- 19 Hit fixed object
- 20 Hit nonfixed object
- 21 Tire failure
- 22 Brake failure
- 23 Other vehicle failure
- 24 Rollover
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Sequence_Of_Events4	\$2.	Char	2

Survey Question: Sequence of events list to characterize events in bus crashes. Note that most are not harmful events. The intent is to capture primary events (forth of up to 5 coded).

- | Code | Label |
|------|--------------------------------|
| 01 | LOC, reduced road friction |
| 02 | Evasive maneuver |
| 03 | Lane excursion, same direction |
| 04 | Lane excursion, opp. direction |
| 05 | Negotiate turn left |
| 06 | Negotiate turn right |
| 07 | Negotiate left turn |
| 08 | Negotiate curve right |
| 09 | Ran off road right |
| 10 | Ran off road left |
| 11 | Drift off road left |
| 12 | Drift off road right |
| 13 | Maintain heading off road |
| 14 | Return to road |
| 15 | Hit motor vehicle |
| 16 | Hit pedestrian |
| 17 | Hit bicyclist |
| 18 | Hit other nonmotorist |
| 19 | Hit fixed object |
| 20 | Hit nonfixed object |
| 21 | Tire failure |
| 22 | Brake failure |
| 23 | Other vehicle failure |
| 24 | Rollover |

- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Sequence_Of_Events5	\$2.	Char	2

Survey Question: Sequence of events list to characterize events in bus crashes. Note that most are not harmful events. The intent is to capture primary events (fifth of up to 5 coded).

- | Code | Label |
|------|--------------------------------|
| 01 | LOC, reduced road friction |
| 02 | Evasive maneuver |
| 03 | Lane excursion, same direction |
| 04 | Lane excursion, opp. direction |
| 05 | Negotiate turn left |
| 06 | Negotiate turn right |
| 07 | Negotiate left turn |
| 08 | Negotiate curve right |
| 09 | Ran off road right |
| 10 | Ran off road left |
| 11 | Drift off road left |
| 12 | Drift off road right |
| 13 | Maintain heading off road |
| 14 | Return to road |
| 15 | Hit motor vehicle |
| 16 | Hit pedestrian |
| 17 | Hit bicyclist |
| 18 | Hit other nonmotorist |
| 19 | Hit fixed object |
| 20 | Hit nonfixed object |
| 21 | Tire failure |
| 22 | Brake failure |
| 23 | Other vehicle failure |
| 24 | Rollover |
| 98 | Other, specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
Pre_Event_Movement	CA4f	Numeric	8

Survey Question: Pre-event movement (Prior to recognition of Critical Event).

- | Code | Label |
|------|------------------------------|
| 00 | No driver present |
| 01 | Going straight |
| 02 | Decelerating in traffic lane |
| 03 | Accelerating in traffic lane |
| 04 | Starting in traffic lane |

- 05 Stopped in traffic lane
- 06 Passing or overtaking another vehicle
- 07 Disabled or parked in travel lane
- 08 Leaving a parking position
- 09 Entering a parking position
- 10 Turning right
- 11 Turning left
- 12 Making a U-turn
- 13 Backing up (other than for parking position)
- 14 Negotiating a curve
- 15 Changing lanes
- 16 Merging
- 17 Successful avoidance maneuver to a previous critical event
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Critical_Pre_Crash_Movement	CA5f	Numeric	8

Survey Question: Critical Precrash Event

- | Code | Label |
|--|---|
| THIS VEHICLE LOSS OF CONTROL DUE TO: | |
| 010 | Blow out or flat tire |
| 020 | Stalled engine |
| 030 | Disabling vehicle failure (e.g., wheel fell off), specify |
| 040 | Minor non-disabling vehicle problem (e.g., hood flew up), specify |
| 050 | Poor road conditions (puddle, pot hole, ice, etc.) specify |
| 060 | Excessive speed |
| 070 | Driver non-performance, specify |
| 080 | Other cause of control loss, specify: |
| 090 | Unknown reason for cause of control loss |
| THIS VEHICLE TRAVELING OVER EDGE OF ROADWAY | |
| 100 | Over left edge of roadway |
| 101 | Over right edge of roadway |
| 102 | End departure |
| 199 | Unknown which edge this vehicle traveled over |
| THIS VEHICLE IN ANOTHER VEHICLE'S LANE | |
| 200 | Stopped |
| 210 | Traveling in same direction with lower steady speed |
| 215 | Traveling in same direction while decelerating |
| 220 | Traveling in same direction with higher speed |
| 230 | Traveling in opposite direction |
| 290 | Unknown direction/speed in another vehicle's lane |
| THIS VEHICLE ENCROACHING INTO ANOTHER VEHICLE'S LANE:
NOT AT JUNCTION | |
| 300 | From adjacent lane (opposite direction) |
| 310 | From adjacent lane (same direction) - over left lane line |
| 320 | From adjacent lane (same direction) - over right lane line |
| 330 | From parallel/diagonal parking lane |

- 390 Unknown direction of encroachment into another vehicle's lane
- THIS VEHICLE ENCROACHING INTO ANOTHER VEHICLE'S LANE: AT JUNCTION**
- 410 Entering intersection, turning into same direction
- 411 Entering intersection, straight across path
- 412 Entering intersection, turning across path
- 413 Entering intersection, turning into opp. direction
- 429 Entering intersection, intended path not known
- 430 Entering driveway, alley access, etc ...
- 440 From driveway, alley, turning into same direction
- 441 From driveway, alley, across path
- 442 From driveway, alley, turning into opp. direction
- 459 From driveway, alley, intended path not known
- 460 Entering from "yield" entrance (ramp/channel)
- 497 Encroaching - other
- 498 Encroaching - details unknown
- THIS MOTOR VEHICLE - DETAILS UNKNOWN**
- 499 This motor vehicle initiated critical event - details unknown
- OTHER MOTOR VEHICLE IN THIS VEHICLE'S LANE**
- 500 Other vehicle stopped
- 510 Traveling in same direction with lower steady speed
- 515 Traveling in same direction while decelerating
- 520 Traveling in same direction with higher speed
- 530 Traveling in opposite direction
- 560 Backing
- 590 Unknown direction/speed of other motor vehicle in lane
- OTHER MOTOR VEHICLE ENCROACHING INTO LANE**
- 600 From adjacent lane (opposite direction)
- 610 From adjacent lane (same direction) - over left lane line
- 620 From adjacent lane (same direction) - over right lane line
- 630 From parallel/diagonal parking lane
- 690 Unknown direction of other vehicle's encroachment
- OTHER MOTOR VEHICLE ENCROACHING INTO LANE: AT JUNCTION**
- 710 Entering intersection, turning into same direction
- 711 Entering intersection, straight across path
- 712 Entering intersection, turning across path
- 713 Entering intersection, turning into opp. direction
- 729 Entering intersection, intended path not known
- 730 Entering driveway, alley access, etc.
- 740 From driveway, alley, turning into same direction
- 741 From driveway, alley, across path
- 742 From driveway, alley, turning into opp. direction
- 759 From driveway, alley ... intended path not known
- 760 Entering from "Yield" Entrance (Ramp/Channel)
- 797 Encroaching - Other
- 798 Encroaching - details unknown
- OTHER MOTOR VEHICLE - UNKNOWN DETAILS**
- 799 Other motor vehicle initiated critical event - details unknown
- PEDESTRIAN, PEDALCYCLIST, NONMOTORIST, ANIMAL**
- 800 Pedestrian in roadway
- 801 Pedestrian approaching roadway

- 809 Pedestrian - unknown location
- 810 Pedalcyclist or other nonmotorist in roadway specify
- 811 Pedalcyclist or other nonmotorist approaching roadway specify
- 819 Pedalcyclist or other nonmotorist - unknown location specify
- 830 Animal in roadway
- 831 Animal approaching roadway
- 839 Animal - unknown location
- 840 Object in roadway
- 841 Object approaching roadway
- 849 Object - unknown location
- OTHER**
- 994 More than two vehicles involved
- 998 Other critical precrash event, specify:
- 999 Unknown

Variable Name	Format	Type	Length
Reason_For_Critical_Event	CA6f	Numeric	8

Survey Question: Critical reason for the critical event

- | Code | Label |
|--|--|
| 000 | Critical event not coded to this vehicle |
| DRIVER RELATED REASON FOR CRITICAL EVENT | |
| <i>Physical Critical Non-Performance Factors</i> | |
| 100 | Sleep, that is, actually asleep |
| 101 | Heart attack, stroke or other sudden physical impairment of the ability to act |
| 102 | Alcohol or drug use |
| 101 | Other permanent physical impairment, specify |
| 108 | Other critical non-performance, specify |
| 109 | Unknown critical non-performance |
| <i>Inattention/Distraction Factor</i> | |
| 110 | Inattention (i.e., daydreaming) |
| 111 | Internal distraction |
| 112 | External distraction |
| 113 | Other inattention/distraction factor, specify |
| 114 | Inattention/distraction factor - no further specified |
| <i>Recognition Factor</i> | |
| 120 | Inadequate surveillance - failed to look |
| 121 | Inadequate surveillance - looked but did not see |
| 122 | Line of sight obstructed |
| 123 | Line of sight obscured |
| 124 | Other recognition factor, specify |
| 125 | Recognition factor - not further specified |
| <i>Decision Factor</i> | |
| 130 | Too fast for conditions |
| 131 | Too slow for traffic stream |
| 132 | Misjudgment of gap or speed of other vehicle or Nonmotorist |
| 133 | Following too closely to respond to unexpected actions |
| 134 | False assumption of other road user's actions |

- 135 Illegal maneuver
- 136 Failure to turn on head lamps
- 137 Inadequate evasive action, e.g., braking only, not braking and steering
- 138 Aggressive driving behavior
- 139 Operated vehicle with known problem, specify
- 140 Other decision error, specify
- 141 Decision error - not further specified

Performance Factor

- 150 Failure to act (panic/freezing)
- 151 Overcompensation
- 152 Poor directional control, e.g., failing to control vehicle with skill ordinarily expected
- 153 Improper use of transmission retarder
- 154 Other performance error, specify
- 155 Performance error - not further specified

General Driver Factor

- 199 General Driver factor - not further specified

VEHICLE RELATED REASON FOR CRITICAL EVENT

- 200 Tires/wheels failed
- 201 Brakes failed
- 202 Steering failed
- 203 Cargo shifted
- 204 Trailer attachment failed
- 205 Suspension failed
- 206 Lights failed
- 207 Vehicle related vision obstructions
- 208 Body, doors, hood failed
- 298 Other vehicle failure, specify
- 299 Vehicle failure - not further specified

ENVIRONMENT RELATED REASON FOR CRITICAL EVENT HIGHWAY RELATED FACTOR

- 500 Signs/signals missing
- 501 Signs/signals erroneous/defective
- 502 Signs/signals inadequate
- 503 View obstructions by roadway design (curve, grade)
- 504 View obstructions by other environment factor (trees, peds)
- 505 View obstructed by other vehicles
- 506 Road design - roadway geometry (e.g., ramp curvature)
- 507 Road design - sight distance
- 508 Road design - other
- 509 Maintenance problems (potholes, deteriorated road edges, etc.)
- 510 Slick roads (low friction road surface due to ice, loose debris, any other cause)
- 518 Other highway-related condition, specify
- 519 Highway Factor - not further specified

Weather Related Factor

- 521 Rain, snow
- 522 Fog
- 523 Wind gust
- 528 Other weather-related condition, specify

- 529 Weather factor - not further specified
- Other Environmental Factor*
- 530 Glare
- 531 Blowing debris
- 538 Other sudden change in ambience, specify
- 539 Other environmental factor - not further specified

UNKNOWN REASON FOR CRITICAL EVENT

- 999 Unknown reason for critical event

Variable Name	Format	Type	Length
Attempted_Avoidance_Maneuver	CA7f	Numeric	8

Survey Question: Attempted avoidance maneuver

- | Code | Label |
|------|---------------------------------|
| 00 | No driver present |
| 01 | No avoidance maneuver |
| 02 | Braking (no lockup) |
| 03 | Braking (lockup) |
| 04 | Braking (lockup unknown) |
| 05 | Releasing brakes |
| 06 | Steering left |
| 07 | Steering right |
| 08 | Braking and steering left |
| 09 | Braking and steering right |
| 10 | Accelerating |
| 11 | Accelerating and steering left |
| 12 | Accelerating and steering right |
| 98 | Other action, specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
PreImpact_Stability	CA8f	Numeric	8

Survey Question: Pre-impact stability

- | Code | Label |
|------|---|
| 0 | No driver present |
| 1 | Tracking |
| 2 | Skidding longitudinally - rotation less than 30 degrees |
| 3 | Skidding laterally - clockwise rotation |
| 4 | Skidding laterally - counterclockwise rotation |
| 7 | Other vehicle loss-of-control, specify: |
| 9 | Pre-crash stability unknown |

Variable Name	Format	Type	Length
PreImpact_Location	CA9f	Numeric	8

Survey Question: Pre-impact location

Code	Label
0	No driver present
1	Stayed in original travel lane
2	Stayed on roadway but left original travel lane
3	Stayed on roadway, not known if left original travel lane
4	Departed roadway
5	Remained off roadway
6	Returned to roadway
7	Entered roadway
9	Unknown

Variable Name	Format	Type	Length
Crash_Type	CA10f	Numeric	8

Survey Question: Crash type, using the codes from the diagram below.

Code	Label
00	No impact

SINGLE DRIVER

01	Right roadside departure - drive off road
02	Right roadside departure - control/traction loss
03	Right roadside departure - avoid collision with vehicle, pedestrian, animal
04	Right roadside departure - specific other
05	Right roadside departure - specifics unknown
06	Left roadside departure - drive off road
07	Left roadside departure - control/traction loss
08	Left roadside departure - avoid collision with vehicle, pedestrian, animal
09	Left roadside departure - specifics other
10	Left roadside departure - specifics unknown
11	Forward impact - parked vehicle
12	Forward impact - stationary object
13	Forward impact - pedestrian/animal
14	Forward impact - end departure
15	Forward impact - specifics other
16	Forward impact - specifics unknown

SAME TRAFFICWAY SAME DIRECTION

20	Rear-end - stopped
21	Rear-end - stopped, straight
22	Rear-end - stopped, left
23	Rear-end - stopped, right
24	Rear-end - slower
25	Rear-end - slower, going straight
26	Rear-end - slower, going left
27	Rear-end - slower, going right
28	Rear-end - decelerating (slowing)
29	Rear-end - decelerating (slowing), going straight
30	Rear-end - decelerating (slowing), going left

- 31 Rear-end - decelerating (slowing), going right
- 32 Rear-end - specifics other
- 33 Rear-end - specifics unknown
- 34 Forward impact - control/traction loss
- 35 Forward impact - control/traction loss
- 36 Forward impact - control/traction loss
- 37 Forward impact - control/traction loss
- 38 Forward impact - avoid collision with vehicle
- 39 Forward impact - avoid collision with vehicle
- 40 Forward impact - avoid collision with object
- 41 Forward impact - avoid collision with object
- 42 Forward impact - specifics other
- 43 Forward impact - specifics unknown
- 44 Sideswipe/angle - straight ahead on left
- 45 Sideswipe/angle - straight ahead on left/right
- 46 Sideswipe/angle - changing lanes to the right
- 47 Sideswipe/angle - changing lanes to the left
- 48 Sideswipe/angle - specifics other
- 49 Sideswipe/angle - specifics unknown

SAME TRAFFICWAY OPPOSITE DIRECTION

- 50 Head-on - lateral move (left/right)
- 51 Head-on - lateral move (going straight)
- 52 Head-on - specifics other
- 53 Head-on - specifics unknown
- 54 Forward impact - control/traction loss
- 55 Forward impact - control/traction loss
- 56 Forward impact - control/traction loss
- 57 Forward impact - control/traction loss
- 58 Forward impact - avoid collision with vehicle
- 59 Forward impact - avoid collision with vehicle
- 60 Forward impact - avoid collision with object
- 61 Forward impact - avoid collision with object
- 62 Forward impact - specifics other
- 63 Forward impact - specifics unknown
- 64 Sideswipe/angle - lateral move (left/right)
- 65 Sideswipe/angle - lateral move (going straight)
- 66 Sideswipe/angle - specifics other
- 67 Sideswipe/angle - specifics unknown

CHANGE TRAFFICWAY VEHICLE TURNING

- 68 Turn across path - initial opposite directions (left/right)
- 69 Turn across path - initial opposite directions (going straight)
- 70 Turn across path - initial same directions (turning right)
- 71 Turn across path - initial same directions (going straight)
- 72 Turn across path - initial same directions (turning left)
- 73 Turn across path - initial same directions (going straight)
- 74 Turn across path - specifics other
- 75 Turn across path - specifics unknown
- 76 Turn into same direction (turning left)
- 77 Turn into same direction (going straight)
- 78 Turn into same direction (turning right)

- 79 Turn into same direction (going straight)
- 80 Turn into opposite directions (turning right)
- 81 Turn into opposite directions (going straight)
- 82 Turn into opposite directions (turning left)
- 83 Turn into opposite directions (going straight)
- 84 Turn into path - specifics other
- 85 Turn into path - specifics unknown

INTERSECTING PATHS (VEHICLE DAMAGE)

- 86 Straight paths - striking from the right
- 87 Straight paths - struck on the right
- 88 Straight paths - striking from the left
- 89 Straight paths - struck on the left
- 90 Straight paths - specifics other
- 91 Straight paths - specifics unknown

MISCELLANEOUS

- 92 Backing vehicle
- 93 Other vehicle or object
- 98 Other crash type, specify
- 99 Unknown

Variable Name	Format	Type	Length
Vehicle_Have_Right_Of_Way	CA11f	Numeric	8

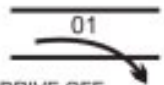
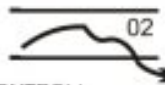
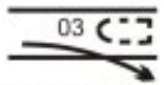
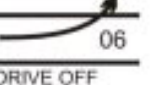

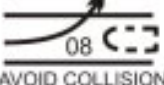


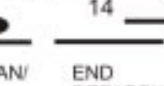
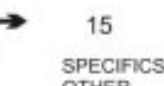

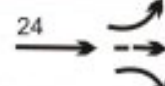
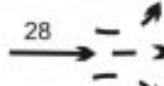



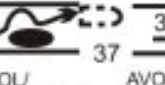
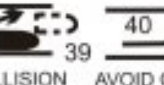
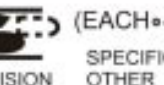
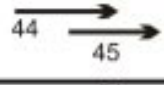
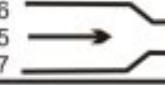



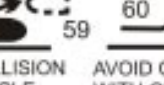
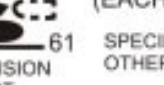



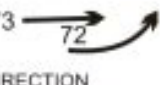
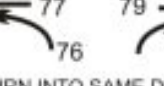
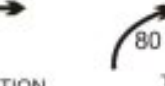


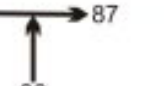

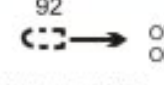
Survey Question: Did this vehicle have the right-of-way?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driver_Required_To_StopYield	CA12f	Numeric	8

Survey Question: Was this driver required to stop or yield prior to crash occurrence?

- | Code | Label |
|------|--|
| 0 | No |
| 1 | Yes, required to yield right-of-way |
| 2 | Yes, required to stop at stop sign |
| 3 | Yes, required to stop at flashing red signal |
| 4 | Yes, required to stop at red/yellow/green signal |
| 5 | Yes, required to stop to pick up/drop off passengers |
| 7 | Not applicable |
| 8 | Yes, other reason, specify |
| 9 | Unknown |

Category	Configuration	CRASH TYPES (includes intent)						
I Single Driver	A. Right roadside departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH. PED. ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN		
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH. PED. ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN		
	C. Forward Impact	 11 PARKED VEHICLE	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN	
II Same Trafficway Same Direction	D. Rear-end	 20 STOPPED 21,22,23	 22 21 23	 24 SLOWER 25,26,27	 26 25 27	 28 29,30,31	30 29 31 (EACH*32) SPECIFICS OTHER	(EACH*33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 35 36 CONTROL/ TRACTION LOSS	 37 38 AVOID COLLISION WITH VEHICLE	 39 40 AVOID COLLISION WITH OBJECT	(EACH*42) SPECIFICS OTHER	(EACH*43) SPECIFICS UNKNOWN	
	F. Sideswipe/Angle	 44 45	 46 45 47	(EACH* 48) SPECIFICS OTHER		(EACH* 49) SPECIFICS UNKNOWN		
III Same Trafficway Opposite Direction	G. Head-on	 50 51 LATERAL MOVE	(EACH* 52) SPECIFICS OTHER		(EACH* 53) SPECIFICS UNKNOWN			
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 55 56 CONTROL/ TRACTION LOSS	 57 58 AVOID COLLISION WITH VEHICLE	 59 60 AVOID COLLISION WITH OBJECT	(EACH* 62) SPECIFICS OTHER	(EACH* 63) SPECIFICS UNKNOWN	
	I. Sideswipe/Angle	 64 65 LATERAL MOVE	(EACH* 66) SPECIFICS OTHER		(EACH* 67) SPECIFICS UNKNOWN			
IV Change Trafficway Vehicle Turning	J. Turn Across Path	 68 69 INITIAL OPPOSITE DIRECTIONS	 71 70 INITIAL SAME DIRECTION	 73 72	(EACH* 74) SPECIFICS OTHER	(EACH* 75) SPECIFICS UNKNOWN		
	K. Turn Into Path	 77 76 TURN INTO SAME DIRECTION	 79 78 TURN INTO OPPOSITE DIRECTION	 80 81	 82 83	(EACH* 84) SPECIFICS OTHER	(EACH* 85) SPECIFICS UNKNOWN	
V Intersecting Paths (Vehicle Damage)	L. Straight Paths	 87 86	 88 89	(EACH* 90) SPECIFICS OTHER		(EACH* 91) SPECIFICS UNKNOWN		
VI Misc.	M. Backing Etc.	 92 BACKING VEHICLE	93 OTHER VEHICLE OR OBJECT	98 Other Crash Type 99 Unknown Crash Type 00 No impact				

Variable Name	Format	Type	Length
Alcohol_Use	CA13f	Numeric	8

Survey Question: Alcohol use

Code	Label
00	No alcohol use identified
01-91	Actual Value
92	Field observation of researcher
93	AC test performed, results negative
95	AC test performed, results positive
96	AC test performed, results unknown
97	Not applicable
98	No driver present
99	Unknown

Variable Name	Format	Type	Length
Source_Of_Bac_Test	CA14f	Numeric	8

Survey Question: Source Of BAC test result

Code	Label
0	No BAC test result provided
1	Police reported
2	Company reported
3	Medical record
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Time_Delay	CA15f	Char	5

Survey Question: Time delay (between crash and BAC test)

Code	Label
hh:mm	Actual hours and minutes
00:00	No physical factors
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Illegal_Drug_Use1	CA16f	Numeric	8

Survey Question: Illegal drug use (first of up to 3 coded)

Code	Label
00	No illegal drug use identified

01	Amphetamine
02	Cocaine
03	Crack Cocaine
04	Hashish
05	Heroin
06	Lysergic Acid Diethylamide (LSD)
07	Marijuana
08	Methadone
09	Methamphetamine
10	Morphine
11	Opium
12	Phencyclidine (PCP)
13	Pentobarbital/Secobarbital
14	Tetrahydrocannabinol (THC)
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Illegal_Drug_Use2	\$2.	Char	2

Survey Question: Illegal drug use (second of up to 3 coded)

Code	Label
00	No illegal drug use identified
01	Amphetamine
02	Cocaine
03	Crack Cocaine
04	Hashish
05	Heroin
06	Lysergic Acid Diethylamide (LSD)
07	Marijuana
08	Methadone
09	Methamphetamine
10	Morphine
11	Opium
12	Phencyclidine (PCP)
13	Pentobarbital/Secobarbital
14	Tetrahydrocannabinol (THC)
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Illegal_Drug_Use3	\$2.	Char	2

Survey Question: Illegal drug use (Third of up to 3 coded)

Code	Label
00	No illegal drug use identified
01	Amphetamine
02	Cocaine
03	Crack Cocaine
04	Hashish
05	Heroin
06	Lysergic Acid Diethylamide (LSD)
07	Marijuana
08	Methadone
09	Methamphetamine
10	Morphine
11	Opium
12	Phencyclidine (PCP)
13	Pentobarbital/Secobarbital
14	Tetrahydrocannabinol (THC)
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Source_Of_Drug_Presence	CA17f	Numeric	8

Survey Question: Source of illegal drug presence

Code	Label
0	No illegal drug presence determined
1	Yes, medical record determined
2	Yes, police determined
3	Yes, researcher determined
4	Yes, determined by other, specify:
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Otc_Use1	CA18f	Numeric	2

Survey Question: Over-The-Counter medication use (first of up to 2 coded)

Code	Label
00	No OTC use
01	Advil
02	Advil cold medicine
03	Bayer aspirin
04	Ibuprofin
05	Laxative
06	Meijer aspirin- free
07	Motrin
08	No Doze

09 Perrigo
 10 Sudafed
 11 Travis D
 12 Tylenol
 13 Tylenol PM
 14 Vicks Nyquil
 15 Vitamins
 97 Not applicable
 98 Other, specify
 99 Unknown

Variable Name	Format	Type	Length
OtcUse2	\$2.	Char	2

Survey Question: Over-The-Counter medication use (second of up to 2 coded)

Code Label
 00 No OTC use
 01 Advil
 02 Advil cold medicine
 03 Bayer aspirin
 04 Ibuprofen
 05 Laxative
 06 Meijer aspirin- free
 07 Motrin
 08 No Doze
 09 Perrigo
 10 Sudafed
 11 Travis D
 12 Tylenol
 13 Tylenol PM
 14 Vicks Nyquil
 15 Vitamins
 97 Not applicable
 98 Other, specify
 99 Unknown

Variable Name	Format	Type	Length
Rx_Use1	CA19f	Numeric	8

Survey Question: Prescription medication use (first of up to 3 coded)

Code Label
 000 No drug use
 001 High blood pressure meds
 002 Lipitor
 003 Atenolol
 004 Glucophage
 005 Prozac

006	Benzodiazepines
007	Birth control
008	Synthroid
009	Zoloft
010	Norvasc
011	Diabetes medication
012	Paxil
013	Zocor
014	Glucotrol XL
015	Glyboride
016	Zyrtec
017	Albuterol
018	Claritin
019	Prilosec
020	Vioxx
021	Xanax
022	Insulin
098	Other, specify
099	Unknown

Variable Name	Format	Type	Length
RxUse2	\$3.	Char	3

Survey Question: Prescription medication use (second of up to 3 coded)

Code	Label
000	No drug use
001	High blood pressure meds
002	Lipitor
003	Atenolol
004	Glucophage
005	Prozac
006	Benzodiazepines
007	Birth control
008	Synthroid
009	Zoloft
010	Norvasc
011	Diabetes medication
012	Paxil
013	Zocor
014	Glucotrol XL
015	Glyboride
016	Zyrtec
017	Albuterol
018	Claritin
019	Prilosec
020	Vioxx
021	Xanax
022	Insulin

098 Other, specify
 099 Unknown

Variable Name	Format	Type	Length
RxUse3	\$3.	Char	3

Survey Question: Prescription medication use (third of up to 3 coded)

Code	Label
000	No drug use
001	High blood pressure meds
002	Lipitor
003	Atenolol
004	Glucophage
005	Prozac
006	Benzodiazepines
007	Birth control
008	Synthroid
009	Zoloft
010	Norvasc
011	Diabetes medication
012	Paxil
013	Zocor
014	Glucotrol XL
015	Glyboride
016	Zyrtec
017	Albuterol
018	Claritin
019	Prilosec
020	Vioxx
021	Xanax
022	Insulin
098	Other, specify
099	Unknown

Variable Name	Format	Type	Length
Driver_Fatigue	CA20f	Numeric	8

Survey Question: Driver fatigue

Code	Label
1	Driver fatigued
2	Driver not fatigued
8	No driver present
9	Unknown if driver fatigued

Variable Name	Format	Type	Length
Driver_Hos_Status	CA21f	Numeric	8

Survey Question: Driver Hours-of-Service (HOS) status

Code	Label
0	No HOS violations identified
1	MCSAP determined Out-of-Service (OOS) violation(s)
2	Research determined OOS violations
3	MCSAP determined non-OOS violation(s) identified
4	Research determined non-OOS violation(s)
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Illness	CA22f	Numeric	8

Survey Question: Illness

Code	Label
0	No illness factors
1	Heart attack or stroke
2	Seizure (epilepsy related)
3	Seizure (other source)
4	Blackout (diabetes related)
5	Blackout (other source)
6	Severe cold/flu symptoms
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Vision	CA23f	Numeric	8

Survey Question: Vision

Code	Label
0	Normal vision indicated
1	Legal blindness
2	Near-sighted condition, corrected with eyewear
3	Near-sighted condition, eyewear not used at time of crash
4	Far-sighted condition, corrected with eyewear
5	Far-sighted condition, eyewear not used at time of crash
6	Glaucoma
7	Not applicable (no driver present)
8	Other sight impairment, specify:
9	Unknown

Variable Name	Format	Type	Length
Hearing	CA24f	Numeric	8

Survey Question: Hearing

Code	Label
0	Normal hearing indicated
1	Legal deafness
2	Hearing deficiency, corrected with hearing aid
3	Hearing deficiency, not corrected
4	Hearing deficiency due to environmental effects (noise)
5	Hearing deficiency due to induced factor (radio, headset, ...)
7	Not applicable (no driver present)
8	Other hearing impairment, specify:
9	Unknown

Variable Name	Format	Type	Length
Other_Physical_Factors1	CA25f	Numeric	8

Survey Question: Other physical factors (first of up to 3 coded)

Code	Label
0	No additional physical factors
1	Prosthesis, specify:
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Sleep disorder, specify:
5	Recent period(s) of poor or inadequate sleep
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Other_Physical_Factors2	\$1.	Char	1

Survey Question: Other physical factors (second of up to 3 coded)

Code	Label
0	No additional physical factors
1	Prosthesis, specify:
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Sleep disorder, specify:
5	Recent period(s) of poor or inadequate sleep
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Other_Physical_Factors3	\$1.	Char	1

Survey Question: Other physical factors (third of up to 3 coded)

Code	Label
0	No additional physical factors
1	Prosthesis, specify
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Sleep disorder, specify:
5	Recent period(s) of poor or inadequate sleep
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Other_Activities_Affecting	CA26f	Numeric	8

Survey Question: Other activities affecting physical factors

Code	Label
0	No additional activities affecting physical factors
1	Strenuous recreational activities
2	Strenuous household activities
3	Working multiple jobs
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Inattention	CA27f	Numeric	8

Survey Question: Inattention

Code	Label
0	Attentive to driving task
1	Not attentive - daydreaming/tuned out
2	Not attentive - preoccupied with personal problem(s)
3	Not attentive - troubled by recent argument(s)
7	Not applicable
8	Other inattention, specify
9	Unknown

Variable Name	Format	Type	Length
Distracted_By_Conversation	CA28f	Numeric	8

Survey Question: Distracted by conversation

Code	Label
0	Not distracted by conversation
1	Conversing with person physically present
2	Talking on phone
3	Talking on CB radio
7	Not applicable
8	Other, specify:
9	Unknown

Variable Name	Format	Type	Length
Distracted_By_Int_Factors	CA29f	Numeric	8

Survey Question: Distracted by other interior factors

Code	Label
00	Not distracted by other interior factors
01	By movement/actions of other occupants or passengers
02	While dialing/hanging up phone
03	While adjusting radio/CD player
04	While adjusting other vehicle controls
05	While retrieving object from floor and/or seat
06	While retrieving object from other location
07	Collecting fares/payments
08	Reviewing paperwork
09	Using onboard travel devices
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Distracted_Person_Obj_Event	CA30f	Numeric	8

Survey Question: Distracted by outside person, object, or event

Code	Label
0	Not distracted by outside person, object, event
1	Looking at previous crash
2	Looking at approaching traffic
3	Looking for street address
4	Looking at outside person
5	Looking at building
6	Unspecified outside focus
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Inadequate_Surveillance	CA31f	Numeric	8

Survey Question: Inadequate surveillance?

Code	Label
0	Surveillance was adequate
1	Failed to look far enough straight ahead
2	Failed to look either side ahead
3	Failed to look to side
4	Failed to look to rear (mirrors)
5	Other, specify
6	Looked, but did not see
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Line_Of_Sight_Obstructed	CA32f	Numeric	8

Survey Question: Line of sight obstructed?

Code	Label
00	Line of sight was not obstructed
01	Yes, view obstructed by roadway curvature
02	Yes, view obstructed by roadway grade
03	Yes, view obstructed by roadside appurtenance
04	Yes, view obstructed by tree(s), bush(es), etc.
05	Yes, view obstructed by building
06	Yes, view obstructed by person(s) outside vehicle
07	Yes, view obstructed by another vehicle(s)
08	Yes, view obstructed by vehicle passenger(s)
09	Yes, view obstructed by vehicle component(s)
97	Not applicable
98	Other, specify:
99	Unknown

Variable Name	Format	Type	Length
Line_Of_Sight_Obscured	CA33f	Numeric	8

Survey Question: Line of sight obscured?

Code	Label
00	Line of sight was not obscured
01	Yes, view obscured by sun glare
02	Yes, view obscured by headlight glare
03	Yes, view obscured by other glare, specify
04	Yes, view obscured by rain
05	Yes, rain obscured by fog

- 06 Yes, view obscured by dark/night condition
- 07 Yes, view obscured by person(s) outside vehicle
- 08 Yes, view obscured by another vehicle(s)
- 09 Yes, view obscured by vehicle passenger(s)
- 10 Yes, view obscured by vehicle component(s)
- 97 Not applicable
- 98 Yes, other condition, specify
- 99 Unknown

Variable Name	Format	Type	Length
Other_Recognition_Factors	CA34f	Numeric	8

Survey Question: Other driver recognition factors

- | Code | Label |
|------|--|
| 0 | No additional other recognition factors |
| 1 | Impending problem masked by traffic flow pattern |
| 2 | Driver focused on extraneous vehicle |
| 3 | Other recognition error, specify: |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Misjudge_Of_Gap_Or_Velocity	CA40f	Numeric	8

Survey Question: Misjudgment of gap distance to, or velocity of, other vehicle or nonmotorist

- | Code | Label |
|------|--|
| 0 | No misjudgment of gap distance or velocity |
| 1 | Yes, misjudged gap or speed |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
False_Assumptions	CA41f	Numeric	8

Survey Question: False assumption about other road user's actions

- | Code | Label |
|------|--|
| 0 | No false assumptions of other party's actions |
| 1 | Assumed that other party would act differently |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Completed_Illegal_Manuever_1	CA42f	Numeric	8

Survey Question: Completed illegal maneuver (first of up to 3 coded)

Code	Label
0	No illegal maneuvers identified
1	Crossed full barrier lines
2	Passed on right (drove off pavement to pass)
3	Turned from wrong lane
4	Initiated illegal U-turn
5	Failed to stop for TCD
6	Drove wrong way on one-way road
7	Not applicable
8	Other illegal maneuver, specify
9	Unknown

Variable Name	Format	Type	Length
Completed_Illegal_Manuever_2	\$1.	Char	1

Survey Question: Completed illegal maneuver (second of up to 3 coded)

Code	Label
0	No illegal maneuvers identified
1	Crossed full barrier lines
2	Passed on right (drove off pavement to pass)
3	Turned from wrong lane
4	Initiated illegal U-turn
5	Failed to stop for TCD
6	Drove wrong way on one-way road
7	Not applicable
8	Other illegal maneuver, specify
9	Unknown

Variable Name	Format	Type	Length
Completed_Illegal_Manuever_3	\$1.	Char	1

Survey Question: Completed illegal maneuver (third of up to 3 coded)

Code	Label
0	No illegal maneuvers identified
1	Crossed full barrier lines
2	Passed on right (drove off pavement to pass)
3	Turned from wrong lane
4	Initiated illegal U-turn
5	Failed to stop for TCD
6	Drove wrong way on one-way road
7	Not applicable

- 8 Other illegal maneuver, specify
- 9 Unknown

Variable Name	Format	Type	Length
Inadequate_Evasive_Action	CA43f	Numeric	8

Survey Question: Inadequate evasive action

- | Code | Label |
|------|---|
| 0 | No inadequate evasive action identified |
| 1 | Insufficient steering inputs |
| 2 | Insufficient braking inputs |
| 3 | Insufficient transmission retarder inputs |
| 4 | Combination of insufficient steering and braking inputs |
| 7 | Not applicable |
| 8 | Other inadequate evasive action, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Aggressive_Driving_1	CA44f	Numeric	8

Survey Question: Aggressive driving behavior

- | Code | Label |
|------|--|
| 00 | No aggressive driving behavior identified |
| 01 | Speeding (10+mph above limit) |
| 02 | Tailgating |
| 03 | Weaving in and out of traffic |
| 04 | Intentional violation of traffic control devices |
| 05 | Accelerating rapidly/stopping suddenly |
| 06 | Honking horn |
| 07 | Flashing lights |
| 08 | Obscene gestures |
| 09 | Obstructing the paths of others |
| 97 | Not applicable |
| 98 | Other, specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
Aggressive_Driving_2	\$2.	Char	2

Survey Question: Aggressive driving behavior (second of up to 3 coded)

- | Code | Label |
|------|---|
| 00 | No aggressive driving behavior identified |
| 01 | Speeding (10+mph above limit) |
| 02 | Tailgating |
| 03 | Weaving in and out of traffic |

- 04 Intentional violation of traffic control devices
- 05 Accelerating rapidly/stopping suddenly
- 06 Honking horn
- 07 Flashing lights
- 08 Obscene gestures
- 09 Obstructing the paths of others
- 97 Not applicable
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Aggressive_Driving_3	\$2.	Char	2

Survey Question: Aggressive driving behavior (third of up to 3 coded)

- | Code | Label |
|------|--|
| 00 | No aggressive driving behavior identified |
| 01 | Speeding (10+mph above limit) |
| 02 | Tailgating |
| 03 | Weaving in and out of traffic |
| 04 | Intentional violation of traffic control devices |
| 05 | Accelerating rapidly/stopping suddenly |
| 06 | Honking horn |
| 07 | Flashing lights |
| 08 | Obscene gestures |
| 09 | Obstructing the paths of others |
| 97 | Not applicable |
| 98 | Other, specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
Other_Decision_Factors	CA45f	Numeric	8

Survey Question: Other decision factors present

- | Code | Label |
|------|---|
| 0 | No additional decision factors identified |
| 1 | Crossed/turned with obstructed view |
| 2 | Stopped when not required |
| 3 | Proceeded with insufficient clearance |
| 4 | Turned without signaling |
| 5 | Failure to turn on headlights |
| 6 | Legal, but unsafe actions, specify |
| 7 | Not applicable |
| 8 | Other decision error, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driver_Upset	CA46f	Numeric	8

Survey Question: Driver upset prior to crash?

Code	Label
0	No indication that driver was upset
1	Driver appears to have been upset
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Driver_Under_Pressure	CA47f	Numeric	8

Survey Question: Driver under pressure to operate?

Code	Label
0	No, pressures identified
1	Under pressure to operate by employer
2	Under pressure to operate by passengers
3	Under pressure to operate by tour/charter organizer
4	Self-induced pressure to operate
5	Combination of codes 1-2-3-4
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
In_A_Hurry	CA48f	Numeric	8

Survey Question: Was this driver in a hurry prior to crash?

Code	Label
0	Driver did not appear to be in a hurry
1	Yes, due to work related schedule
2	Yes, to make up time
3	Yes, late for business appointment
4	Yes, late for social appointment
5	Yes, late for start of work shift/school
6	Yes, always drives in a hurry
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Other_Emotional_Factors	CA49f	Numeric	8

Survey Question: Other emotional factors

Code	Label
0	No additional emotional factors
1	Driver clinically depressed
2	Driver has a diagnosed psychosis, specify:
7	Not applicable
8	Other factors, specify:
9	Unknown

Variable Name	Format	Type	Length
Vehicle_Familiarity	CA50f	Numeric	8

Survey Question: Vehicle familiarity

Code	Label
00	First time driving this vehicle
TIMES DRIVER HAS OPERATED THIS VEHICLE IN PAST 3 MONTHS	
01-29	Actual value
30	30 or more times in last 3 months
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Vehicle_Acceptability	CA51f	Numeric	8

Survey Question: Vehicle acceptability to driver

Code	Label
0	Comfortable with vehicle operation
1	Uncomfortable with vehicle steering
2	Uncomfortable with vehicle braking
3	Uncomfortable with vehicle suspension
4	Uncomfortable with vehicle tires
5	Uncomfortable with vehicle lighting
6	Uncomfortable with controls
7	Not applicable
8	Uncomfortable with other aspect of vehicle, specify:
9	Unknown

Variable Name	Format	Type	Length
Type_Of_Service_Familiarity	CA52f	Numeric	8

Survey Question: Type of service familiarity

Code	Label
00	First time driving this type of service

TIMES DRIVER HAS PERFORMED THIS TYPE OF SERVICE IN PAST 3 MONTHS

- 01-29 Actual value
- 30 30 or more times in last 3 months
- 97 Not applicable
- 99 Unknown

Variable Name	Format	Type	Length
Type_Of_Service_Acceptability	CA53f	Numeric	8

Survey Question: Type of service acceptability to driver

- | Code | Label |
|------|---|
| 0 | Driver appears to be comfortable with service |
| 1 | Driver appears to be uncomfortable with service |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driver_Comfort_With_Passengers	CA54f	Numeric	8

Survey Question: Driver comfort with passengers

- | Code | Label |
|------|--|
| 0 | Comfortable with passengers |
| 1 | Not comfortable with number of passengers |
| 2 | Not comfortable with passenger behavior |
| 3 | Not comfortable with passenger-imposed work pressure |
| 4 | Not comfortable with other aspect of passengers, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Road_Familiarity	CA55f	Numeric	8

Survey Question: Roadway familiarity

- | Code | Label |
|------|--|
| 0 | First time driving on this roadway |
| 1 | Rarely drives on this roadway |
| 2 | Drives on this roadway daily |
| 3 | Drives on this roadway more than once a week |
| 4 | Drives on this roadway several times per month |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Comfort_With_Road_Environment	CA56f	Numeric	8

Survey Question: Comfort with roadway & environment

Code	Label
0	Comfortable with roadway & environment
1	Uncomfortable with roadway surface
2	Uncomfortable with roadway terrain (mountains/urban)
3	Uncomfortable with surrounding traffic densities
4	Uncomfortable with general traffic speeds
5	Uncomfortable with general traffic flow, specify
6	Uncomfortable with climate/weather (not from area)
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Work_Related_Pressure	CA57f	Numeric	8

Survey Question: Driver under work-related pressure?

Code	Label
0	Not under work-related pressure
1	Learning new position
2	Work schedule
3	Forced to accept jobs with little/no advance notice
4	Forced to accept jobs when ill
7	Not applicable
8	Other pressure, specify:
9	Unknown

Variable Name	Format	Type	Length
Pressure_To_Accept_Trips	CA58f	Numeric	8

Survey Question: Under pressure to accept trips

Code	Label
0	Not under pressure to accept trips
1	Yes, unscheduled trips while on a scheduled trip
2	Yes, additional trips while on an unscheduled trip
3	Yes, unscheduled trips while on a short notice scheduled trip
4	Yes, additional trips although over allowable driving hours
7	Not applicable
8	Other carrier/employer factors, specify
9	Unknown

Variable Name	Format	Type	Length
Pressure_To_Operate_If_Fatigued	CA59f	Numeric	8

Survey Question: Under pressure to operate even if fatigued

Code	Label
0	Not pressured to operate while fatigued
1	Scheduled trips require extended hours to complete
2	Scheduled trips require rotating shift schedule
3	Unscheduled trips require extended hours
7	Not applicable
8	Other fatigue-related factors, specify:
9	Unknown

Variable Name	Format	Type	Length
Other_Relational_Factor_Types	CA60f	Numeric	8

Survey Question: Other relation factor types

Code	Label
0	No additional carrier/employer relation factors
1	Required to accept short notice trips
2	Required to fill-in for other drivers
3	Required to complete uncompensated activities
4	Required to operate unacceptable vehicle
7	Not applicable
8	Other factors, specify:
9	Unknown

Variable Name	Format	Type	Length
Vehicle_Condition_Factors_1	CA61f	Numeric	8

Survey Question: Vehicle condition related factors (first of up to 4 coded)

Code	Label
00	No vehicle related factors
01	View obstruction - related to passenger positioning
02	View obstruction, related to mirror
03	View obstruction, related to vehicle design
04	View obstruction, other
05	Pre-crash fire
06	Post-crash fire
07	Tire or wheel failure/malfunction
08	Suspension component failure/malfunction
09	Braking system failure/malfunction
10	Engine, transmission, or other driveline component problem
11	Headlight failure/malfunction
12	Brake light failure/malfunction
13	Other lighting/vehicle conspicuity failure or malfunction

- 14 Windshield wiper/washer/defroster failure or malfunction
- 97 Not applicable
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Vehicle_Condition_Factors_2	\$2.	Char	2

Survey Question: Vehicle condition related factors (second of up to 4 coded)

- | Code | Label |
|------|--|
| 00 | No vehicle related factors |
| 01 | View obstruction - related to passenger positioning |
| 02 | View obstruction, related to mirror |
| 03 | View obstruction, related to vehicle design |
| 04 | View obstruction, other |
| 05 | Pre-crash fire |
| 06 | Post-crash fire |
| 07 | Tire or wheel failure/malfunction |
| 08 | Suspension component failure/malfunction |
| 09 | Braking system failure/malfunction |
| 10 | Engine, transmission, or other driveline component problem |
| 11 | Headlight failure/malfunction |
| 12 | Brake light failure/malfunction |
| 13 | Other lighting/vehicle conspicuity failure or malfunction |
| 14 | Windshield wiper/washer/defroster failure or malfunction |
| 97 | Not applicable |
| 98 | Other, specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
Vehicle_Condition_Factors_3	\$2.	Char	2

Survey Question: Vehicle condition related factors (third of up to 4 coded)

- | Code | Label |
|------|--|
| 00 | No vehicle related factors |
| 01 | View obstruction - related to passenger positioning |
| 02 | View obstruction, related to mirror |
| 03 | View obstruction, related to vehicle design |
| 04 | View obstruction, other |
| 05 | Pre-crash fire |
| 06 | Post-crash fire |
| 07 | Tire or wheel failure/malfunction |
| 08 | Suspension component failure/malfunction |
| 09 | Braking system failure/malfunction |
| 10 | Engine, transmission, or other driveline component problem |
| 11 | Headlight failure/malfunction |
| 12 | Brake light failure/malfunction |

- 13 Other lighting/vehicle conspicuity failure or malfunction
- 14 Windshield wiper/washer/defroster failure or malfunction
- 97 Not applicable
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
Vehicle_Condition_Factors_4	\$2.	Char	2

Survey Question: Vehicle condition related factors (forth of up to 4 coded)

- | Code | Label |
|------|--|
| 00 | No vehicle related factors |
| 01 | View obstruction - related to passenger positioning |
| 02 | View obstruction, related to mirror |
| 03 | View obstruction, related to vehicle design |
| 04 | View obstruction, other |
| 05 | Pre-crash fire |
| 06 | Post-crash fire |
| 07 | Tire or wheel failure/malfunction |
| 08 | Suspension component failure/malfunction |
| 09 | Braking system failure/malfunction |
| 10 | Engine, transmission, or other driveline component problem |
| 11 | Headlight failure/malfunction |
| 12 | Brake light failure/malfunction |
| 13 | Other lighting/vehicle conspicuity failure or malfunction |
| 14 | Windshield wiper/washer/defroster failure or malfunction |
| 97 | Not applicable |
| 98 | Other, specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
PreCrash_Mcsap_Violations	CA62f	Numeric	8

Survey Question: Pre-crash vehicle MCSAP violations

- | Code | Label |
|------|--|
| 0 | No MCSAP violations identified |
| 1 | MCSAP Out-of-Service (OOS) violation(s) identified |
| 2 | MCSAP NON OOS violation(s) identified |
| 3 | Researcher determined vehicle violations, specify: |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Traffic_Flow_Interrupt_Factors_1	CA63f	Numeric	8

Survey Question: Traffic flow interruption factors (first of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion
8	Other, specify:
9	Unknown

Variable Name	Format	Type	Length
Traffic_Flow_Interrupt_Factors_2	\$1.	Char	1

Survey Question: Traffic flow interruption factors (second of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion
8	Other, specify:
9	Unknown

Variable Name	Format	Type	Length
Traffic_Flow_Interrupt_Factors_3	\$1.	Char	1

Survey Question: Traffic flow interruption factors (third of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion
8	Other, specify:
9	Unknown

Variable Name	Format	Type	Length
Traffic_Flow_Interrupt_Factors_4	\$1.	Char	1

Survey Question: Traffic flow interruption factors (fourth of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion
8	Other, specify:
9	Unknown

Variable Name	Format	Type	Length
Road_Related_Factors_1	CA64f	Numeric	8

Survey Question: Roadway related factors (first of up to 2 coded)

Code	Label
00	No roadway related factors
01	Traffic signs/signals missing
02	Traffic signs/signals misunderstood/unclear to driver
03	Roadway view obstructions
04	Roadway geometry (e.g., ramp curvature, median width)
05	Road sight distance insufficient
06	Lane delineation problem (not present, worn, etc.)
07	Narrow shoulders
08	Narrow road
09	Ramp speed
10	Roadway condition (potholes, deteriorated road edges, etc.)
11	Slick surface (low friction value such as icy condition, debris, etc)
12	Road under water
13	Road washed out
97	Not applicable
98	Other roadway problem, specify
99	Unknown

Variable Name	Format	Type	Length
Road_Related_Factors_2	\$2.	Char	2

Survey Question: Roadway related factors (second of up to 2 coded)

Code	Label
00	No roadway related factors
01	Traffic signs/signals missing
02	Traffic signs/signals misunderstood/unclear to driver
03	Roadway view obstructions
04	Roadway geometry (e.g., ramp curvature, median width)
05	Road sight distance insufficient
06	Lane delineation problem (not present, worn, etc.)
07	Narrow shoulders

- 08 Narrow road
- 09 Ramp speed
- 10 Roadway condition (potholes, deteriorated road edges, etc.)
- 11 Slick surface (low friction value such as icy condition, debris, etc)
- 12 Road under water
- 13 Road washed out
- 97 Not applicable
- 98 Other roadway problem, specify
- 99 Unknown

Variable Name	Format	Type	Length
Road_Geometry_Median_Width	CA65f	Numeric	8

Survey Question: What is the median width in feet, if roadway geometry (code '04' in elements Road_Related_Factors_1 and/or Road_Related_Factors_2) and crash site involves a crossover?

Code	Label
000.1-999.6	Actual value
999.7	Not applicable
999.9	Unknown

Variable Name	Format	Type	Length
Road_Geometry_Inside_Shoulder_Wi	CA65f	Numeric	8

Survey Question: What is the inside shoulder width in feet, if roadway geometry (code '04' in elements Road_Related_Factors_1 and/or Road_Related_Factors_2) is selected and crash site involves a crossover?

Code	Label
000.1-999.6	Actual value
999.7	Not applicable
999.9	Unknown

Variable Name	Format	Type	Length
Road_Geometry_Median	\$5.	Char	5

Survey Question: What is the measurement of the median, if roadway geometry (code '04' in elements Road_Related_Factors_1 and/or Road_Related_Factors_2) is selected and crash site involves a crossover?

Code	Label
000.1-999.6	Actual value
999.7	Not applicable
999.9	Unknown

Variable Name	Format	Type	Length
Road_Geometry_Shoulder	\$5.	Char	5

Survey Question: What is the measurements of the shoulder, if roadway geometry (code '04' in elements Road_Related_Factors_1 and/or Road_Related_Factors_2) is selected and crash site involves a crossover?

Code	Label
000.1-999.6	Actual value
999.7	Not applicable
999.9	Unknown

Variable Name	Format	Type	Length
Sight_Distance	CA67f	Numeric	8

Survey Question: What is the measured sight distance, if road sight distance insufficient (code '05' in elements Road_Related_Factors_1 and/or Road_Related_Factors_2) is selected?

Code	Label
0000.1 - 9999.6	Actual value
9999.7	Not applicable
9999.9	Unknown

Variable Name	Format	Type	Length
Aashto_Recommended_Sight_Distanc	CA67f	Numeric	8

Survey Question: What is the AASHTO Recommended sight distance, if road sight distance insufficient (code '05' in elements Road_Related_Factors_1 and/or Road_Related_Factors_2) is selected?

Code	Label
0000.1-9999.6	Actual value
9999.7	Not applicable
9999.9	Unknown

Variable Name	Format	Type	Length
Weather_Factors_1	CA68f	Numeric	8

Survey Question: Weather related factors (first of up to 3 coded).

Code	Label
0	No weather related factors
1	Rain
2	Snow
3	Fog
4	Wind gust
5	Hail

- 6 Sleet
- 7 Not applicable
- 8 Other, specify
- 9 Unknown

Variable Name	Format	Type	Length
Weather_Factors_2	\$5.	Char	5

Survey Question: Weather related factors (second of up to 3 coded)

- | Code | Label |
|------|----------------------------|
| 0 | No weather related factors |
| 1 | Rain |
| 2 | Snow |
| 3 | Fog |
| 4 | Wind gust |
| 5 | Hail |
| 6 | Sleet |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Weather_Factors_3	\$5.	Char	5

Survey Question: Weather related factors (third of up to 3 coded)

- | Code | Label |
|------|----------------------------|
| 0 | No weather related factors |
| 1 | Rain |
| 2 | Snow |
| 3 | Fog |
| 4 | Wind gust |
| 5 | Hail |
| 6 | Sleet |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Other_Environ_Factors_1	CA69f	Numeric	8

Survey Question: Other environmental factors (first of up to 3 coded)

- | Code | Label |
|------|------------------|
| 0 | No other factors |
| 1 | Glare |
| 2 | Blowing debris |

- 3 Smoke
- 7 Not applicable
- 8 Other sudden change in ambience, specify:
- 9 Unknown

Variable Name	Format	Type	Length
Other_Environ_Factors_2	\$5.	Char	5

Survey Question: Other environmental factors (second of up to 3 coded).

- | Code | Label |
|------|---|
| 0 | No other factors |
| 1 | Glare |
| 2 | Blowing debris |
| 3 | Smoke |
| 7 | Not applicable |
| 8 | Other sudden change in ambience, specify: |
| 9 | Unknown |

Variable Name	Format	Type	Length
Other_Environ_Factors_3	\$5.	Char	5

Survey Question: Other environmental factors (third of up to 3 coded)

- | Code | Label |
|------|---|
| 0 | No other factors |
| 1 | Glare |
| 2 | Blowing debris |
| 3 | Smoke |
| 7 | Not applicable |
| 8 | Other sudden change in ambience, specify: |
| 9 | Unknown |

Codebook – DriverAssessment Data Set

DriverAssessment Data Set

The DriverAssessment data set contains assessment information on the driver regarding level of attention, behavior, mental or emotional state prior to the crash. One record of this information exists for each vehicle/driver. The DriverAssessment data set contains the variables Case_Number and Vehicle_Number. Case_Number and Vehicle_Number uniquely identify each record in this data set and should be used to merge the DriverAssessment data set with other vehicle level data sets.

Variable Name	Format	Type	Length
Drivers_Age	BD3f	Numeric	8

Survey Question: Driver's Age Code actual age at time of crash.

Code	Label
00	Less than one year old (specify by month)
97	97 years and older
99	Unknown

Variable Name	Format	Type	Length
Understand_English	BD8f	Numeric	8

Survey Question: How well can the driver communicate/understand English?

Code	Label
0	Not at all
1	Poorly
2	Fairly well
3	Very well
4	Excellently

Variable Name	Format	Type	Length
Ejection	BD9f	Numeric	8

Survey Question: Driver Ejection?

Code	Label
0	No ejection
1	Complete ejection
2	Partial ejection
3	Ejection, unknown degree
9	Unknown

Variable Name	Format	Type	Length
Entrapment	BD10f	Numeric	8

Survey Question: Entrapment

Code	Label
0	Not entrapped/exit not inhibited
1	Entrapped/pinned - mechanically restrained
2	Could not exit vehicle due to jammed doors, fire, etc., specify
9	Unknown

Variable Name	Format	Type	Length
Belt_Use	BD11f	Numeric	8

Survey Question: Safety Belt Use

Code	Label
0	Not used, not available, or belt removed/destroyed
1	Inoperative (specify)
2	Shoulder belt
3	Lap belt
4	Lap and shoulder belt
5	Belt used - type unknown
8	Other belt used (specify)
9	Unknown if belt used

Variable Name	Format	Type	Length
Proper_Use	BD12f	Numeric	8

Survey Question: Proper Use of Manual (Active) Belts

Code	Label
0	None used or available
1	Belt used properly
2	Belt used improperly
8	Other improper use of manual belt system (specify)
9	Unknown

Variable Name	Format	Type	Length
Police_Belt_Use	BD13f	Numeric	8

Survey Question: Police Reported Belt Use

Code	Label
0	None used
1	Police did not indicate belt use
2	Shoulder belt
3	Lap belt

- 4 Lap and shoulder belt
- 5 Belt used, type not specified
- 6 Automatic belt
- 8 Other type belt, (specify)
- 9 Police indicated, unknown

Variable Name	Format	Type	Length
Police_Injury_Rating	BD14f	Numeric	8

Survey Question: Injury Severity (Police Rating)

- | Code | Label |
|------|-------------------------------|
| 0 | O - No injury |
| 1 | C - Possible injury |
| 2 | B - Non-incapacitating injury |
| 3 | A - Incapacitating injury |
| 4 | K - Killed |
| 5 | U - Injury, severity unknown |
| 6 | Died prior to crash |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driver_Transported	BD15f	Numeric	8

Survey Question: Was the driver transported for medical care?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Police_Alcohol	BD16f	Numeric	8

Survey Question: Police reported alcohol presence for driver

- | Code | Label |
|------|---------------------|
| 0 | No alcohol present |
| 1 | Yes alcohol present |
| 7 | Not reported |
| 8 | No driver present |
| 9 | Unknown |

Variable Name	Format	Type	Length
Source_Of_Alcohol_Rpt_	BD17f	Numeric	8

Survey Question: Source of alcohol report

Code	Label
0	Police
1	Company
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Time_Delay	\$5.	Numeric	8

Survey Question: Time Delay (between crash and alcohol test)

Code	Label
hh:mm	Actual value
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
Alcohol_Test_Result	BD19f	Numeric	8

Survey Question: Alcohol test result for driver

Code	Label
0-93	Actual value
94	Test refused
95	None given
96	AC test performed, results unknown
97	Not applicable
98	No driver present
99	Unknown

Variable Name	Format	Type	Length
Police_Drug_Presence	BD20f	Numeric	8

Survey Question: Police reported other drug presence for driver

Code	Label
0	No other drug(s) present
1	Yes other drug(s) present
7	Not reported
8	No driver present
9	Unknown

Variable Name	Format	Type	Length
Other_Drug_Test_Results	BD21f	Numeric	8

Survey Question: Other drug specimen test result for driver

Code	Label
0	No specimen test given
1	Drug(s) not found in specimen
2	Drug(s) found in specimen, (specify)
3	Specimen test given, results unknown or not obtained
7	Not applicable
8	No driver present
9	Unknown if specimen test given

Variable Name	Format	Type	Length
Violation_1	BD22f	Numeric	8

Survey Question: Violations charged (first of up to 4 coded)

Code	Label
RECKLESS/CARELESS/HIT-AND-RUN TYPE OFFENSES	
00	No violations
01	Manslaughter or homicide
02	Willful reckless driving; driving to endanger, negligent driving
03	Unsafe reckless (not willful, wanton reckless) driving
04	Inattentive, careless, improper driving
05	Fleeing or eluding police
06	Failure to obey police, fireman, authorized person directing traffic
07	Hit-and-run, failure to stop after accident
08	Failure to give aid, info, wait for police after accident
09	Serious violation resulting in death
IMPAIRMENT OFFENSES	
11	Driving while intoxicated (alcohol or drugs) or BAC above limit (any detectable BAC for CDLs)
12	Driving while impaired
13	Driving under influence of substance not intended to intoxicate
14	Drinking while operating
15	Illegal possession of alcohol or drugs
16	Driving with detectable alcohol
18	Refusal to submit to chemical test
19	Alcohol, drug or impairment violations generally
SPEED-RELATED OFFENSES	
21	Racing
22	Speeding (above the speed limit)
23	Speed greater than reasonable & prudent (not necessarily over the limit)
24	Exceeding special speed limit (e.g.: for trucks, buses, cycles, or on bridge, in school zone, etc.)
25	Energy speed (exceeding 55 mph, non-point able)
26	Driving too slowly
29	Speed related violations, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 31 Failure to stop for red signal
- 32 Failure to stop for flashing red
- 33 Violation of turn on red (failure to stop & yield, yield to pedestrians before turning)
- 34 Failure to obey flashing signal (yellow or red)
- 35 Failure to obey signal, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 36 Violate RR grade crossing device/regulations
- 37 Failure to obey stop sign
- 38 Failure to obey yield sign
- 39 Failure to obey traffic control device, generally

RULES OF THE ROAD - TURNING, YIELDING, SIGNALING

- 41 Turn in violation of traffic control (disobey signs, turn arrow or pavement markings; this is not a right-on red violation)
- 42 Improper method & position of turn (too wide, wrong lane)
- 43 Failure to signal for turn or stop
- 45 Failure to yield to emergency vehicle
- 46 Failure to yield, generally
- 48 Enter intersection when space insufficient
- 49 Turn, yield, signaling violations, generally

RULES OF THE ROAD - WRONG SIDE, PASSING & FOLLOWING

- 51 Driving wrong way on one-way road
- 52 Driving on left, wrong side of road, generally
- 53 Improper, unsafe passing
- 54 Pass on right (drive off pavement to pass)
- 55 Pass stopped school bus
- 56 Failure to give way when overtaken
- 58 Following too closely
- 59 Wrong side, passing, following violations, generally

RULES OF THE ROAD - LANE USAGE

- 61 Unsafe or prohibited lane change
- 62 Improper use of lane (center of 3-lane road, HOV designated lane)
- 63 Certain traffic to use right lane (trucks, slow-moving, etc.)
- 66 Motorcycle violations (more than 2 per lane, riding b/t lanes, etc.)
- 67 Motorcyclist attached to another vehicle

NON-MOVING - LICENSE AND REGISTRATION VIOLATIONS

- 71 Driving while license withdrawn (including violation of provisions of work permit)
- 72 Other driver license violations
- 73 Commercial driver violations (log book, hours, permits carried)
- 74 Vehicle registration violations
- 75 Failure to carry insurance card
- 76 Driving uninsured vehicle
- 79 Non-moving violations, generally

EQUIPMENT

- 81 Lamp violations
- 82 Brake violations
- 83 Failure to require restraint use (by self or passengers)
- 84 Motorcycle equipment violations (helmet, special equipment)
- 85 Violation of hazardous cargo regulations

- 86 Size, weight, load violations
- 89 Equipment violations, generally

LICENSE, REGISTRATION & OTHER VIOLATIONS

- 91 Parking
- 92 Theft, unauthorized use of motor vehicle
- 93 Driving where prohibited (sidewalk, limited access, off truck route)
- 98 Other moving violation (coasting, backing, opening door)
- 99 Unknown violation/Unknown if violation occurred

Variable Name	Format	Type	Length
Violation_2	\$2.	Char	2

Survey Question: Violations charged (second of up to 4 coded)

Code Label

RECKLESS/CARELESS/HIT-AND-RUN TYPE OFFENSES

- 00 No violations
- 01 Manslaughter or homicide
- 02 Willful reckless driving; driving to endanger, negligent driving
- 03 Unsafe reckless (not willful, wanton reckless) driving
- 04 Inattentive, careless, improper driving
- 05 Fleeing or eluding police
- 06 Failure to obey police, fireman, authorized person directing traffic
- 07 Hit-and-run, failure to stop after accident
- 08 Failure to give aid, info, wait for police after accident
- 09 Serious violation resulting in death

IMPAIRMENT OFFENSES

- 11 Driving while intoxicated (alcohol or drugs) or BAC above limit (any detectable BAC for CDLs)
- 12 Driving while impaired
- 13 Driving under influence of substance not intended to intoxicate
- 14 Drinking while operating
- 15 Illegal possession of alcohol or drugs
- 16 Driving with detectable alcohol
- 18 Refusal to submit to chemical test
- 19 Alcohol, drug or impairment violations generally

SPEED-RELATED OFFENSES

- 21 Racing
- 22 Speeding (above the speed limit)
- 23 Speed greater than reasonable & prudent (not necessarily over the limit)
- 24 Exceeding special speed limit (e.g.: for trucks, buses, cycles, or on bridge, in school zone, etc.)
- 25 Energy speed (exceeding 55 mph, non-point able)
- 26 Driving too slowly
- 29 Speed related violations, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 31 Failure to stop for red signal
- 32 Failure to stop for flashing red

- 33 Violation of turn on red (failure to stop & yield, yield to pedestrians before turning)
- 34 Failure to obey flashing signal (yellow or red)
- 35 Failure to obey signal, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 36 Violate RR grade crossing device/regulations
- 37 Failure to obey stop sign
- 38 Failure to obey yield sign
- 39 Failure to obey traffic control device, generally

RULES OF THE ROAD - TURNING, YIELDING, SIGNALING

- 41 Turn in violation of traffic control (disobey signs, turn arrow or pavement markings; this is not a right-on red violation)
- 42 Improper method & position of turn (too wide, wrong lane)
- 43 Failure to signal for turn or stop
- 45 Failure to yield to emergency vehicle
- 46 Failure to yield, generally
- 48 Enter intersection when space insufficient
- 49 Turn, yield, signaling violations, generally

RULES OF THE ROAD - WRONG SIDE, PASSING & FOLLOWING

- 51 Driving wrong way on one-way road
- 52 Driving on left, wrong side of road, generally
- 53 Improper, unsafe passing
- 54 Pass on right (drive off pavement to pass)
- 55 Pass stopped school bus
- 56 Failure to give way when overtaken
- 58 Following too closely
- 59 Wrong side, passing, following violations, generally

RULES OF THE ROAD - LANE USAGE

- 61 Unsafe or prohibited lane change
- 62 Improper use of lane (center of 3-lane road, HOV designated lane)
- 63 Certain traffic to use right lane (trucks, slow-moving, etc.)
- 66 Motorcycle violations (more than 2 per lane, riding b/t lanes, etc.)
- 67 Motorcyclist attached to another vehicle

NON-MOVING - LICENSE AND REGISTRATION VIOLATIONS

- 71 Driving while license withdrawn (including violation of provisions of work permit)
- 72 Other driver license violations
- 73 Commercial driver violations (log book, hours, permits carried)
- 74 Vehicle registration violations
- 75 Failure to carry insurance card
- 76 Driving uninsured vehicle
- 79 Non-moving violations, generally

EQUIPMENT

- 81 Lamp violations
- 82 Brake violations
- 83 Failure to require restraint use (by self or passengers)
- 84 Motorcycle equipment violations (helmet, special equipment)
- 85 Violation of hazardous cargo regulations
- 86 Size, weight, load violations

89 Equipment violations, generally
LICENSE, REGISTRATION & OTHER VIOLATIONS

- 91 Parking
- 92 Theft, unauthorized use of motor vehicle
- 93 Driving where prohibited (sidewalk, limited access, off truck route)
- 98 Other moving violation (coasting, backing, opening door)
- 99 Unknown violation/Unknown if violation occurred

Variable Name	Format	Type	Length
Violation_3	\$2.	Char	2

Survey Question: Violations charged (third of up to 4 coded)

Code Label

RECKLESS/CARELESS/HIT-AND-RUN TYPE OFFENSES

- 00 No violations
- 01 Manslaughter or homicide
- 02 Willful reckless driving; driving to endanger, negligent driving
- 03 Unsafe reckless (not willful, wanton reckless) driving
- 04 Inattentive, careless, improper driving
- 05 Fleeing or eluding police
- 06 Failure to obey police, fireman, authorized person directing traffic
- 07 Hit-and-run, failure to stop after accident
- 08 Failure to give aid, info, wait for police after accident
- 09 Serious violation resulting in death

IMPAIRMENT OFFENSES

- 11 Driving while intoxicated (alcohol or drugs) or BAC above limit (any detectable BAC for CDLs)
- 12 Driving while impaired
- 13 Driving under influence of substance not intended to intoxicate
- 14 Drinking while operating
- 15 Illegal possession of alcohol or drugs
- 16 Driving with detectable alcohol
- 18 Refusal to submit to chemical test
- 19 Alcohol, drug or impairment violations generally

SPEED-RELATED OFFENSES

- 21 Racing
- 22 Speeding (above the speed limit)
- 23 Speed greater than reasonable & prudent (not necessarily over the limit)
- 24 Exceeding special speed limit (e.g.: for trucks, buses, cycles, or on bridge, in school zone, etc.)
- 25 Energy speed (exceeding 55 mph, non-point able)
- 26 Driving too slowly
- 29 Speed related violations, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 31 Failure to stop for red signal
- 32 Failure to stop for flashing red

- 33 Violation of turn on red (failure to stop & yield, yield to pedestrians before turning)
- 34 Failure to obey flashing signal (yellow or red)
- 35 Failure to obey signal, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 36 Violate RR grade crossing device/regulations
- 37 Failure to obey stop sign
- 38 Failure to obey yield sign
- 39 Failure to obey traffic control device, generally

RULES OF THE ROAD - TURNING, YIELDING, SIGNALING

- 41 Turn in violation of traffic control (disobey signs, turn arrow or pavement markings; this is not a right-on red violation)
- 42 Improper method & position of turn (too wide, wrong lane)
- 43 Failure to signal for turn or stop
- 45 Failure to yield to emergency vehicle
- 46 Failure to yield, generally
- 48 Enter intersection when space insufficient
- 49 Turn, yield, signaling violations, generally

RULES OF THE ROAD - WRONG SIDE, PASSING & FOLLOWING

- 51 Driving wrong way on one-way road
- 52 Driving on left, wrong side of road, generally
- 53 Improper, unsafe passing
- 54 Pass on right (drive off pavement to pass)
- 55 Pass stopped school bus
- 56 Failure to give way when overtaken
- 58 Following too closely
- 59 Wrong side, passing, following violations, generally

RULES OF THE ROAD - LANE USAGE

- 61 Unsafe or prohibited lane change
- 62 Improper use of lane (center of 3-lane road, HOV designated lane)
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- 71 Driving while license withdrawn (including violation of provisions of work permit)
- 72 Other driver license violations
- 73 Commercial driver violations (log book, hours, permits carried)
- 74 Vehicle registration violations
- 75 Failure to carry insurance card
- 76 Driving uninsured vehicle
- 79 Non-moving violations, generally

EQUIPMENT

- 81 Lamp violations
- 82 Brake violations
- 83 Failure to require restraint use (by self or passengers)
- 84 Motorcycle equipment violations (helmet, special equipment)
- 85 Violation of hazardous cargo regulations

- 86 Size, weight, load violations
- 89 Equipment violations, generally

LICENSE, REGISTRATION & OTHER VIOLATIONS

- 91 Parking
- 92 Theft, unauthorized use of motor vehicle
- 93 Driving where prohibited (sidewalk, limited access, off truck route)
- 98 Other moving violation (coasting, backing, opening door)
- 99 Unknown violation/Unknown if violation occurred

Variable Name	Format	Type	Length
Violation_4	BD25f	Char	2

Survey Question: Violations charged (fourth of up to 4 coded)

Code Label

RECKLESS/CARELESS/HIT-AND-RUN TYPE OFFENSES

- 00 No violations
- 01 Manslaughter or homicide
- 02 Willful reckless driving; driving to endanger, negligent driving
- 03 Unsafe reckless (not willful, wanton reckless) driving
- 04 Inattentive, careless, improper driving
- 05 Fleeing or eluding police
- 06 Failure to obey police, fireman, authorized person directing traffic
- 07 Hit-and-run, failure to stop after accident
- 08 Failure to give aid, info, wait for police after accident
- 09 Serious violation resulting in death

IMPAIRMENT OFFENSES

- 11 Driving while intoxicated (alcohol or drugs) or BAC above limit (any detectable BAC for CDLs)
- 12 Driving while impaired
- 13 Driving under influence of substance not intended to intoxicate
- 14 Drinking while operating
- 15 Illegal possession of alcohol or drugs
- 16 Driving with detectable alcohol
- 18 Refusal to submit to chemical test
- 19 Alcohol, drug or impairment violations generally

SPEED-RELATED OFFENSES

- 21 Racing
- 22 Speeding (above the speed limit)
- 23 Speed greater than reasonable & prudent (not necessarily over the limit)
- 24 Exceeding special speed limit (e.g.: for trucks, buses, cycles, or on bridge, in school zone, etc.)
- 25 Energy speed (exceeding 55 mph, non-point able)
- 26 Driving too slowly
- 29 Speed related violations, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 31 Failure to stop for red signal

- 32 Failure to stop for flashing red
- 33 Violation of turn on red (failure to stop & yield, yield to pedestrians before turning)
- 34 Failure to obey flashing signal (yellow or red)
- 35 Failure to obey signal, generally

RULES OF THE ROAD - TRAFFIC SIGN & SIGNALS

- 36 Violate RR grade crossing device/regulations
- 37 Failure to obey stop sign
- 38 Failure to obey yield sign
- 39 Failure to obey traffic control device, generally

RULES OF THE ROAD - TURNING, YIELDING, SIGNALING

- 41 Turn in violation of traffic control (disobey signs, turn arrow or pavement markings; this is not a right-on red violation)
- 42 Improper method & position of turn (too wide, wrong lane)
- 43 Failure to signal for turn or stop
- 45 Failure to yield to emergency vehicle
- 46 Failure to yield, generally
- 48 Enter intersection when space insufficient
- 49 Turn, yield, signaling violations, generally

RULES OF THE ROAD - WRONG SIDE, PASSING & FOLLOWING

- 51 Driving wrong way on one-way road
- 52 Driving on left, wrong side of road, generally
- 53 Improper, unsafe passing
- 54 Pass on right (drive off pavement to pass)
- 55 Pass stopped school bus
- 56 Failure to give way when overtaken
- 58 Following too closely
- 59 Wrong side, passing, following violations, generally

RULES OF THE ROAD - LANE USAGE

- 61 Unsafe or prohibited lane change
- 62 Improper use of lane (center of 3-lane road, HOV designated lane)
- 63 Certain traffic to use right lane (trucks, slow-moving, etc.)
- 66 Motorcycle violations (more than 2 per lane, riding b/t lanes, etc.)
- 67 Motorcyclist attached to another vehicle

NON-MOVING - LICENSE AND REGISTRATION VIOLATIONS

- 71 Driving while license withdrawn (including violation of provisions of work permit)
- 72 Other driver license violations
- 73 Commercial driver violations (log book, hours, permits carried)
- 74 Vehicle registration violations
- 75 Failure to carry insurance card
- 76 Driving uninsured vehicle
- 79 Non-moving violations, generally

EQUIPMENT

- 81 Lamp violations
- 82 Brake violations
- 83 Failure to require restraint use (by self or passengers)
- 84 Motorcycle equipment violations (helmet, special equipment)

- 85 Violation of hazardous cargo regulations
- 86 Size, weight, load violations
- 89 Equipment violations, generally

LICENSE, REGISTRATION & OTHER VIOLATIONS

- 91 Parking
- 92 Theft, unauthorized use of motor vehicle
- 93 Driving where prohibited (sidewalk, limited access, off truck route)
- 98 Other moving violation (coasting, backing, opening door)
- 99 Unknown violation/Unknown if violation occurred

Codebook – ExteriorBus Data Set

ExteriorBus Data Set

The Exterior data set contains information on each Bus in the crash. Passenger vehicles involved in the crash are not included in this data set but instead are covered under GeneralVehicle data set. This material is provided as one record per bus involved in the crash. The ExteriorBus data set contains the variables Case_Number and Vehicle_Number. Case_Number and Vehicle_Number uniquely identify each record in this data set and should be used to merge the ExteriorBus data set with vehicle level data sets.

Variable Name	Format	Type	Length
Dot_Markings	EBF3f	Numeric	8

Survey Question: DOT markings present

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Date_Of_Decal	\$10.	Char	10

Survey Question: Date of decal

Code	Label
mm/dd/yyyy	Actual value

Variable Name	Format	Type	Length
InspExpir_Date	EBF9f	Numeric	8

Survey Question: Date is inspection or expiration date

Code	Label
1	Inspection
2	Expiration
8	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Reg_State	\$2.	Char	2

Survey Question: Registration state

Code Label
 * Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Reg_Veh_Owner	EBF11f	Numeric	8

Survey Question: Registered vehicle owner

Code Label
 0 N/A, Vehicle not registered
 1 Driver was registered owner
 2 Driver not registered owner (other private owner listed)
 3 Vehicle registered as business/company/government vehicle
 4 Vehicle registered as rental vehicle
 6 Driverless vehicle
 9 Unknown

Variable Name	Format	Type	Length
Veh_Stolen	EBF12f	Numeric	8

Survey Question: Was this vehicle stolen?

Code Label
 1 Yes
 2 No
 9 Unknown

Variable Name	Format	Type	Length
Make	EBF14f	Numeric	8

Survey Question: Make

Code Label
 007 Dodge
 012 Ford
 020 Chevrolet
 023 GMC
 084 International Harvester
 090 Blue Bird
 091 Eagle Coach
 092 Gillig
 093 MCI
 094 Thomas Built
 111 Flxible
 112 Neoplan
 113 New Flyer

- 114 Ontario
- 115 TMC
- 116 Orion
- 117 Prevost
- 118 Van Hool
- 998 Other (specify)
- 999 Unknown

Variable Name	Format	Type	Length
Bus_Body_Config	EBF15f	Numeric	8

Survey Question: Bus Body Configuration

- | Code | Label |
|------|---|
| 1 | Flat front (like transit bus) |
| 2 | Big cowl and chassis (like typical school bus) |
| 3 | High platform (like over-the-road bus) |
| 4 | Small cowl and chassis (like some small shuttles) |
| 5 | Large van (like Econoliner) |
| 6 | Extended body (like stretch limosine) |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
Front_Of_Bus	EBF16f	Numeric	8

Survey Question: Front of Bus

- | Code | Label |
|------|-------------------|
| 1 | Conventional hood |
| 2 | Flat front |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
Model_Year	EBF17f	Numeric	8

Survey Question: Model year

- | Code | Label |
|------|--------------|
| yyyy | Actual value |

Variable Name	Format	Type	Length
Bus_Model	\$25.	Char	25

Survey Question: Bus Model

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Engine_Location	EBF19f	Numeric	8

Survey Question: Engine location

Code	Label
1	Rear
2	Front
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Fuel	EBF20f	Numeric	8

Survey Question: Fuel

Code	Label
1	Gasoline
2	Diesel
3	CNG
4	LPG
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
ITS_Equip	EBF21f	Numeric	8

Survey Question: ITS Equipment Installed

Code	Label
0	None identified
1	Headway detection unit
2	Side/object detection unit
3	Rollover warning unit
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Engine_Control_EDR	EBF22f	Numeric	8

Survey Question: Engine Control/Data Recorder Installed

Code	Label
1	Yes (specify type)
2	No
9	Unknown

Variable Name	Format	Type	Length
Tranmission_Retard	EBF23f	Numeric	8

Survey Question: Does the bus have a transmission retarder?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Wheelchair_Lift	EBF24f	Numeric	8

Survey Question: Wheelchair lift equipment?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Gvwr	EBF25f	Numeric	8

Survey Question: Gross Vehicle Weight Rating

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Seating_Capacity	EBF26f	Numeric	8

Survey Question: Passenger seating capacity (excluding driver but including designated wheel chair spaces)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_Of_Pass_At_Crash	EBF27f	Numeric	8

Survey Question: Number of passengers at time of crash

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_Of_Axles	EBF28f	Numeric	8

Survey Question: Number of Axles

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Steer_Rear_Axle	EBF29f	Numeric	8

Survey Question: Is rear axle steerable?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Curb_Weight	EBF30f	Numeric	8

Survey Question: Curb weight (pounds)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Length	EBF31f	Numeric	8

Survey Question: Length (feet)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Width	EBF32f	Numeric	8

Survey Question: Width (inches)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_Of_Trailers	EBF33f	Numeric	8

Survey Question: Number of trailers

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Pass_Restraint	EBF34f	Numeric	8

Survey Question: Restraint type availability for seated passengers

Code	Label
1	None
2	Lap belts
3	Lap and shoulder belts
7	Lap belts, front passengers only
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Special_Pass_Restraint	EBF35f	Numeric	8

Survey Question: Restraint type availability for special needs passengers

Code	Label
1	None
2	Wheelchair securement
3	Belts (attachment point on vehicle)
4	Wheelchair securement and belts
7	Not applicable

- 8 Other (specify)
- 9 Unknown

Variable Name	Format	Type	Length
Cargo_Hold	EBF36f	Numeric	8

Survey Question: Cargo Weight, in cargo hold, (weight in pounds, includes baggage)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Overhead	EBF37f	Numeric	8

Survey Question: Cargo Weight, in passenger compartment: Overhead, (weight in pounds, includes baggage)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Forward	EBF38f	Numeric	8

Survey Question: Cargo Weight, in passenger compartment: Forward (near driver), (weight in pounds, includes baggage)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Rear	EBF39f	Numeric	8

Survey Question: Cargo Weight, in passenger compartment: Rear, (weight in pounds, includes baggage)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Roof_Mounted	EBF40f	Numeric	8

Survey Question: Cargo Weight, in passenger compartment: Roof mounted, (weight in pounds, includes baggage)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Total_Cargo_Wt_	EBF41f	Numeric	8

Survey Question: Total Cargo Weight in passenger compartment, (weight in pounds, includes baggage)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Door_Mount_Planar	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Door Mounted, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Door_Mount_Convex	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Door Mounted, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Fender_Planar	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Front Fender, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Fender_Convex	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Front Fender, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Look_Down_Planar	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Look Down, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Look_Down_Convex	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Look down, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Cross_Planar	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Front crossview, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Cross_Convex	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Front Crossview, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Rear_Cross_Planar	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Rear crossview, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Rear_Cross_Convex	EBF42f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Passenger Side, Rear crossview, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Door_Mount_Planar1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Door Mounted, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Door_Mount_Convex1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Door Mounted, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Fender_Planar1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Front fender, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Fender_Convex1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Front fender, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Cross_Planar1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Front crossview, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Front_Cross_Convex1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Front crossview, Convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Rear_Cross_Planar1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Rear crossview, Planar

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Rear_Cross_Convex1	EBF43f	Numeric	8

Survey Question: Number of Each Mirror Type at the Location: Driver Side, Rear crossview, convex

Code	Label
0-8	Actual value
9	Unknown

Variable Name	Format	Type	Length
Blind_Spot_Issues	EBF44f	Numeric	8

Survey Question: Were there field-of-view restrictions or blind spot issues related to this crash?

Code	Label
1	Yes (specify)
2	No
9	Unknown

Variable Name	Format	Type	Length
Rear_Video	EBF45f	Numeric	8

Survey Question: Rear video monitor?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
Headlights_On_Off	EBF46f	Numeric	8

Survey Question: Headlights on/off at time of crash?

Code	Label
1	On
2	Off
9	Unknown

Variable Name	Format	Type	Length
Day_Running_On_Off	EBF47f	Numeric	8

Survey Question: Daytime running lights on/off at time of crash?

Code	Label
1	On
2	Off
9	Unknown

Variable Name	Format	Type	Length
Driver_Violations_1	EBF48f	Numeric	8

Survey Question: Driver pre-crash MCSAP violation(s) present (first of up to 3 coded)?

Code	Label
00	None identified
01	Age
02	License (non CDL)
03	CDL
04	Waiver
05	Medical certificate
06	Sickness/fatigue
07	Driver disqualification
08	Drugs
09	Alcohol
10	10 hr rule
11	15 hr rule
12	60/70 hr rule
13	No log / no prior 7 days log
14	False log
15	Driver violation(s) present, unknown if pre-crash
97	Not applicable, no MCSAP inspection
98	Other driver violation(s), specify
99	Unknown

Variable Name	Format	Type	Length
Driver_Violations_2	\$2.	Char	2

Survey Question: Driver pre-crash MCSAP violation(s) present (second of up to 3 coded)?

Code	Label
00	None identified
01	Age
02	License (non CDL)
03	CDL
04	Waiver
05	Medical certificate
06	Sickness/fatigue
07	Driver disqualification
08	Drugs
09	Alcohol
10	10 hr rule
11	15 hr rule
12	60/70 hr rule
13	No log / no prior 7 days log
14	False log
15	Driver violation(s) present, unknown if pre-crash
97	Not applicable, no MCSAP inspection
98	Other driver violation(s), specify
99	Unknown

Variable Name	Format	Type	Length
Driver_Violations_3	\$2.	Char	2

Survey Question: Driver pre-crash MCSAP violation(s) present (third of up to 3 coded)?

Code	Label
00	None identified
01	Age
02	License (non CDL)
03	CDL
04	Waiver
05	Medical certificate
06	Sickness/fatigue
07	Driver disqualification
08	Drugs
09	Alcohol
10	10 hr rule
11	15 hr rule
12	60/70 hr rule
13	No log / no prior 7 days log
14	False log
15	Driver violation(s) present, unknown if pre-crash
97	Not applicable, no MCSAP inspection
98	Other driver violation(s), specify
99	Unknown

Variable Name	Format	Type	Length
Driver_OOS_Violations_1	EBF49f	Numeric	8

Survey Question: Driver pre-crash MCSAP out-of-service violation(s) present (first of up to 3 coded)?

Code	Label
00	None identified
01	Age
02	License (non CDL)
03	CDL
04	Waiver
05	Medical certificate
06	Sickness/fatigue
07	Driver disqualification
08	Drugs
09	Alcohol
10	10 hr rule
11	15 hr rule
12	60/70 hr rule
13	No log / no prior 7 days log
14	False log
15	Driver OOS violation(s) present, unknown if pre-crash
97	Not applicable, no MCSAP inspection
98	Other driver violation(s), specify:
99	Unknown

Variable Name	Format	Type	Length
Driver_OOS_Violations_2	\$2.	Char	2

Survey Question: Driver pre-crash MCSAP out-of-service violation(s) present (second of up to 3 coded)?

Code	Label
00	None identified
01	Age
02	License (non CDL)
03	CDL
04	Waiver
05	Medical certificate
06	Sickness/fatigue
07	Driver disqualification
08	Drugs
09	Alcohol
10	10 hr rule
11	15 hr rule
12	60/70 hr rule
13	No log / no prior 7 days log
14	False log
15	Driver OOS violation(s) present, unknown if pre-crash

- 97 Not applicable, no MCSAP inspection
- 98 Other driver violation(s), specify:
- 99 Unknown

Variable Name	Format	Type	Length
Driver_OOS_Violations_3	\$2.	Char	2

Survey Question: Driver pre-crash MCSAP out-of-service violation(s) present (third of up to 3 coded)?

- | Code | Label |
|------|---|
| 00 | None identified |
| 01 | Age |
| 02 | License (non CDL) |
| 03 | CDL |
| 04 | Waiver |
| 05 | Medical certificate |
| 06 | Sickness/fatigue |
| 07 | Driver disqualification |
| 08 | Drugs |
| 09 | Alcohol |
| 10 | 10 hr rule |
| 11 | 15 hr rule |
| 12 | 60/70 hr rule |
| 13 | No log / no prior 7 days log |
| 14 | False log |
| 15 | Driver OOS violation(s) present, unknown if pre-crash |
| 97 | Not applicable, no MCSAP inspection |
| 98 | Other driver violation(s), specify: |
| 99 | Unknown |

Variable Name	Format	Type	Length
Vehicle_Violations1	EBF50f	Numeric	8

Survey Question: Vehicle pre-crash MCSAP violation(s) present (first of up to 3 coded)?

- | Code | Label |
|------|--------------------|
| 00 | None identified |
| 01 | Brake system |
| 02 | Coupling device(s) |
| 03 | Exhaust system |
| 04 | Frame |
| 05 | Fuel system |
| 06 | Lighting devices |
| 07 | Safe loading |
| 08 | Steering system |
| 09 | Suspension system |
| 10 | Tires |
| 11 | Wheels/rims/hubs |

- 12 Windshield
- 13 Emergency exit
- 14 HAZMAT violation
- 15 Vehicle violation(s) present, unknown if pre-crash
- 97 Not applicable, no MCSAP inspection
- 98 Other vehicle violation(s), specify:
- 99 Unknown

Variable Name	Format	Type	Length
Vehicle_Violations2	\$2.	Char	2

Survey Question: Vehicle pre-crash MCSAP violation(s) present (second of up to 3 coded)?

- | Code | Label |
|------|--|
| 00 | None identified |
| 01 | Brake system |
| 02 | Coupling device(s) |
| 03 | Exhaust system |
| 04 | Frame |
| 05 | Fuel system |
| 06 | Lighting devices |
| 07 | Safe loading |
| 08 | Steering system |
| 09 | Suspension system |
| 10 | Tires |
| 11 | Wheels/rims/hubs |
| 12 | Windshield |
| 13 | Emergency exit |
| 14 | HAZMAT violation |
| 15 | Vehicle violation(s) present, unknown if pre-crash |
| 97 | Not applicable, no MCSAP inspection |
| 98 | Other vehicle violation(s), specify: |
| 99 | Unknown |

Variable Name	Format	Type	Length
Vehicle_Violations3	\$2.	Char	2

Survey Question: Vehicle pre-crash MCSAP violation(s) present (third of up to 3 coded)?

- | Code | Label |
|------|--------------------|
| 00 | None identified |
| 01 | Brake system |
| 02 | Coupling device(s) |
| 03 | Exhaust system |
| 04 | Frame |
| 05 | Fuel system |
| 06 | Lighting devices |
| 07 | Safe loading |

08	Steering system
09	Suspension system
10	Tires
11	Wheels/rims/hubs
12	Windshield
13	Emergency exit
14	HAZMAT violation
15	Vehicle violation(s) present, unknown if pre-crash
97	Not applicable, no MCSAP inspection
98	Other vehicle violation(s), specify:
99	Unknown

Variable Name	Format	Type	Length
Vehicle_OOS_Violations_1	EBF51f	Numeric	8

Survey Question: Vehicle pre-crash MCSAP out-of-service violation(s) present (first of up to 3 coded)?

Code	Label
00	None identified
01	Brake system
02	Coupling device(s)
03	Exhaust system
04	Frame
05	Fuel system
06	Lighting devices
07	Safe loading
08	Steering system
09	Suspension system
10	Tires
11	Wheels/rims/hubs
12	Windshield
13	Emergency exit
14	HAZMAT violation
15	Vehicle OOS violation(s) present, unknown if pre-crash
97	Not applicable, no MCSAP inspection
98	Other vehicle OOS violation(s) (specify)
99	Unknown

Variable Name	Format	Type	Length
Vehicle_OOS_Violations_2	\$2.	Char	2

Survey Question: Vehicle pre-crash MCSAP out-of-service violation(s) present (second of up to 3 coded)?

Code	Label
00	None identified
01	Brake system
02	Coupling device(s)

- 03 Exhaust system
- 04 Frame
- 05 Fuel system
- 06 Lighting devices
- 07 Safe loading
- 08 Steering system
- 09 Suspension system
- 10 Tires
- 11 Wheels/rims/hubs
- 12 Windshield
- 13 Emergency exit
- 14 HAZMAT violation
- 15 Vehicle OOS violation(s) present, unknown if pre-crash
- 97 Not applicable, no MCSAP inspection
- 98 Other vehicle OOS violation(s) (specify)
- 99 Unknown

Variable Name	Format	Type	Length
Vehicle_OOS_Violations_3	\$2.	Char	2

Survey Question: Vehicle pre-crash MCSAP out-of-service violation(s) present (third of up to 3 coded)?

- | Code | Label |
|------|--|
| 00 | None identified |
| 01 | Brake system |
| 02 | Coupling device(s) |
| 03 | Exhaust system |
| 04 | Frame |
| 05 | Fuel system |
| 06 | Lighting devices |
| 07 | Safe loading |
| 08 | Steering system |
| 09 | Suspension system |
| 10 | Tires |
| 11 | Wheels/rims/hubs |
| 12 | Windshield |
| 13 | Emergency exit |
| 14 | HAZMAT violation |
| 15 | Vehicle OOS violation(s) present, unknown if pre-crash |
| 97 | Not applicable, no MCSAP inspection |
| 98 | Other vehicle OOS violation(s) (specify) |
| 99 | Unknown |

Codebook – General Vehicle Data Set

General Vehicle Data Set

The GeneralVehicle data set contains general information about the vehicle. The material is provided as one record per vehicle. The GeneralVehicle data set contains the variables Case_Number and Vehicle_Number. Case_Number and Vehicle_Number uniquely identify each record in the data set and should be used to merge the GeneralVehicle data set with other vehicle level data sets.

Variable Name	Format	Type	Length
Model_Year	GV3f	Numeric	8

Survey Question: Vehicle model year

Code	Label
yyyy	Actual value
9999	Unknown

Variable Name	Format	Type	Length
Make	\$22.	Char	22

Survey Question: Vehicle Make

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Model	\$17.	Char	17

Survey Question: Vehicle model

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Vehicle_Type	GV6f	Numeric	8

Survey Question: Vehicle Type

Code	Label/Definition
------	------------------

- 01 Automobile — 2 door, 4 door, hatchback, station wagon
- 02 Automobile derivatives — auto-based pickup, auto-base panel, large limousines
- 03 Utility vehicle — compact utility, large utility, utility station wagon, Suzuki Sidekick, Explorer, Blazer, Tahoe, Suburban
- 04 Van-based light trucks (GVWR < 10,000) - Minivan, large van (Econoliner, Vandura), step van, van-based motor home, van-based school or transit bus.
- 05 Light conventional truck (pickup style, GVWR <10,000) — Compact pickup, standard pickup, pickup with slide-in camper.
- 06 Other light conventional truck (GVWR 10,000) — Cab chassis based, such as light stake, light dump, light tow, truck-based panel, stretch suburban limousine.
- 07 Bus (excludes van-based)
- 08 Medium heavy truck (GVWR >10,000) — At least 2 axles, 6 tires. Step van, single unit truck, truck tractor, truck-base motor home.
- 09 Motorcycles, moped, ATV, all-terrain cycles
- 98 Other vehicles — snowmobiles, farm equipment, construction equipment, motorized wheelchair, forklift, street sweeper.
- 99 Unknown

Variable Name	Format	Type	Length
Special_Use	GV8f	Numeric	8

Survey Question: Vehicle special use during this trip

- | Code | Label |
|------|----------------------------|
| 0 | No special use |
| 1 | Taxi |
| 2 | Vehicle used as school bus |
| 3 | Vehicle used as other bus |
| 4 | Military |
| 5 | Police |
| 6 | Ambulance |
| 7 | Fire truck or car |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
Police_Disposition	GV9f	Numeric	8

Survey Question: Police reported vehicle disposition

- | Code | Label |
|------|---------------------------------|
| 0 | Not towed due to vehicle damage |
| 1 | Towed due to vehicle damage |
| 9 | Unknown |

Variable Name	Format	Type	Length
Police_Num_Occupants	GV10f	Numeric	8

Survey Question: Police reported number of occupants

Code	Label
0-998	Actual value
999	No police reported number of occupants

Variable Name	Format	Type	Length
Police_Max_Injury	GV11f	Numeric	8

Survey Question: Police reported maximum injury in vehicle

Code	Label
0	No injury
1	C - Possible injury
2	B - Non-incapacitating injury
3	A - Incapacitating injury
4	K - Killed
5	U - Injured, severity unknown
6	Died prior to crash
9	Unknown

Variable Name	Format	Type	Length
Police_Occs_Transported	GV12f	Numeric	8

Survey Question: Police reported number of occupants transported for medical treatment

Code	Label
0-96	Actual value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Police_Nonm_Transported	GV13f	Numeric	8

Survey Question: Police reported number of nonmotorist transported for medical treatment

Code	Label
0-96	Actual value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Speed_Limit	GV15f	Numeric	8

Survey Question: Code posted or statutory speed limit in mph

Code	Label
00	No statutory limit
01-96	Actual value
99	Unknown

Variable Name	Format	Type	Length
Alcohol_Driver	GV16f	Numeric	8

Survey Question: Alcohol presence for driver

Code	Label
0	No alcohol presence determined
1	Yes, medical record determined
2	Yes, police determined
3	Yes, researcher determined
4	Yes, determined by other, specify
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Drug_Driver	GV17f	Numeric	8

Survey Question: Illegal drug presence for driver

Code	Label
0	No illegal drug presence determined
1	Yes, medical record determined
2	Yes, police determined
3	Yes, researcher determined
4	Yes, determined by other, specify
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Relation_Road	GV19f	Numeric	8

Survey Question: Relation To Roadway

Code	Label
1	On roadway
2	Shoulder
3	Median
4	Roadside

- 5 Outside right-of-way
- 6 Off roadway - location unknown
- 7 In parking lane
- 8 Gore
- 9 Unknown

Variable Name	Format	Type	Length
Relation_Junction	GV20f	Numeric	8

Survey Question: Relation to Junction

- | Code | Label |
|-------------------------|-------------------------------|
| NON-INTERCHANGE | |
| 01 | Non-junction |
| 02 | Intersection |
| 03 | Intersection related |
| 04 | Driveway, alley access, etc. |
| 05 | Entrance/exit ramp related |
| 06 | Rail grade crossing |
| 07 | In crossover |
| 09 | Unknown, non-interchange |
| INTERCHANGE AREA | |
| 10 | Intersection |
| 11 | Intersection related |
| 12 | Driveway, alley access, etc. |
| 13 | Entrance/exit ramp related |
| 14 | In crossover |
| 15 | Other location in interchange |
| 19 | Unknown, interchange area |
| 99 | Unknown |

Variable Name	Format	Type	Length
Intersection_Type	GV21f	Numeric	8

Survey Question: Intersection Type

- | Code | Label |
|------|--|
| 00 | Non-intersection (and not intersection related) |
| 01 | Signalized cross intersection |
| 02 | Cross intersection with right turn lane & stop control on minor street |
| 03 | Cross intersection with left turn lane & stop control on minor street |
| 04 | Cross intersection with left/right turn lanes & stop control on minor street |
| 05 | Cross intersection with no turn lanes & stop control on minor street |
| 06 | Signalized tee intersection |
| 07 | Tee intersection with turn lanes and stop control on minor street |
| 08 | Tee intersection with no turn lanes and stop control on minor street |
| 98 | Other (specify) |
| 99 | Unknown |

Variable Name	Format	Type	Length
Traffic_Flow	GV22f	Numeric	8

Survey Question: Traffic way flow

Code	Label
0	Not physically divided (two way traffic)
1	Divided trafficway-median strip without positive barrier
2	Divided trafficway-median strip with positive barrier
3	One way traffic
9	Unknown

Variable Name	Format	Type	Length
Flow_Restrictions	GV23f	Numeric	8

Survey Question: Traffic way flow restrictions

Code	Label
0	No restrictions
1	Work zone
2	Roadway immersed
3	Prior crash
4	Congestion
5	Dust storm
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Num_TravelLanes	GV24f	Numeric	8

Survey Question: Number of Travel Lanes

Code	Label
1	One
2	Two
3	Three
4	Four
5	Five
6	Six
7	Seven or more
9	Unknown

Variable Name	Format	Type	Length
Access_Control	GV25f	Numeric	8

Survey Question: Access Control

Code	Label
1	Full control
2	No control
3	Other
9	Unknown

Variable Name	Format	Type	Length
Road_Signing	GV26f	Numeric	8

Survey Question: Route Signing

Code	Label
1	Interstate
2	U.S. highway
3	State highway
4	County road
5	Township
6	Municipality
7	Frontage road
8	Other
9	Unknown

Variable Name	Format	Type	Length
Trafficway__FunctionalClass	GV27f	Numeric	8

Survey Question: Trafficway Functional Class

Code	Label
01	Rural principal arterial - Interstate
02	Rural principal arterial - other
03	Rural minor arterial
04	Rural major collector
05	Rural minor collector
06	Rural local
09	Rural unknown
11	Urban principal arterial - Interstate
12	Urban principle arterial - Freeways and Expressways
13	Urban principal arterial - other
14	Urban minor arterial
15	Urban collector
16	Urban local
19	Urban unknown
99	Unknown

Variable Name	Format	Type	Length
Roadway_Class	GV28f	Numeric	8

Survey Question: Roadway Class

Code	Label
01	Rural Freeway (> four lanes)
02	Rural Freeway (< four lanes)
03	Rural multi-lane divided, non-Freeway
04	Rural multi-lane undivided, non-Freeway
05	Rural two-lane road
09	Rural unknown
11	Urban Freeway (> four lanes)
12	Urban Freeway (< four lanes)
13	Urban multi-lane divided, non-Freeway
14	Urban multi-lane undivided, non-Freeway
15	Urban two-lane road
19	Urban unknown
99	Unknown

Variable Name	Format	Type	Length
Roadway_Alignment	GV29f	Numeric	8

Survey Question: Roadway Alignment

Code	Label
1	Straight
2	Curve right
3	Curve left
9	Unknown

Variable Name	Format	Type	Length
Roadway_Profile	GV30f	Numeric	8

Survey Question: Roadway Profile

Code	Label
1	Level
2	Uphill grade (> 2%)
3	Hill crest
4	Downhill grade (> 2%)
5	Sag
9	Unknown

Variable Name	Format	Type	Length
Roadway_Surface	GV31f	Numeric	8

Survey Question: Roadway Surface Type

Code	Label
1	Concrete
2	Bituminous (asphalt)
3	Brick or block

- 4 Slag, gravel, or stone
- 5 Dirt
- 8 Other (specify)
- 9 Unknown

Variable Name	Format	Type	Length
Surface_Condition	GV32f	Numeric	8

Survey Question: Roadway Surface Condition

- | Code | Label |
|------|--------------------|
| 1 | Dry |
| 2 | Wet |
| 3 | Snow or slush |
| 4 | Ice |
| 5 | Sand, dirt, or oil |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
Surface_Defects	GV33f	Numeric	8

Survey Question: Roadway Surface Defects

- | Code | Label |
|------|------------------------|
| 0 | No defects noted |
| 1 | Defect noted (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
Outboard_Shoulder__Surface	GV34f	Numeric	8

Survey Question: Outboard Shoulder Surface Type

- | Code | Label |
|------|------------------------|
| 0 | No stabilized shoulder |
| 1 | Concrete |
| 2 | Bituminous (asphalt) |
| 3 | Brick or block |
| 4 | Slag, gravel, or stone |
| 5 | Dirt |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
Outboard__Shoulder__Width	\$5.	Char	5

Survey Question: Outboard shoulder width (Feet/Inches)

Code	Label
00/01 - 99/98	Actual value
00/00	None
99/99	Unknown

Variable Name	Format	Type	Length
Inboard__Shoulder_Surface	GV36f	Numeric	8

Survey Question: Inboard Shoulder Surface Type

Code	Label
0	No stabilized shoulder
1	Concrete
2	Bituminous (asphalt)
3	Brick or block
4	Slag, gravel, or stone
5	Dirt
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Inboard__Shoulder_Width	\$5.	Char	5

Survey Question: Inboard Shoulder Width (Feet/Inches)

Code	Label
00/01 -99/98	Actual value
00/00	None
99/99	Unknown

Variable Name	Format	Type	Length
Rumble_Strips	GV38f	Numeric	8

Survey Question: Rumble Strip Type/Involvement

Code	Label
0	No rumble strip present
1	Raised rumble strip/no precrash departure
2	Raised rumble strip/partial precrash departure
3	Raised rumble strip/full precrash departure
4	Depressed rumble strip/no precrash departure
5	Depressed rumble strip/partial precrash departure
6	Depressed rumble strip/full precrash departure
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Road_Design_Deficiencies	GV39f	Numeric	8

Survey Question: Roadway Design Deficiencies

Code	Label
0	No deficiencies noted
1	Inappropriate signage speeds (i.e., appropriate for autos, not heavy trucks)
2	Insufficient crown
3	Excessive crown
4	Insufficient superelevation
5	Excessive superelevation
6	Excessive curvature (i.e., short radius)
7	No shoulder/Breakdown lane
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
SightLine_Restrictions	GV40f	Numeric	8

Survey Question: Sight-line restrictions for this vehicle

Code	Label
1	Yes (specify)
2	No
9	Unknown

Variable Name	Format	Type	Length
Light_Conditions	GV41f	Numeric	8

Survey Question: Light Conditions

Code	Label
1	Daylight
2	Dark
3	Dark, but lighted
4	Dawn
5	Dusk
9	Unknown

Variable Name	Format	Type	Length
Atmospheric_Cond1	GV42f	Numeric	8

Survey Question: Atmospheric conditions (first of up to 3 coded)

Code	Label
0	No adverse atmospheric-related driving conditions
1	Rain

- 2 Snow
- 3 Fog
- 4 Wind gust
- 5 Hail
- 6 Sleet
- 7 Dust
- 8 Other (specify)
- 9 Unknown

Variable Name	Format	Type	Length
Atmospheric_Cond2	\$1.	Char	1

Survey Question: Atmospheric conditions (second of up to 3 coded)

- | Code | Label |
|------|---|
| 0 | No adverse atmospheric-related driving conditions |
| 1 | Rain |
| 2 | Snow |
| 3 | Fog |
| 4 | Wind gust |
| 5 | Hail |
| 6 | Sleet |
| 7 | Dust |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
Atmospheric_Cond3	\$1.	Char	1

Survey Question: Atmospheric conditions (third of up to 3 coded)

- | Code | Label |
|------|---|
| 0 | No adverse atmospheric-related driving conditions |
| 1 | Rain |
| 2 | Snow |
| 3 | Fog |
| 4 | Wind gust |
| 5 | Hail |
| 6 | Sleet |
| 7 | Dust |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
FirstHarmfulEvent	GV43f	Numeric	8

Survey Question: First Harmful Event, Choose One

Code	Label
01	LOC, reduced road friction
02	Evasive maneuver
03	Lane excursion, same direction
04	Lane excursion, opposite direction
05	Negotiate turn left
06	Negotiate turn right
07	Negotiate curve left
08	Negotiate curve right
09	Ran off road right
10	Ran off road left
11	Drift off road right
12	Drift off road left
13	Maintain heading off road
14	Return to road
15	Hit motor vehicle
16	Hit pedestrian
17	Hit bicyclist
18	Hit other non-motorist
19	Hit fixed object
20	Hit non-fixed object
21	Tire failure
22	Brake failure
23	Other vehicle failure
24	Rollover
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
TrafficControl_Device	GV44f	Numeric	8

Survey Question: Traffic Control Device

Code	Label
00	No traffic control device
01	Traffic control signal (on colors) without pedestrian signal
02	Traffic control signal (on colors) with pedestrian signal
03	Traffic control signal (on colors) not known whether or not pedestrian signal
04	Flashing traffic control signal
05	Flashing beacon
06	Flashing highway traffic signal, type unknown or other than traffic control or beacon
07	Lane use control signal
08	Other highway traffic signal
09	Unknown highway traffic signal
REGULATORY SIGNS	
20	Stop sign
21	Yield sign
28	Other regulatory sign
29	Unknown type regulatory sign

SCHOOL ZONE SIGNS

- 30 School speed limit sign
- 31 School advance or crossing sign
- 38 Other school related sign
- 39 Unknown type school zone sign

WARNING SIGNS

- 40 Warning sign

MISCELLANEOUS NOT AT RAILROAD CROSSING

- 50 Officer, crossing guard, flagman, etc.

AT RAILROAD GRADE CROSSING*ACTIVE DEVICES*

- 60 Gates
- 61 Flashing lights
- 62 Traffic control signal
- 63 Wigwags
- 64 Bells
- 68 Other train activated device
- 69 Active device, type unknown

PASSIVE DEVICES

- 70 Cross-bucks
- 71 Stop sign
- 72 Other railroad crossing sign
- 73 Special warning device - watchman, flagged by crew
- 78 Other passive device
- 79 Passive device, type unknown

MISCELLANEOUS DEVICES AT RAILROAD CROSSING

- 80 Grade crossing controlled, type unknown

WHETHER OR NOT AT RAILROAD GRADE CROSSING

- 98 Other (specify)
- 99 Unknown

Variable Name	Format	Type	Length
Device_Functioning	GV45f	Numeric	8

Survey Question: Was the Traffic Control Device (that was coded for variable TrafficControl_Device) Functioning?

Code	Label
0	No traffic control device
1	Traffic control device not functioning (specify)
2	Traffic control device functioning properly
9	Unknown

Variable Name	Format	Type	Length
MannerCollision	GV46f	Numeric	8

Survey Question: Manner of Collision

Code	Label
0	Not a collision with a motor-vehicle in transit
1	Rear-end
2	Head-on
3	Rear-to-rear
4	Angle
5	Sideswipe - same direction
6	Sideswipe - opposite direction
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
Area_Damage_1	GV47f	Numeric	8

Survey Question: General Area of Damage, using the codes from the diagrams on the following pages. Note: Order by collision sequence; first of up to 3 coded.

Code	Label
00	No contact, noncollision event

BUS OR STRAIGHT TRUCK

01	Front-right contact
02	Front contact that extends to more than one zone
03	Front-left contact
04	Front-left corner contact
05	Front-left side contact
06	Mid-left side contact
07	Rear-left side contact
08	Rear-left corner contact
09	Rear-left contact
10	Rear contact that extends to more than one zone
11	Rear-right contact
12	Rear-right corner contact
13	Rear-right side contact
14	Mid-right side contact
15	Front-right side contact
16	Front-right corner contact
17	Top of bus or vehicle
18	Hood of bus or vehicle (if it has one)
19	Windshield of bus or vehicle (if it has a hood and contact is to windshield, rather than hood or front)
20	Undercarriage of vehicle
21	Mirror damage only, e.g., from striking ped/bicyclist/nonmotorist
22	Rollover

PASSENGER CAR, LIGHT VEHICLE

31	Front-right contact
32	Front contact that extends to more than one zone
33	Front-left contact
34	Front-left corner contact
35	Front-left side contact

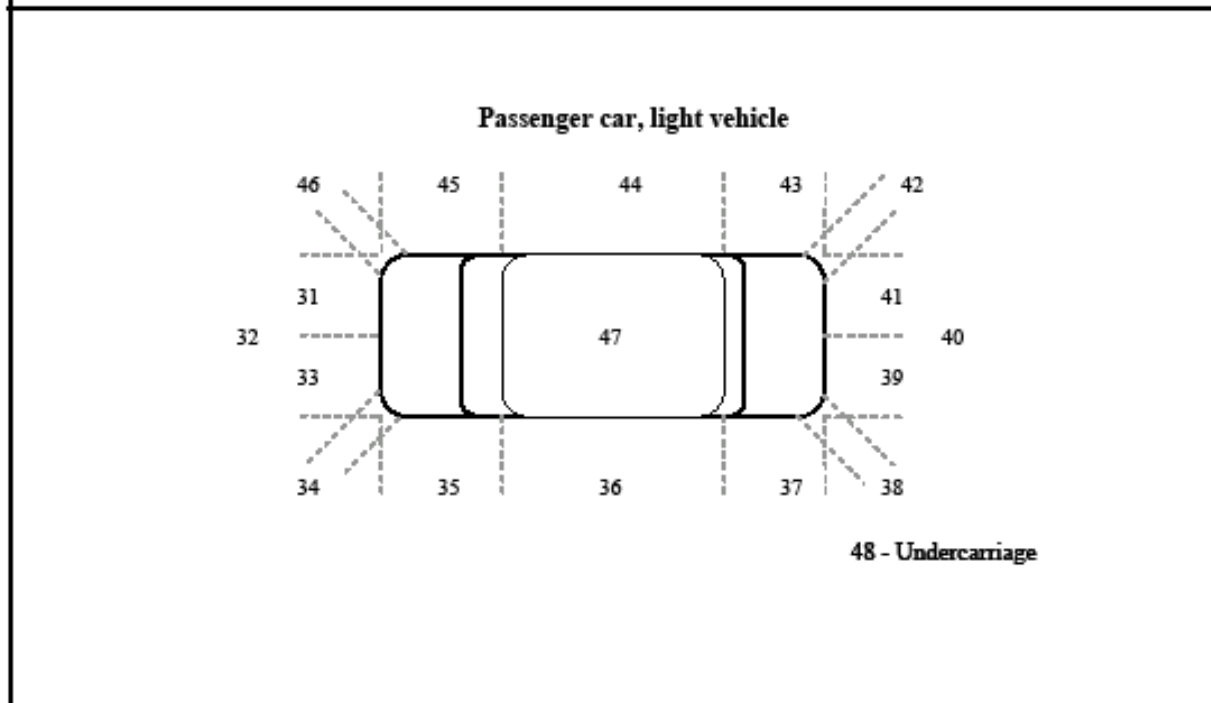
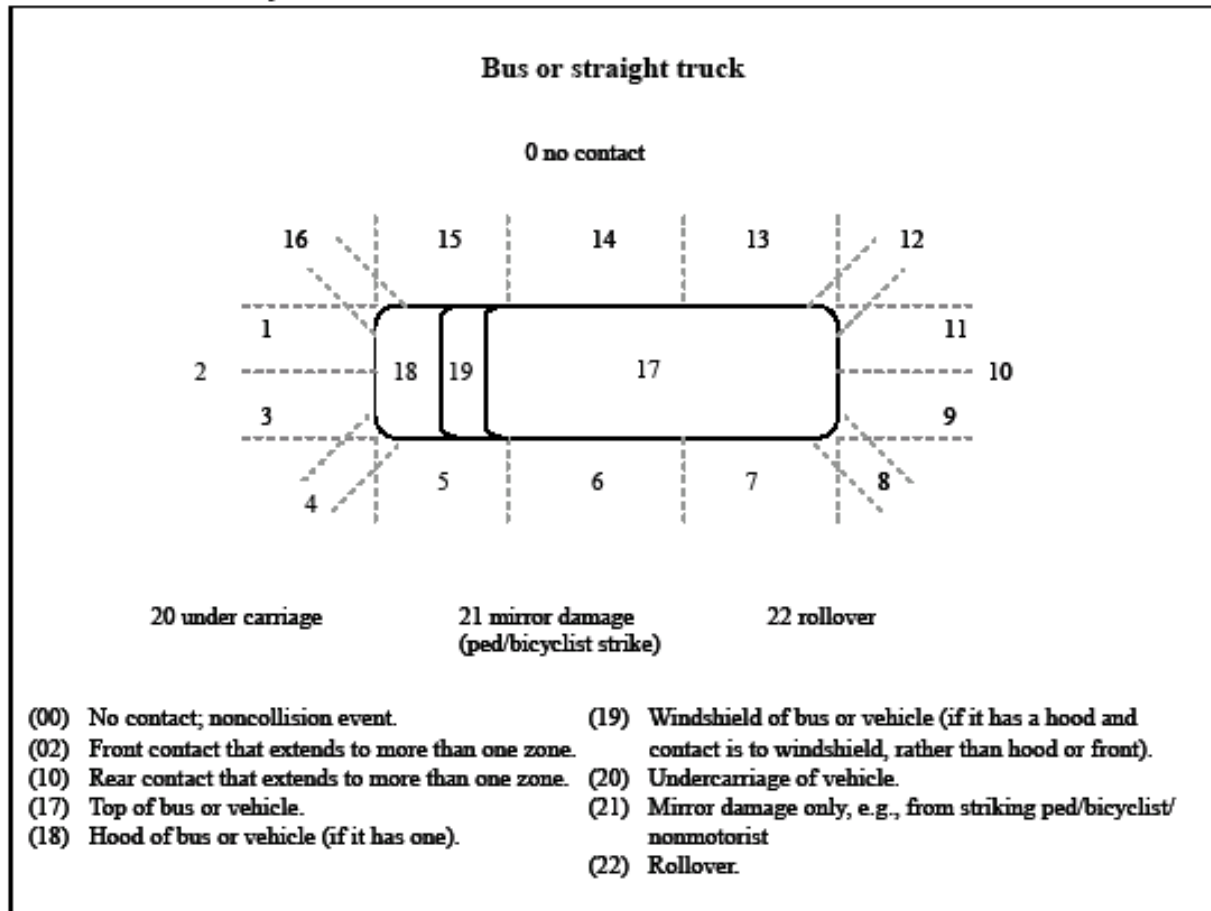
- 36 Mid-left side contact
- 37 Rear-left side contact
- 38 Rear-left corner contact
- 39 Rear-left contact
- 40 Rear contact that extends to more than one zone
- 41 Rear-right contact
- 42 Rear-right corner contact
- 43 Rear-right side contact
- 44 Mid-right side contact
- 45 Front-right side contact
- 46 Front-right corner contact
- 47 Top of bus or vehicle
- 48 Undercarriage

TRUCK OR TRACTOR WITH TRAILER

- 51 Front-right contact on tractor
- 52 Front contact on tractor that extends to more than one zone
- 53 Front-left contact on tractor
- 54 Front-left corner contact on tractor
- 55 Front-left contact on tractor
- 56 Left side contact on tractor
- 57 Contact between tractor and trailer on the left side
- 58 Front-left contact on trailer
- 59 Rear-left contact on trailer
- 60 Rear-left corner contact on trailer
- 61 Rear-left contact on trailer
- 62 Rear contact on trailer that extends to more than one zone
- 63 Rear-right contact on trailer
- 64 Rear-right corner contact on trailer
- 65 Rear-right contact on trailer
- 66 Front-right contact on trailer
- 67 Contact between tractor and trailer on the right side
- 68 Right side contact on tractor
- 69 Front-right contact on tractor
- 70 Front-right corner contact on tractor
- 71 Hood, windshield, or top of tractor
- 72 Top of trailer
- 73 Undercarriage

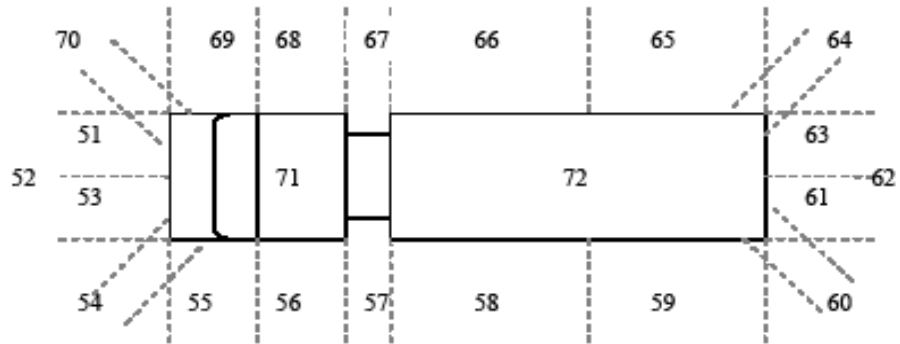
MOTORCYCLE

- 81 Front of motorcycle
- 82 Left side of motorcycle
- 83 Rear of motorcycle
- 84 Right side of motorcycle



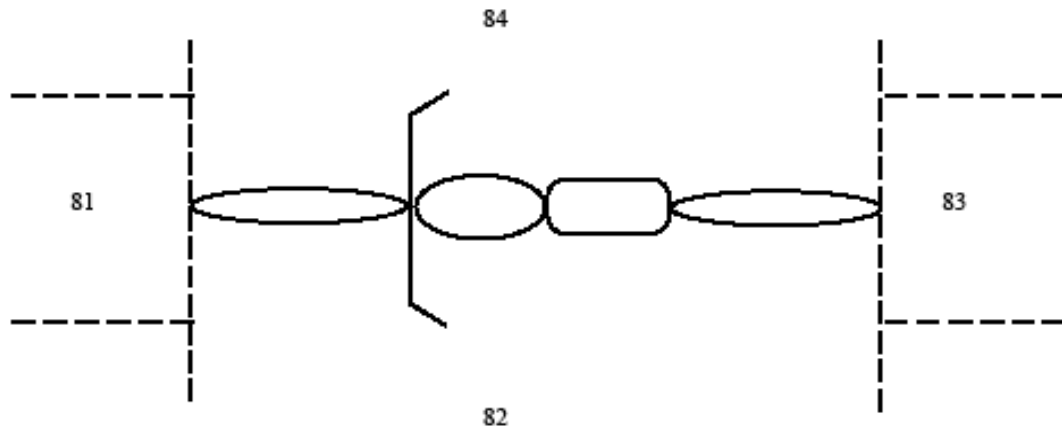
U.S. DOT, Federal Motor Carrier Safety Administration

Truck or Tractor with Trailer



73 Undercarriage

Motorcycle



U.S. DOT, Federal Motor Carrier Safety Administration

Variable Name	Format	Type	Length
Area_Damage_2	\$2.	Char	2

Survey Question: General Area of Damage, using the codes from the previous diagrams.
 Note: Order by collision sequence; second of up to 3 coded.

Code	Label
00	No contact, noncollision event

BUS OR STRAIGHT TRUCK

01	Front-right contact
02	Front contact that extends to more than one zone
03	Front-left contact
04	Front-left corner contact
05	Front-left side contact
06	Mid-left side contact
07	Rear-left side contact
08	Rear-left corner contact
09	Rear-left contact
10	Rear contact that extends to more than one zone
11	Rear-right contact
12	Rear-right corner contact
13	Rear-right side contact
14	Mid-right side contact
15	Front-right side contact
16	Front-right corner contact
17	Top of bus or vehicle
18	Hood of bus or vehicle (if it has one)
19	Windshield of bus or vehicle (if it has a hood and contact is to windshield, rather than hood or front)
20	Undercarriage of vehicle
21	Mirror damage only, e.g., from striking ped/bicyclist/nonmotorist
22	Rollover

PASSENGER CAR, LIGHT VEHICLE

31	Front-right contact
32	Front contact that extends to more than one zone
33	Front-left contact
34	Front-left corner contact
35	Front-left side contact
36	Mid-left side contact
37	Rear-left side contact
38	Rear-left corner contact
39	Rear-left contact
40	Rear contact that extends to more than one zone
41	Rear-right contact
42	Rear-right corner contact
43	Rear-right side contact
44	Mid-right side contact
45	Front-right side contact
46	Front-right corner contact
47	Top of bus or vehicle

48 Undercarriage

TRUCK OR TRACTOR WITH TRAILER

- 51 Front-right contact on tractor
- 52 Front contact on tractor that extends to more than one zone
- 53 Front-left contact on tractor
- 54 Front-left corner contact on tractor
- 55 Front-left contact on tractor
- 56 Left side contact on tractor
- 57 Contact between tractor and trailer on the left side
- 58 Front-left contact on trailer
- 59 Rear-left contact on trailer
- 60 Rear-left corner contact on trailer
- 61 Rear-left contact on trailer
- 62 Rear contact on trailer that extends to more than one zone
- 63 Rear-right contact on trailer
- 64 Rear-right corner contact on trailer
- 65 Rear-right contact on trailer
- 66 Front-right contact on trailer
- 67 Contact between tractor and trailer on the right side
- 68 Right side contact on tractor
- 69 Front-right contact on tractor
- 70 Front-right corner contact on tractor
- 71 Hood, windshield, or top of tractor
- 72 Top of trailer
- 73 Undercarriage

MOTORCYCLE

- 81 Front of motorcycle
- 82 Left side of motorcycle
- 83 Rear of motorcycle
- 84 Right side of motorcycle

Variable Name	Format	Type	Length
Area_Damage_3	\$2.	Char	2

Survey Question: General Area of Damage, using the codes from the previous diagrams.
Note: Order by collision sequence; third of up to 3 coded.

- Code Label
- 00 No contact, noncollision event

BUS OR STRAIGHT TRUCK

- 01 Front-right contact
- 02 Front contact that extends to more than one zone
- 03 Front-left contact
- 04 Front-left corner contact
- 05 Front-left side contact
- 06 Mid-left side contact
- 07 Rear-left side contact
- 08 Rear-left corner contact
- 09 Rear-left contact

- 10 Rear contact that extends to more than one zone
- 11 Rear-right contact
- 12 Rear-right corner contact
- 13 Rear-right side contact
- 14 Mid-right side contact
- 15 Front-right side contact
- 16 Front-right corner contact
- 17 Top of bus or vehicle
- 18 Hood of bus or vehicle (if it has one)
- 19 Windshield of bus or vehicle (if it has a hood and contact is to windshield, rather than hood or front)
- 20 Undercarriage of vehicle
- 21 Mirror damage only, e.g., from striking ped/bicyclist/nonmotorist
- 22 Rollover

PASSENGER CAR, LIGHT VEHICLE

- 31 Front-right contact
- 32 Front contact that extends to more than one zone
- 33 Front-left contact
- 34 Front-left corner contact
- 35 Front-left side contact
- 36 Mid-left side contact
- 37 Rear-left side contact
- 38 Rear-left corner contact
- 39 Rear-left contact
- 40 Rear contact that extends to more than one zone
- 41 Rear-right contact
- 42 Rear-right corner contact
- 43 Rear-right side contact
- 44 Mid-right side contact
- 45 Front-right side contact
- 46 Front-right corner contact
- 47 Top of bus or vehicle
- 48 Undercarriage

TRUCK OR TRACTOR WITH TRAILER

- 51 Front-right contact on tractor
- 52 Front contact on tractor that extends to more than one zone
- 53 Front-left contact on tractor
- 54 Front-left corner contact on tractor
- 55 Front-left contact on tractor
- 56 Left side contact on tractor
- 57 Contact between tractor and trailer on the left side
- 58 Front-left contact on trailer
- 59 Rear-left contact on trailer
- 60 Rear-left corner contact on trailer
- 61 Rear-left contact on trailer
- 62 Rear contact on trailer that extends to more than one zone
- 63 Rear-right contact on trailer
- 64 Rear-right corner contact on trailer
- 65 Rear-right contact on trailer
- 66 Front-right contact on trailer

- 67 Contact between tractor and trailer on the right side
- 68 Right side contact on tractor
- 69 Front-right contact on tractor
- 70 Front-right corner contact on tractor
- 71 Hood, windshield, or top of tractor
- 72 Top of trailer
- 73 Undercarriage

MOTORCYCLE

- 81 Front of motorcycle
- 82 Left side of motorcycle
- 83 Rear of motorcycle
- 84 Right side of motorcycle

Variable Name	Format	Type	Length
Max_Damage	GV48f	Numeric	8

Survey Question: Maximum Damage Area, using codes from the previous diagrams.

- Code Label
- 00 No contact, noncollision event

BUS OR STRAIGHT TRUCK

- 01 Front-right contact
- 02 Front contact that extends to more than one zone
- 03 Front-left contact
- 04 Front-left corner contact
- 05 Front-left side contact
- 06 Mid-left side contact
- 07 Rear-left side contact
- 08 Rear-left corner contact
- 09 Rear-left contact
- 10 Rear contact that extends to more than one zone
- 11 Rear-right contact
- 12 Rear-right corner contact
- 13 Rear-right side contact
- 14 Mid-right side contact
- 15 Front-right side contact
- 16 Front-right corner contact
- 17 Top of bus or vehicle
- 18 Hood of bus or vehicle (if it has one)
- 19 Windshield of bus or vehicle (if it has a hood and contact is to windshield, rather than hood or front)
- 20 Undercarriage of vehicle
- 21 Mirror damage only, e.g., from striking ped/bicyclist/nonmotorist
- 22 Rollover

PASSENGER CAR, LIGHT VEHICLE

- 31 Front-right contact
- 32 Front contact that extends to more than one zone
- 33 Front-left contact
- 34 Front-left corner contact

- 35 Front-left side contact
- 36 Mid-left side contact
- 37 Rear-left side contact
- 38 Rear-left corner contact
- 39 Rear-left contact
- 40 Rear contact that extends to more than one zone
- 41 Rear-right contact
- 42 Rear-right corner contact
- 43 Rear-right side contact
- 44 Mid-right side contact
- 45 Front-right side contact
- 46 Front-right corner contact
- 47 Top of bus or vehicle
- 48 Undercarriage

TRUCK OR TRACTOR WITH TRAILER

- 51 Front-right contact on tractor
- 52 Front contact on tractor that extends to more than one zone
- 53 Front-left contact on tractor
- 54 Front-left corner contact on tractor
- 55 Front-left contact on tractor
- 56 Left side contact on tractor
- 57 Contact between tractor and trailer on the left side
- 58 Front-left contact on trailer
- 59 Rear-left contact on trailer
- 60 Rear-left corner contact on trailer
- 61 Rear-left contact on trailer
- 62 Rear contact on trailer that extends to more than one zone
- 63 Rear-right contact on trailer
- 64 Rear-right corner contact on trailer
- 65 Rear-right contact on trailer
- 66 Front-right contact on trailer
- 67 Contact between tractor and trailer on the right side
- 68 Right side contact on tractor
- 69 Front-right contact on tractor
- 70 Front-right corner contact on tractor
- 71 Hood, windshield, or top of tractor
- 72 Top of trailer
- 73 Undercarriage

MOTORCYCLE

- 81 Front of motorcycle
- 82 Left side of motorcycle
- 83 Rear of motorcycle
- 84 Right side of motorcycle

Variable Name	Format	Type	Length
Damage_Severity	GV49f	Numeric	8

Survey Question: Damage Severity

Code	Label
0	None
1	Minor
2	Functional [Moderate]
3	Disabling [Severe]
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
PreCrash_Speed	GV50f	Numeric	8

Survey Question: Vehicle pre-crash speed

Code	Label
00	Vehicle stationary
01-94	Actual value
95	95+ miles per hour
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
SourceOfSpeed_Est	GV51f	Numeric	8

Survey Question: Source of Travel Speed Estimate

Code	Label
0	None
1	EDR
2	ECM
3	Research estimate
4	Police estimate
5	Driver estimate
6	Witness estimate
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Curb_Weight	GV52f	Numeric	8

Survey Question: Vehicle Curb Weight (to the nearest 100 pounds)

Code	Label
100 - 9000	Actual value
9999	Unknown

Variable Name	Format	Type	Length
Rollover	GV53f	Numeric	8

Survey Question: Rollover

Code	Label
00	No rollover (no overturning)
LONGITUNDINAL AXIS	
01 - 16	Actual value of quarter
17	17 or more quarter turns
LATERAL AXIS	
98	Rollover - end-over-end
99	Rollover (overturn), details unknown

Variable Name	Format	Type	Length
Rollover_Type	GV54f	Numeric	8

Survey Question: Rollover Initiation Type

Code	Label
00	No rollover
01	Trip-over
02	Flip-over
03	Turn-over
04	Climb-over
05	Fall-over
06	Bounce-over
07	Collision with another vehicle
08	Other rollover initiation type (specify):
98	Rollover - end-over-end
99	Unknown rollover initiation type

Variable Name	Format	Type	Length
Location_Rollover	GV55f	Numeric	8

Survey Question: Location of Rollover Initiation

Code	Label
0	No rollover
1	On roadway
2	On shoulder - paved
3	On shoulder - unpaved
4	On roadside or divided trafficway median
8	Rollover - end-over-end
9	Unknown

Variable Name	Format	Type	Length
RolloverObjContacted	GV56f	Numeric	8

Survey Question: Rollover Initiation Object Contacted

Code Label
00 No rollover
01-30 Indicates Vehicle Number of actual value

NONCOLLISION

31 Turn-over fall-over
32 No rollover impact initiation (end-over-end)
34 Jackknife

COLLISION WITH FIXED OBJECT

41 Tree (< 10 cm in diameter)
42 Tree (> 10 cm in diameter)
43 Shrubbery or bush
44 Embankment
45 Breakaway pole or post (any diameter)

NONBREAKAWAY POLE OR POST

50 Pole or post (<10 cm in diameter)
51 Pole or post (>10 cm in diameter)
52 Pole or post (>30 cm in diameter)
53 Pole or post (diameter unknown)
54 Concrete traffic barrier
55 Impact attenuator
56 Other traffic barrier (includes guardrail), specify
57 Fence
58 Wall
59 Building
60 Ditch or culvert
61 Ground
62 Fire hydrant
63 Curb
64 Bridge
68 Other fixed object, specify
69 Unknown fixed object

COLLISION WITH NONFIXED OBJECT

70 Passenger car, light truck, van, or other vehicle not in-transport
71 Medium/heavy truck or bus not in-transport
76 Animal
77 Train
78 Trailer, disconnected in-transport
79 Object fell from vehicle in-transport
88 Other nonfixed object, specify
89 Unknown nonfixed object
98 Other event, specify
99 Unknown event or object

Variable Name	Format	Type	Length
LocationOnVehicle	GV57f	Numeric	8

Survey Question: Location on vehicle where initial tripping force is applied

Code	Label
0	No rollover
1	Wheels/tires
2	Side plane
3	End plane
4	Undercarriage
5	Other location on vehicle (specify)
6	Non-contact rollover forces (specify)
8	Rollover - - end-over-end
9	Unknown

Variable Name	Format	Type	Length
DirectionOfRoll	GV58f	Numeric	8

Survey Question: Direction of Initial Roll

Code	Label
0	No rollover
1	Roll right - primarily about the longitudinal axis
2	Roll left - primarily about the longitudinal axis
8	Rollover - - end-over-end
9	Unknown roll direction

Variable Name	Format	Type	Length
Fire	GV59f	Numeric	8

Survey Question: Fire Occurrence

Code	Label
0	No fire
1	Yes, minor
2	Yes, major
9	Unknown

Variable Name	Format	Type	Length
OriginOfFire	GV60f	Numeric	8

Survey Question: Origin of Fire

Code	Label
00	No fire
01	Vehicle exterior (front, side, back, top)
02	Exhaust system

- 03 Fuel tank (and other fuel retention system parts)
- 04 Engine compartment
- 05 Cargo/trunk compartment/trailer
- 06 Instrument panel
- 07 Passenger compartment/cab area
- 08 Tire/wheel area
- 09 Other location (specify)
- 99 Unknown

Variable Name	Format	Type	Length
Under_OverRide	GV61f	Numeric	8

Survey Question: Did this vehicle underride or override?

- | Code | Label |
|--|--|
| 0 | No underride or override |
| WITH MOTOR VEHICLE IN TRANSPORT | |
| 1 | Underride, compartment intrusion |
| 2 | Underride, no compartment intrusion |
| 3 | Underride, compartment intrusion unknown |
| WITH OTHER VEHICLE NOT IN TRANSPORT | |
| 4 | Underride, compartment intrusion |
| 5 | Underride, no compartment intrusion |
| 6 | Underride, compartment intrusion unknown |
| 7 | Override, motor vehicle in transport |
| 8 | Override, other vehicle not in transport |
| 9 | Unknown if underride or override |

Variable Name	Format	Type	Length
Components_Degraded1	GV62f	Numeric	8

Survey Question: Vehicle components identified to be degraded or substandard (first of up to 5 coded)

- | Code | Label |
|------|---------------------------|
| 00 | None identified |
| 01 | Tires |
| 02 | Wheels |
| 03 | Suspension |
| 04 | Braking system |
| 05 | Engine |
| 06 | Transmission |
| 07 | Other driveline component |
| 08 | Steering |
| 09 | Cooling system |
| 10 | Fuel system |
| 11 | Headlights |
| 12 | Brake lights |
| 13 | Other exterior lights |

- 14 Wiring
- 15 Windshield
- 16 Other windows/glazing
- 97 Other components, specify:
- 98 Not applicable
- 99 Unknown

Variable Name	Format	Type	Length
Components_Degraded2	GV62f	Numeric	8

Survey Question: Vehicle components identified to be degraded or substandard (second of up to 5 coded)

- | Code | Label |
|------|----------------------------|
| 00 | None identified |
| 01 | Tires |
| 02 | Wheels |
| 03 | Suspension |
| 04 | Braking system |
| 05 | Engine |
| 06 | Transmission |
| 07 | Other driveline component |
| 08 | Steering |
| 09 | Cooling system |
| 10 | Fuel system |
| 11 | Headlights |
| 12 | Brake lights |
| 13 | Other exterior lights |
| 14 | Wiring |
| 15 | Windshield |
| 16 | Other windows/glazing |
| 97 | Other components, specify: |
| 98 | Not applicable |
| 99 | Unknown |

Variable Name	Format	Type	Length
Components_Degraded3	GV62f	Numeric	8

Survey Question: Vehicle components identified to be degraded or substandard (third of up to 5 coded)

- | Code | Label |
|------|-----------------|
| 00 | None identified |
| 01 | Tires |
| 02 | Wheels |
| 03 | Suspension |
| 04 | Braking system |
| 05 | Engine |
| 06 | Transmission |

- 07 Other driveline component
- 08 Steering
- 09 Cooling system
- 10 Fuel system
- 11 Headlights
- 12 Brake lights
- 13 Other exterior lights
- 14 Wiring
- 15 Windshield
- 16 Other windows/glazing
- 97 Other components, specify:
- 98 Not applicable
- 99 Unknown

Variable Name	Format	Type	Length
Components_Degraded4	GV62f	Numeric	8

Survey Question: Vehicle components identified to be degraded or substandard (fourth of up to 5 coded)

- | Code | Label |
|------|----------------------------|
| 00 | None identified |
| 01 | Tires |
| 02 | Wheels |
| 03 | Suspension |
| 04 | Braking system |
| 05 | Engine |
| 06 | Transmission |
| 07 | Other driveline component |
| 08 | Steering |
| 09 | Cooling system |
| 10 | Fuel system |
| 11 | Headlights |
| 12 | Brake lights |
| 13 | Other exterior lights |
| 14 | Wiring |
| 15 | Windshield |
| 16 | Other windows/glazing |
| 97 | Other components, specify: |
| 98 | Not applicable |
| 99 | Unknown |

Variable Name	Format	Type	Length
ComponentsDegraded__5	GV62f	Numeric	8

Survey Question: Vehicle components identified to be degraded or substandard (fifth of up to 5 coded)

Code	Label
00	None identified
01	Tires
02	Wheels
03	Suspension
04	Braking system
05	Engine
06	Transmission
07	Other driveline component
08	Steering
09	Cooling system
10	Fuel system
11	Headlights
12	Brake lights
13	Other exterior lights
14	Wiring
15	Windshield
16	Other windows/glazing
97	Other components, specify:
98	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Condition_Degraded1	GV63f	Numeric	8

Survey Question: Condition of degraded or substandard components (first of up to 5 coded)

Code	Label
0	Not applicable
1	Failed
2	Malfunctioned
3	Substandard

Variable Name	Format	Type	Length
Condition_Degraded2	GV63f	Numeric	8

Survey Question: Condition of degraded or substandard components (second of up to 5 coded)

Code	Label
0	Not applicable
1	Failed
2	Malfunctioned
3	Substandard

Variable Name	Format	Type	Length
Condition_Degraded3	GV63f	Numeric	8

Survey Question: Condition of degraded or substandard components (third of up to 5 coded)

Code	Label
0	Not applicable
1	Failed
2	Malfunctioned
3	Substandard

Variable Name	Format	Type	Length
Condition_Degraded4	GV63f	Numeric	8

Survey Question: Condition of degraded or substandard components (fourth of up to 5 coded)

Code	Label
0	Not applicable
1	Failed
2	Malfunctioned
3	Substandard

Variable Name	Format	Type	Length
Condition_Degraded5	GV63f	Numeric	8

Survey Question: Condition of degraded or substandard components (fifth of up to 5 coded)

Code	Label
0	Not applicable
1	Failed
2	Malfunctioned
3	Substandard

Codebook – MotorCarrier Data Set

MotorCarrier Data Set

The MotorCarrier data set contains information on the operations of the driver's carrier from the party responsible for the operation of the bus. This material is provided as one record per vehicle/driver for which a Motor Carrier was available. The MotorCarrier data set contains the variables Case_Number and Vehicle_Number. Case_Number and Vehicle_Number uniquely identify each record in this data set and should be used to merge the MotorCarrier data set with vehicle level data sets.

Variable Name	Format	Type	Length
Carrier_type	MCI7f	Numeric	8

Survey Question: Carrier type

Code	Label
1	Private - intrastate
2	Private - interstate
3	For hire - intrastate
4	For hire - interstate
5	Government
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Operation_status	MCI8f	Numeric	8

Survey Question: Operation Status

Code	Label
1	Interstate
2	Intrastate
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Operation_type	MCI9f	Numeric	8

Survey Question: Operation Type

Code	Label
01	Intercity, regular route
02	Charter and tour operations
03	Limousine operations
04	Small passenger carriers (15 or less)

05	School bus operation
06	Private motor carrier - Nonbusiness
07	Private motor carrier - Business
08	Transit (corner-to-corner)
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
Business_size	MC110f	Numeric	8

Survey Question: Business Size: total number of buses operated

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Small_bus_under_75	MC110f	Numeric	8

Survey Question: Small buses (9-15 occupants) less than 75 miles

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
small_bus_over_75	MC110f	Numeric	8

Survey Question: Small buses (9-15 occupants) greater than 75 miles

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Medium_bus	MC110f	Numeric	8

Survey Question: Medium buses (16-29 occupants)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Large_bus	MC110f	Numeric	8

Survey Question: Large buses (greater than 30 occupants)

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
school_bus	MC110f	Numeric	8

Survey Question: School buses

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
other_bus	MC110f	Numeric	8

Survey Question: Number of Other buses, specify

Code	Label
1 - 9997	Actual value
9998	More than 9997 buses
9999	Unknown

Variable Name	Format	Type	Length
carrier_experience	\$5.	Char	5

Survey Question: Carrier experience: length of time carrier has been operating under current identification.

Code	Label
00/01	1 month or less
yy/mm	Actual value of years and months
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
subject_to_regulations	MC112f	Numeric	8

Survey Question: Is the carrier subject to U.S. DOT safety regulations?

Code	Label
0	Yes, specify
1	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
ownership_1	MC113f	Numeric	8

Survey Question: Ownership of buses operated by carrier (first of up to 2 coded)

Code	Label
1	Owned by carrier
2	Subcontracted
LEASED OVER 30 DAYS	
3	From owner/operator
4	From other (specify)
SHORT TERM RENTAL	
5	From owner/operator
6	From other (specify)
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
ownership_2	\$2.	Char	1

Survey Question: Ownership of buses operated by carrier (second of up to 2 coded)

Code	Label
1	Owned by carrier
2	Subcontracted
LEASED OVER 30 DAYS	
3	From owner/operator
4	From other (specify)
SHORT TERM RENTAL	
5	From owner/operator
6	From other (specify)
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
maintenance	MC114f	Numeric	8

Survey Question: Who is responsible for maintenance of vehicles operated by carrier?

Code	Label
1	Carrier of record
2	Operator
3	Dealership/Manufacturer
4	Contracted garage
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Num_of_full_time_drivers	MC115f	Numeric	8

Survey Question: Number of full time drivers employed by carrier

Code	Label
0 - 99995	Actual value
99996	99996+ drivers
99997	Not applicable
99999	Unknown

Variable Name	Format	Type	Length
Num_of_part_time_drivers	MC116f	Numeric	8

Survey Question: Number of part time drivers employed by carrier

Code	Label
0 - 99995	Actual value
99996	99996+ drivers
99997	Not applicable
99999	Unknown

Variable Name	Format	Type	Length
methods_of_comp_1	MC117f	Numeric	8

Survey Question: Method of compensation for drivers. (first of up to 3 coded)

Code	Label
1	Fixed salary
2	By the hour
3	By the mile
4	By the hour and mile
5	Percentage of gross trip revenue
6	Flat rate or trip
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
methods_of_comp_2	\$1.	Char	1

Survey Question: Method of compensation for drivers. (Second of up to 3 coded)

Code	Label
1	Fixed salary
2	By the hour
3	By the mile
4	By the hour and mile
5	Percentage of gross trip revenue
6	Flat rate or trip
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
methods_of_comp_3	\$1.	Char	1

Survey Question: Method of compensation for drivers. (Third of up to 3 coded)

Code	Label
1	Fixed salary
2	By the hour
3	By the mile
4	By the hour and mile
5	Percentage of gross trip revenue
6	Flat rate or trip
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
on_time_performance	MC118f	Numeric	8

Survey Question: On time performance payments?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
safety_bonus	MC119f	Numeric	8

Survey Question: Safety bonus paid?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
other_pmts	MC120f	Numeric	8

Survey Question: Do you offer and other special payments to drivers besides on-time performance payments and safety bonuses?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
min_driver_age	MC121f	Numeric	8

Survey Question: Minimum age for hiring drivers?

Code	Label
01 - 96	Actual value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
min_drive_experience	\$5.	Char	5

Survey Question: What is the minimum bus driving experience criteria?

Code	Label
00/00	None
00/01 - 97/96	Actual value (yy/mm)
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
min_exp_for equip	\$5.	Char	5

Survey Question: What is the minimum experience level for the type of equipment to be operated?

Code	Label
00/00	None
00/01 - 97/96	Actual value (yy/mm)

97/97
99/99

Not applicable
Unknown

Variable Name	Format	Type	Length
prof_bus_training	MC124f	Numeric	8

Survey Question: Do you require that new drivers have passed a professional bus training program?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
pre_employ_drug_test	MC125f	Numeric	8

Survey Question: Do you require pre-employment drug and alcohol testing?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
pre_employ_background	MC126f	Numeric	8

Survey Question: Are pre-employment background checks completed before driver is permitted to drive?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
additional_background	MC127f	Numeric	8

Survey Question: Do you complete any additional driver background checks or tests beyond those specified in CFR391.21 and 391.23?

Code	Label
1	Yes (specify)
2	No

7 Not applicable
 9 Unknown

Variable Name	Format	Type	Length
carrier_adv_notice	MCI28f	Numeric	8

Survey Question: Does the carrier provide advance notice for over-the-road trips?

Code	Label
1	Yes
2	No
3	All trips scheduled well in advance
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
extend_of_notice	\$3.	Char	3

Survey Question: Extent of advance notice,

Code	Label
dd/hh	Actual days and hours value
6/0	6+ days
9/7	Not applicable
9/9	Unknown

Variable Name	Format	Type	Length
carrier_determine_2nd_jobs	MCI30f	Numeric	8

Survey Question: Does the carrier determine if the drivers have second jobs?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
_nd_jobs_considered	MCI31f	Numeric	8

Survey Question: Are second job hours considered when establishing carrier hours of service?

Code	Label
1	Yes, specify
2	No

7 Not applicable
 9 Unknown

Variable Name	Format	Type	Length
require_driver_logs	MCI32f	Numeric	8

Survey Question: Does the carrier require drivers to log each trip?

Code	Label
1	Yes
2	No, exempt
3	No, Other - specify
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
monitor_driver_hours	MCI33f	Numeric	8

Survey Question: Does the carrier monitor driver hours during trip?

Code	Label
1	Yes, specify
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
monitored_via	MCI34f	Numeric	8

Survey Question: Does the carrier monitor, download, or determine speed(s) for any buses operated by the carrier (or have the capability of doing so)?

Code	Label
0	No
1	Yes, determined by ECM
2	Yes, determined by EDR
3	Yes, determined by GPS devices
4	Yes, determined by other device, specify:
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
ownership_of_crashed_bus	MCI35f	Numeric	8

Survey Question: Ownership of crash involved bus

Code	Label
1	Owned by carrier
2	Subcontracted

LEASED OVER 30 DAYS

3	From owner/operator
4	From other (specify)

SHORT TERM RENTAL

5	From owner/operator
6	From other (specify)
7	Not applicable
8	Other (specify):
9	Unknown

Variable Name	Format	Type	Length
length_of_driver_employ	\$5.	Char	5

Survey Question: Length of time driver employed by carrier?

Code	Label
00/01	One month or less
yy/mm	Actual years and months value
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
employ_status	MCI37f	Numeric	8

Survey Question: Driver's employment status with carrier?

Code	Label
0	Not an employee
1	Full time employee
2	Part time employee
3	Casual, intermittent or occasional driver
4	Leased driver
5	Contract driver
6	Independent owner-operator contractor
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
experience_with_this_veh	\$5.	Char	5

Survey Question: Driver's experience driving this type of vehicle for this carrier

Code	Label
00/01	One month or less
yy/mm	Actual years and months value
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
qualification_file_OK	MCI39f	Numeric	8

Survey Question: Is the driver's qualification file up to date?

Code	Label
1	Yes
2	No, specify
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
med_cert	MCI40f	Numeric	8

Survey Question: Medical certification status?

Code	Label
0	None
1	Medical certification
2	Grandfathered
3	Medical waiver
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
med_cert_current	MCI41f	Numeric	8

Survey Question: If driver has medical certificate, is it current?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
med_waiver	MCI42f	Numeric	8

Survey Question: If driver has a medical waiver, who issued it?

Code	Label
1	US DOT
2	State, specify
7	Not applicable
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
date_of_waiver_expire	\$10.	Char	10

Survey Question: Date of waiver expiration? (month day year)

Code	Label
mm/dd/yyyy	Actual month, day, and year value
97/97/9997	Not applicable
99/99/9999	Unknown

Variable Name	Format	Type	Length
condition_on_waiver	\$7.	Char	7

Survey Question: Condition covered by waiver:

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
medically_qual	MC145f	Numeric	8

Survey Question: Driver medically qualified?

Code	Label
0	Less than 2 years
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
_nd_job	MC146f	Numeric	8

Survey Question: Does the driver have a second job?

Code	Label
1	Yes
2	No

7 Not applicable
9 Unknown

Variable Name	Format	Type	Length
_nd_job_hours_in_7_days	MCI47f	Numeric	8

Survey Question: If second job, number of hours worked during preceding 7days?

Code	Label
hh	Actual hours value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
random_drug_test	MCI48f	Numeric	8

Survey Question: Is the driver subject to random drug/alcohol testing?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
positive_test	MCI49f	Numeric	8

Survey Question: Has the driver ever tested positive to a random drug/alcohol test?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
substance	MCI50f	Numeric	8

Survey Question: If the driver was tested positive to a random drug/alcohol test, what substance type documented?

Code	Label
1	Alcohol
2	Prescription drug
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
follow_up_test	MCI51f	Numeric	8

Survey Question: If the driver tested positive, was a follow-up test conducted?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
trip_type	MCI52f	Numeric	8

Survey Question: Trip type

Code	Label
1	Scheduled trip (advance notification)
2	Unscheduled trip (< 8 hours advance notification)
3	Unscheduled trip (> 8 hours advance notification)
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
purpose_of_trip	MCI53f	Numeric	8

Survey Question: What was the purpose of the trip?

Code	Label
1	Line run
2	Charter
3	Deadhead
4	Corner to corner
5	Tour/Sightseeing
6	Private motor carrier
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
intended_trip_duration	\$5.	Char	5

Survey Question: Intended trip duration)

Code	Label
dd/hh	Actual days and hours value
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
one_way_this_day	MC155f	Numeric	8

Survey Question: What was the intended one-way trip distance for the day the crash/accident occurred (estimate to nearest ten miles)

Code	Label
0009	<10 miles
0010-8990	Actual value
9000	9000 miles or more
9997	Not applicable
9999	Unknown

Variable Name	Format	Type	Length
one_way_total	MC156f	Numeric	8

Survey Question: What was the intended one-way trip distance total (estimate to the nearest ten miles)?

Code	Label
0009	<10 miles
0010-8990	Actual value
9000	9000 miles or more
9997	Not applicable
9999	Unknown

Variable Name	Format	Type	Length
max_distance_from_pickup	MC157f	Numeric	8

Survey Question: What was the maximum distance the vehicle traveled or was scheduled to travel from the vehicle pick-up location? (air miles, focus: 75 mile rule)

Code	Label
0001-7776	Actual value
7777	Not applicable
9999	Unknown

Variable Name	Format	Type	Length
unusual_events	MC158f	Numeric	8

Survey Question: Did unusual events occur prior to the crash?

Code	Label
1	Yes, specify
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
times_driver_in_this_unit	MCI59f	Numeric	8

Survey Question: Number of times the driver has driven this unit during the preceding three month interval?

Code	Label
01	First time
02-29	Actual value
30	30+ times
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
monitor_driver_this_trip	MCI60f	Numeric	8

Survey Question: Did the carrier monitor the driver's hours during THIS trip?

Code	Label
1	Yes, specify
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
driver_log_trip	MCI61f	Numeric	8

Survey Question: Did the driver log this trip or use an exemption?

Code	Label
1	Logged
2	Exempt
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
how_monitored	MCI62f	Numeric	8

Survey Question: If exempt, how were driver's hours monitored?

Code	Label
0	Not monitored
1	On board computers/techographs
2	Phone check-ins
3	Time card (record)
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
did_carrier_monitor	MCI63f	Numeric	8

Survey Question: Did the carrier monitor, download, or determine speed(s) for this bus (or have the capability of doing so) this trip?

Code	Label
0	No
1	Yes, determined by ECM
2	Yes, determined by EDR
3	Yes, determined by GPS devices
4	Yes, determined by other device, specify:
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
driver_comp	MCI64f	Numeric	8

Survey Question: Driver compensation for this trip

Code	Label
01	Fixed salary
02	By the hour
03	By the mile
04	By the hour and mile
05	Percentage of gross trip revenue
06	Flat rate or trip
07	Combination of the above, specify:
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
performnace_pay_this_trip	MCI65f	Numeric	8

Survey Question: Was the driver eligible for on time performance pay on this trip?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
safety_bonus_this_trip	MCI66f	Numeric	8

Survey Question: Was the driver eligible for a safety bonus?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
special_payments	MCI67f	Numeric	8

Survey Question: Was the driver eligible for other special payments?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
driver_on_schedule	MCI68f	Numeric	8

Survey Question: At the time of the crash was the driver on schedule?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
if_not_why	MCI69f	Numeric	8

Survey Question: If driver was not on schedule at the time of the crash, why?

Code	Label
0	On schedule
1	Loading delays
2	Unloading delays
3	Traffic/weather
4	Passenger actions
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
hours_on_duty_day_of_crash	MCI70f	Numeric	8

Survey Question: Number of hours the driver was on duty at the time of the crash hours

Code	Label
hh	Actual hours value

97 Not applicable
99 Unknown

Variable Name	Format	Type	Length
hours_on_duty_day_before_crash	MCI71f	Numeric	8

Survey Question: Number of hours the driver was on duty the day before the crash

Code	Label
hh	Actual hours value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Longest_hours_worked_last_7_days	MCI72f	Numeric	8

Survey Question: Longest hours worked per day in the previous 7 day period?

Code	Label
hh	Actual hours value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Shortest_hours_worked_last_7_day	MCI73f	Numeric	8

Survey Question: Shortest hours worked per day in the previous 7 day period?

Code	Label
hh	Actual hours value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Average_hours_worked_last_7_days	MCI74f	Numeric	8

Survey Question: Average hours worked per day in the previous 7 day period?

Code	Label
hh	Actual hours value
97	Not applicable
99	Unknown

Variable Name	Format	Type	Length
Total_hours_worked_last_7_days	MCI75f	Numeric	8

Survey Question: Total hours worked the previous 7 days?

Code	Label
hhh	Actual hours value
997	Not applicable
999	Unknown

Variable Name	Format	Type	Length
supporting_documentation	MC176f	Numeric	8

Survey Question: What types of supporting documentation do you maintain?

Code	Label
1	Charter contract
2	Charter/trip order
3	Driver trip envelope
4	Tour permits
5	Trip itineraries
6	All of the above
7	Not applicable
8	Other, specify:
9	Unknown

Variable Name	Format	Type	Length
number_of_drivers	MC177f	Numeric	8

Survey Question: Motor Carrier's SAFER System Data Number of drivers

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
number_of_power_units	MC178f	Numeric	8

Survey Question: Number of power units

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
mileage_per_year	MC179f	Numeric	8

Survey Question: Mileage per year

Code Label
 * Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
time_since_MC150_submission	MC181f	Char	5

Survey Question: Time since MC150 submission date (years months) Subtract date from date of crash

Code Label
 97/97 Not applicable
 99/99 Unknown

Variable Name	Format	Type	Length
operation_classification_1	MC182f	Numeric	8

Survey Question: Operation classification (first of up to 3 coded)

Code Label
 01 Authorized for hire
 02 Exempt for hire
 03 Private (property)
 04 Private passenger (business)
 05 Private passenger (non-business)
 06 Migrant
 07 U.S. Mail
 08 Federal government
 09 State government
 10 Local government
 11 Indian Nation
 97 Other, specify
 98 Not applicable
 99 Unknown

Variable Name	Format	Type	Length
operation_classification_2	\$1.	Char	1

Survey Question: Operation classification (Second of up to 3 coded)

Code Label
 01 Authorized for hire
 02 Exempt for hire
 03 Private (property)
 04 Private passenger (business)
 05 Private passenger (non-business)
 06 Migrant

- 07 U.S. Mail
- 08 Federal government
- 09 State government
- 10 Local government
- 11 Indian Nation
- 97 Other, specify
- 98 Not applicable
- 99 Unknown

Variable Name	Format	Type	Length
operation_classification_3	\$1.	Char	1

Survey Question: Operation classification (third of up to 3 coded)

- | Code | Label |
|------|----------------------------------|
| 01 | Authorized for hire |
| 02 | Exempt for hire |
| 03 | Private (property) |
| 04 | Private passenger (business) |
| 05 | Private passenger (non-business) |
| 06 | Migrant |
| 07 | U.S. Mail |
| 08 | Federal government |
| 09 | State government |
| 10 | Local government |
| 11 | Indian Nation |
| 97 | Other, specify |
| 98 | Not applicable |
| 99 | Unknown |

Variable Name	Format	Type	Length
carrier_operation	MC183f	Numeric	8

Survey Question: Carrier operation

- | Code | Label |
|------|--------------------------|
| 1 | Interstate |
| 2 | Intrastate only (HM) |
| 3 | Intrastate only (Non HM) |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
fatal_crashes	MC184f	Numeric	8

Survey Question: Fatal crashes which occurred in the last 24 months.

Code Label
* Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
injury_crashes	MC185f	Numeric	8

Survey Question: Injury crashes which occurred in the last 24 months.

Code Label
* Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
towaway_crashes	MC186f	Numeric	8

Survey Question: Tow-away crashes which occurred in the last 24 months.

Code Label
* Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
total_crashes	MC187f	Numeric	8

Survey Question: Total crashes which occurred in the last 24 months.

Code Label
* Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_of_vehicle_inspections	MC188f	Numeric	8

Survey Question: Number of vehicle inspections

Code Label
* Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_of_vehicle_inspections_OOS	MC189f	Numeric	8

Survey Question: Number of vehicle inspections OOS

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
percent_vehicle_inspections_OOS	MC190f	Numeric	8

Survey Question: Percentage of vehicle inspections OOS

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_driver_inspections	MC191f	Numeric	8

Survey Question: Number of driver inspections

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_driver_inspections_OOS	MC192f	Numeric	8

Survey Question: Number of driver inspections OOS

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
percent_driver_inspections_OOS	MC193f	Numeric	8

Survey Question: Percentage of driver inspections OOS

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_HAZMAT_inspections	MC194f	Numeric	8

Survey Question: Number of HAZMAT inspections

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
Num_HAZMAT_inspections_OOS	MC195f	Numeric	8

Survey Question: Number of HAZMAT inspections OOS

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
percent_HAZMAT_inspections_OOS	MC196f	Numeric	8

Survey Question: Percentage of HAZMAT inspections OOS

Code	Label
*	Actual value

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
time_since_date_of_rating	\$5.	Char	5

Survey Question: Time since date of rating NOTE: Subtracted date from date of crash

Code	Label
yy/mm	Actual value
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
time_since_date_of_review	\$5.	Char	5

Survey Question: Time since date of review NOTE: Subtracted date from date of crash

Code	Label
yy/mm	Actual value
97/97	Not applicable
99/99	Unknown

Variable Name	Format	Type	Length
rating	MC199f	Numeric	8

Survey Question: Carrier Safety Rating (at the time of the crash)

Code	Label
00	Not rated
01	Satisfactory
02	Conditional
03	Unsatisfactory
09	Unknown

Variable Name	Format	Type	Length
type_of_review	MC1100f	Numeric	8

Survey Question: Type of review

Code	Label
00	No review
01	Compliance review
02	Safety review
08	Other, specify
09	Unknown

Variable Name	Format	Type	Length
review_less_than_satisfactory	MC1101f	Numeric	8

Survey Question: Previously noted review less than satisfactory

Code	Label
0	None identified
1	Yes, specify
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Common_authority_status	MC1102f	Numeric	8

Survey Question: Common authority status

Code	Label
0	None
1	Active
2	Application pending
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Contract_authority_status	MC1103f	Numeric	8

Survey Question: Contract authority status

Code	Label
0	None
1	Active
2	Application pending
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
broker_authority_status	MC1104f	Numeric	8

Survey Question: Broker authority status

Code	Label
0	None
1	Active
2	Application pending
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
passenger_carrier_status	MC1105f	Numeric	8

Survey Question: Passenger carrier status

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
insurance_required_1	MC1106f	Numeric	8

Survey Question: Insurance required, (first of up to 3 coded)

Code	Label
0	None required
1	BIPD
2	Cargo
3	Bond
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
insurance_required_2	\$1.	Char	1

Survey Question: Insurance required, (second of up to 3 coded)

Code	Label
0	None required
1	BIPD
2	Cargo
3	Bond
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
insurance_required_3	\$1.	Char	1

Survey Question: Insurance required (third of up to 3 coded)

Code	Label
0	None required
1	BIPD
2	Cargo
3	Bond
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
Insurance_requirement_met	MC1107f	Numeric	8

Survey Question: Insurance requirements met

Code	Label
0	No
1	Yes
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
driver_SEA_score	MC1108f	Numeric	8

Survey Question: SAFESTAT Driver Safety Evaluation Area (SEA) score, at the time of the crash

Code	Label
*	Actual value
999.9	Unknown or insufficient data

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
vehicle_SEA_score	MC1109f	Numeric	8

Survey Question: SAFESTAT Vehicle SEA Score, at the time of the crash

Code	Label
*	Actual value
999.9	Unknown or insufficient data

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
safety_mgmt_SEA_score	MC1110f	Numeric	8

Survey Question: SAFESTAT Safety management SEA score, at the time of the crash

Code	Label
*	Actual value
999.9	Unknown or insufficient data

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Codebook – NonMotorist Assessment Data Set

NonMotorist Assessment Data Set

The NonMotorist data set contains information on non-motorists who were involved in the crash. One record is stored for each nonmotorist. The NonMotorist data set contains the variables Case_Number and NM_Number. NM_Number is assigned to each non-motorist (i.e., pedestrian, pedal cyclist, etc.) involved in the crash. Crash_Number and NM_Number uniquely identify each record in this data set and should be used to merge the NonMotorist Assessment table data set with the crash data set.

Variable Name	Format	Type	Length
NM_age	NMA3f	Numeric	8

Survey Question: What was the age of non-motorist involved in the crash; actual age at the time of the crash?

Code	Label
00	Less than one year
97	97 years and older
99	Unknown

Variable Name	Format	Type	Length
NM_type	NMA7f	Numeric	8

Survey Question: What nonmotorist type was involved in the crash?

Code	Label
1	Pedestrian
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Skater
5	Pedalcyclist
6	Motorized scooter
8	Other (specify)
9	Unknown

Variable Name	Format	Type	Length
NM_attitude	NMA8f	Numeric	8

Survey Question: What was the nonmotorist attitude at the time of the crash?

Code	Label
1	Erect - standing
2	Crouching

- 3 Kneeling
- 4 Bending at waist
- 5 Sitting
- 6 Laying prone
- 7 Pushing a vehicle
- 8 Other (specify)
- 9 Unknown

Variable Name	Format	Type	Length
NM_motion	NMas9f	Numeric	8

Survey Question: What was the non-motorist motion at the time of the crash?

- | Code | Label |
|------|--|
| 0 | Not moving |
| 1 | Moving slowly (for activity) |
| 2 | Moving at moderate speed (normal for activity) |
| 3 | Moving rapidly (for activity) |
| 4 | Falling/stumbling/rising |
| 8 | Other (specify) |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_action_relative_to_vehicle	NMas10f	Numeric	8

Survey Question: What was the nonmotorist action relative to the vehicle?

- | Code | Label |
|------|---------------------------------|
| 00 | Stopped |
| 01 | Crossing road, straight |
| 02 | Crossing road, diagonally |
| 03 | In roadway, not moving |
| 04 | Moving in road, with traffic |
| 05 | Moving in road, against traffic |
| 06 | Off road, approaching road |
| 07 | Off road, going away from road |
| 08 | Off road, moving parallel |
| 09 | Off road, crossing driveway |
| 10 | Off road, moving along driveway |
| 98 | Other specify |
| 99 | Unknown |

Variable Name	Format	Type	Length
NM_body_to_striking_veh	NMas11f	Numeric	8

Survey Question: Nonmotorist body (chest) orientation relative to striking vehicle prior to avoidance actions.

Code	Label
1	Facing vehicle
2	Facing away
3	Left side to vehicle
4	Right side to vehicle
8	Other specify
9	Unknown

Variable Name	Format	Type	Length
first_avoid_action	NMas12f	Numeric	8

Survey Question: What was the first avoidance action?

Code	Label
0	No avoidance action
1	Stopped
2	Slowed
3	Accelerated
4	Moved left
5	Moved right
6	Moved forward
7	Moved rearward
8	Other specify
9	Unknown

Variable Name	Format	Type	Length
hand_use_in_avoid_action	NMas13f	Numeric	8

Survey Question: Hand use in avoidance action

Code	Label
0	Nonmotorist did not use hands in avoidance action
USED HANDS TO:	
1	Vault corner of vehicle
2	Vault onto vehicle
3	Brace against vehicle
8	Other specify
9	Unknown

Variable Name	Format	Type	Length
pre_impact_location	NMas14f	Numeric	8

Survey Question: What was the nonmotorist pre-impact location?

Code	Label
01	Intersection - in crosswalk
02	Intersection - on road
03	Intersection - other, specify

- 04 Intersection - unknown location
- 05 Non-intersection - in crossway
- 06 Non-intersection - on road
- 07 Non-intersection - other, specify
- 08 Non-intersection - unknown location
- 09 In crosswalk - unknown if intersection
- 98 Other, specify
- 99 Unknown

Variable Name	Format	Type	Length
crash_type	NMas15f	Numeric	8

Survey Question: Crash type, using the codes from the diagram below.

- Code Label
- 00 No impact

SINGLE DRIVER

- 01 Right roadside departure - drive off road
- 02 Right roadside departure - control/traction loss
- 03 Right roadside departure - avoid collision with vehicle, pedestrian, animal
- 04 Right roadside departure - specific other
- 05 Right roadside departure - specifics unknown
- 06 Left roadside departure - drive off road
- 07 Left roadside departure - control/traction loss
- 08 Left roadside departure - avoid collision with vehicle, pedestrian, animal
- 09 Left roadside departure - specifics other
- 10 Left roadside departure - specifics unknown
- 11 Forward impact - parked vehicle
- 12 Forward impact - stationary object
- 13 Forward impact - pedestrian/animal
- 14 Forward impact - end departure
- 15 Forward impact - specifics other
- 16 Forward impact - specifics unknown

SAME TRAFFICWAY SAME DIRECTION

- 20 Rear-end - stopped
- 21 Rear-end - stopped, straight
- 22 Rear-end - stopped, left
- 23 Rear-end - stopped, right
- 24 Rear-end - slower
- 25 Rear-end - slower, going straight
- 26 Rear-end - slower, going left
- 27 Rear-end - slower, going right
- 28 Rear-end - decelerating (slowing)
- 29 Rear-end - decelerating (slowing), going straight
- 30 Rear-end - decelerating (slowing), going left
- 31 Rear-end - decelerating (slowing), going right
- 32 Rear-end - specifics other
- 33 Rear-end - specifics unknown
- 34 Forward impact - control/traction loss

- 35 Forward impact - control/traction loss
- 36 Forward impact - control/traction loss
- 37 Forward impact - control/traction loss
- 38 Forward impact - avoid collision with vehicle
- 39 Forward impact - avoid collision with vehicle
- 40 Forward impact - avoid collision with object
- 41 Forward impact - avoid collision with object
- 42 Forward impact - specifics other
- 43 Forward impact - specifics unknown
- 44 Sideswipe/angle - straight ahead on left
- 45 Sideswipe/angle - straight ahead on left/right
- 46 Sideswipe/angle - changing lanes to the right
- 47 Sideswipe/angle - changing lanes to the left
- 48 Sideswipe/angle - specifics other
- 49 Sideswipe/angle - specifics unknown

SAME TRAFFICWAY OPPOSITE DIRECTION

- 50 Head-on - lateral move (left/right)
- 51 Head-on - lateral move (going straight)
- 52 Head-on - specifics other
- 53 Head-on - specifics unknown
- 54 Forward impact - control/traction loss
- 55 Forward impact - control/traction loss
- 56 Forward impact - control/traction loss
- 57 Forward impact - control/traction loss
- 58 Forward impact - avoid collision with vehicle
- 59 Forward impact - avoid collision with vehicle
- 60 Forward impact - avoid collision with object
- 61 Forward impact - avoid collision with object
- 62 Forward impact - specifics other
- 63 Forward impact - specifics unknown
- 64 Sideswipe/angle - lateral move (left/right)
- 65 Sideswipe/angle - lateral move (going straight)
- 66 Sideswipe/angle - specifics other
- 67 Sideswipe/angle - specifics unknown

CHANGE TRAFFICWAY VEHICLE TURNING

- 68 Turn across path - initial opposite directions (left/right)
- 69 Turn across path - initial opposite directions (going straight)
- 70 Turn across path - initial same directions (turning right)
- 71 Turn across path - initial same directions (going straight)
- 72 Turn across path - initial same directions (turning left)
- 73 Turn across path - initial same directions (going straight)
- 74 Turn across path - specifics other
- 75 Turn across path - specifics unknown
- 76 Turn into same direction (turning left)
- 77 Turn into same direction (going straight)
- 78 Turn into same direction (turning right)
- 79 Turn into same direction (going straight)
- 80 Turn into opposite directions (turning right)
- 81 Turn into opposite directions (going straight)
- 82 Turn into opposite directions (turning left)

- 83 Turn into opposite directions (going straight)
- 84 Turn into path - specifics other
- 85 Turn into path - specifics unknown

INTERSECTING PATHS (VEHICLE DAMAGE)

- 86 Straight paths - striking from the right
- 87 Straight paths - struck on the right
- 88 Straight paths - striking from the left
- 89 Straight paths - struck on the left
- 90 Straight paths - specifics other
- 91 Straight paths - specifics unknown

MISCELLANEOUS

- 92 Backing vehicle
- 93 Other vehicle or object
- 98 Other crash type, specify
- 99 Unknown

Variable Name	Format	Type	Length
NM_have_roght_of_way	NMas16f	Numeric	8

Survey Question: Did this nonmotorist have the right-of-way?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_required_to_stop_yield	NMas17f	Numeric	8

Survey Question: Was this nonmotorist required to stop or yield prior to crash occurrence?

- | Code | Label |
|------|--|
| 0 | No |
| 1 | Yes, required to yield right-of-way |
| 2 | Yes, required to stop at stop sign |
| 3 | Yes, required to stop at flashing red signal |
| 4 | Yes, required to stop at red/yellow/green signal |
| 5 | Yes, required to stop to pick up/drop off passengers |
| 7 | Not applicable |
| 8 | Yes, other reason, specify: |
| 9 | Unknown |

Category	Configuration	CRASH TYPES (includes intent)					
I Single Driver	A. Right roadside departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH. PED. ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN	
	B. Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH. PED. ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN	
	C. Forward Impact	11 PARKED VEHICLE	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-end	20 STOPPED 21,22,23	24 SLOWER 25,26,27	28 DECEL 29,30,31	22, 23, 25, 26, 27, 29, 30, 31	(EACH * 32) SPECIFICS OTHER	(EACH * 33) SPECIFICS UNKNOWN
	E. Forward Impact	34 CONTROL/ TRACTION LOSS	36 CONTROL/ TRACTION LOSS	38 AVOID COLLISION WITH VEHICLE	40 AVOID COLLISION WITH OBJECT	(EACH * 42) SPECIFICS OTHER	(EACH * 43) SPECIFICS UNKNOWN
	F. Sideswipe/Angle	44 45	46 47	45		(EACH * 48) SPECIFICS OTHER	(EACH * 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G. Head-on	50 LATERAL MOVE	51		(EACH * 52) SPECIFICS OTHER	(EACH * 53) SPECIFICS UNKNOWN	
	H. Forward Impact	54 CONTROL/ TRACTION LOSS	56 CONTROL/ TRACTION LOSS	58 AVOID COLLISION WITH VEHICLE	60 AVOID COLLISION WITH OBJECT	(EACH * 62) SPECIFICS OTHER	(EACH * 63) SPECIFICS UNKNOWN
	I. Sideswipe/Angle	64 LATERAL MOVE	65			(EACH * 66) SPECIFICS OTHER	(EACH * 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turning	J. Turn Across Path	68 INITIAL OPPOSITE DIRECTIONS	71 INITIAL SAME DIRECTION	73		(EACH * 74) SPECIFICS OTHER	(EACH * 75) SPECIFICS UNKNOWN
	K. Turn Into Path	77 TURN INTO SAME DIRECTION	79 TURN INTO OPPOSITE DIRECTION	80	81	(EACH * 84) SPECIFICS OTHER	(EACH * 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L. Straight Paths	86 87	88 89		(EACH * 90) SPECIFICS OTHER	(EACH * 91) SPECIFICS UNKNOWN	
VI Misc.	M. Backing Etc.	92 BACKING VEHICLE	93 OTHER VEHICLE OR OBJECT	98 Other Crash Type 99 Unknown Crash Type 00 No impact			

Variable Name	Format	Type	Length
critical_preocrash_event	NMas18f	Numeric	8

Survey Question: Critical precrash event

Code Label

THIS VEHICLE LOSS OF CONTROL DUE TO

- 010 Blow out or flat tire
- 020 Stalled engine
- 030 Disabling vehicle failure (e.g., wheel fell off), specify
- 040 Minor non-disabling vehicle problem (e.g., hood flew up), specify
- 050 Poor road conditions (puddle, pothole, ice, etc.) specify
- 060 Excessive speed
- 070 Driver non-performance, specify
- 080 Other cause of control loss, specify
- 090 Unknown reason for cause of control loss

THIS VEHICLE TRAVELING OVER EDGE OF ROADWAY

- 100 Over left edge of roadway
- 101 Over right edge of roadway
- 102 End departure
- 199 Unknown which edge this vehicle traveled over

THIS VEHICLE IN ANOTHER VEHICLE'S LANE

- 200 Stopped
- 210 Traveling in same direction with lower steady speed
- 215 Traveling in same direction while decelerating
- 220 Traveling in same direction with higher speed
- 230 Traveling in opposite direction
- 290 Unknown direction/speed in another vehicles lane

THIS VEHICLE ENCROACHING INTO ANOTHER VEHICLES LANE

NOT AT JUNCTION

- 300 From adjacent lane (opposite direction)
- 310 From adjacent lane (same direction) - over left lane line
- 320 From adjacent lane (same direction) - over right lane line
- 330 From parallel/diagonal parking lane
- 390 Unknown direction of encroachment into another vehicles lane

THIS VEHICLE ENCROACHING INTO ANOTHER VEHICLE'S LANE

AT JUNCTION

- 410 Entering intersection, turning into same direction
- 411 Entering intersection, straight across path
- 412 Entering intersection, turning across path
- 413 Entering intersection, turning into opp direction
- 429 Entering intersection, intended path not known
- 430 Entering driveway, alley access, etc ...
- 440 From driveway, alley, turning into same direction
- 441 From driveway, alley, across path
- 442 From driveway, alley, turning into opp direction
- 459 From driveway, alley, intended path not known

- 460 Entering from Yield Entrance (Ramp/Channel)
- 497 Encroaching - other
- 498 Encroaching - details unknown

THIS MOTOR VEHICLE - DETAILS UNKNOWN

- 499 This motor vehicle initiated critical event - details unknown

OTHER MOTOR VEHICLE IN THIS VEHICLE'S LANE

- 500 Other vehicle stopped
- 510 Traveling in same direction with lower steady speed
- 515 Traveling in same direction while decelerating
- 520 Traveling in same direction with higher speed
- 530 Traveling in opposite direction
- 560 Backing
- 590 Unknown direction/speed of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

- 600 From adjacent lane (opposite direction)
- 610 From adjacent lane (same direction) - over left lane line
- 620 From adjacent lane (same direction) - over right lane line
- 630 From parallel/diagonal parking lane
- 690 Unknown direction of other vehicles encroachment

OTHER MOTOR VEHICLE ENCROACHING INTO LANE: AT JUNCTION

- 710 Entering intersection, turning into same direction
- 711 Entering intersection, straight across path
- 712 Entering intersection, turning across path
- 713 Entering intersection, turning into opp. direction
- 729 Entering intersection, intended path not known
- 730 Entering driveway, alley access, etc ...
- 740 From driveway, alley, turning into same direction
- 741 From driveway, alley, across path
- 742 From driveway, alley, turning into opp. direction
- 759 From driveway, alley ... intended path not known
- 760 Entering from Yield Entrance (Ramp/Channel)
- 797 Encroaching - Other
- 798 Encroaching - details unknown

OTHER MOTOR VEHICLE - UNKNOWN DETAILS

- 799 Other motor vehicle initiated critical event - details unknown

PEDESTRIAN, PEDALCYCLIST, NONMOTORIST, ANIMAL

- 800 Pedestrian in roadway
- 801 Pedestrian approaching roadway
- 809 Pedestrian - unknown location
- 810 Pedalcyclist or other nonmotorist in roadway specify
- 811 Pedalcyclist or other nonmotorist approaching roadway specify
- 819 Pedalcyclist or other nonmotorist - unknown location specify
- 830 Animal in roadway
- 831 Animal approaching roadway
- 839 Animal - unknown location
- 840 Object in roadway
- 841 Object approaching roadway
- 849 Object - unknown location

OTHER

- 994 More than two vehicles involved
- 998 Other critical precrash event, specify
- 999 Unknown

Variable Name	Format	Type	Length
critical_reason_for_critical_eve	NoMas19f	Numeric	8

Survey Question: Critical reason for the critical event

- Code Label
- 000 Critical event not coded to this vehicle

NONMOTORIST RELATED REASON FOR CRITICAL EVENT*Physical Critical Non-Performance Factors*

- 100 Sleep, that is, actually asleep
- 101 Heart attack, stroke or other sudden physical impairment of the ability to act
- 102 Alcohol or drug use
- 101 Other permanent physical impairment, specify
- 108 Other critical non-performance, specify
- 109 Unknown critical non-performance

Inattention/Distraction Factor

- 110 Inattention (i.e., daydreaming)
- 111 Internal distraction
- 112 External distraction
- 113 Other inattention/distraction factor, specify
- 114 Inattention/distraction factor - not further specified

Recognition Factor

- 120 Inadequate surveillance - failed to look
- 121 Inadequate surveillance - looked but did not see
- 122 Line of sight obstructed
- 123 Line of sight obscured
- 124 Other recognition factor, specify
- 125 Recognition factor - not further specified

Decision Factor

- 130 Too fast for conditions
- 131 Too slow for traffic stream
- 132 Misjudgment of gap or speed of other vehicle or Nonmotorist
- 133 Following too closely to respond to unexpected actions
- 134 False assumption of other road users actions
- 135 Illegal maneuver
- 136 Failure to turn on head lamps
- 137 Inadequate evasive action, e.g., braking only, not braking and steering
- 138 Aggressive driving behavior
- 139 Operated vehicle with known problem, specify
- 140 Other decision error, specify
- 141 Decision error - not further specified

Performance Factor

- 150 Failure to act (panic/freezing)
- 151 Overcompensation

- 152 Poor directional control, e.g., failing to control vehicle with skill ordinarily expected
- 154 Other performance error, specify
- 155 Performance error - not further specified
- General Nonmotorist Factor*
- 199 General Nonmotorist factor - not further specified

VEHICLE RELATED REASON FOR CRITICAL EVENT

- 200 Tires/wheels failed
- 201 Brakes failed
- 202 Steering failed
- 203 Cargo shifted
- 204 Trailer attachment failed
- 205 Suspension failed
- 206 Lights failed
- 207 Vehicle related vision obstructions
- 208 Body, doors, hood failed
- 298 Other vehicle failure, specify
- 299 Vehicle failure - not further specified

ENVIRONMENT RELATED REASON FOR CRITICAL EVENT HIGHWAY RELATED FACTOR

- 500 Signs/signals missing
- 501 Signs/signals erroneous/defective
- 502 Signs/signals inadequate
- 503 View obstructions by roadway design (curve, grade)
- 504 View obstructions by other environment factor (trees, peds)
- 505 View obstructed by other vehicles
- 506 Road design - roadway geometry (e.g., ramp curvature)
- 507 Road design - sight distance
- 508 Road design - other
- 509 Maintenance problems (potholes, deteriorated road edges, etc.)
- 510 Slick roads (low friction road surface due to ice, loose debris, any other cause)
- 518 Other highway-related condition, specify
- 519 Highway Factor - not further specified
- Weather Related Factor*
- 521 Rain, snow
- 522 Fog
- 523 Wind gust
- 528 Other weather-related condition, specify
- 529 Weather factor - not further specified
- Other Environmental Factor*
- 530 Glare
- 531 Blowing debris
- 538 Other sudden change in ambience, specify
- 539 Other environmental factor - not further specified

UNKNOWN REASON FOR CRITICAL EVENT

- 999 Unknown reason for critical event

Variable Name	Format	Type	Length
alcohol_use	NMas20f	Numeric	8

Survey Question: Was the nonmotorist influenced by Alcohol use?

Code	Label
00	No alcohol use identified
**	Code BAC test results, (0.xx)
92	Field observation of Researcher
93	AC test performed, results negative
95	AC test performed, results positive
96	AC test performed, results unknown
97	Not applicable
98	No driver present
99	Unknown

Variable Name	Format	Type	Length
source_of_BAC_test	NMas21f	Numeric	8

Survey Question: What was the source of BAC test result?

Code	Label
0	No BAC test result provided
1	Police reported
2	Medical record
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
time_delay	NMas22f	Char	5

Survey Question: What was the time delay between the crash and nonmotorist BAC test?

Code	Label
00:00	No physical factors
hh:mm	Actual time between crash and BAC test
97:97	Not applicable
99:99	Unknown

Variable Name	Format	Type	Length
illegal_drug_use_1	NMas23f	Numeric	8

Survey Question: Was the nonmotorist influenced by Illegal drug use? (First of up to 3 coded)

Code	Label
00	No illegal drug use identified

01 Amphetamine
 02 Cocaine
 03 Crack Cocaine
 04 Hashish
 05 Heroin
 06 Lysergic Acid Diethylamide (LSD)
 07 Marijuana
 08 Methadone
 09 Methamphetamine
 10 Morphine
 11 Opium
 12 Phencyclidine (PCP)
 13 Pentobarbital/Secobarbital
 14 Tetrahydrocannabinol (THC)
 97 Not applicable
 98 Other, specify
 99 Unknown

Variable Name	Format	Type	Length
illegal_drug_use_2	\$2.	Char	2

Survey Question: Was the nonmotorist influenced by Illegal drug use? (Second of up to 3 coded)

Code	Label
00	No illegal drug use identified
01	Amphetamine
02	Cocaine
03	Crack Cocaine
04	Hashish
05	Heroin
06	Lysergic Acid Diethylamide (LSD)
07	Marijuana
08	Methadone
09	Methamphetamine
10	Morphine
11	Opium
12	Phencyclidine (PCP)
13	Pentobarbital/Secobarbital
14	Tetrahydrocannabinol (THC)
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
illegal_drug_use_3	\$2.	Char	2

Survey Question: Was the nonmotorist influenced by Illegal drug use? (Third of up to 3 coded)

Code	Label
00	No illegal drug use identified
01	Amphetamine
02	Cocaine
03	Crack Cocaine
04	Hashish
05	Heroin
06	Lysergic Acid Diethylamide (LSD)
07	Marijuana
08	Methadone
09	Methamphetamine
10	Morphine
11	Opium
12	Phencyclidine (PCP)
13	Pentobarbital/Secobarbital
14	Tetrahydrocannabinol (THC)
97	Not applicable
98	Other, specify
99	Unknown

Variable Name	Format	Type	Length
source_of_illegal_drug_use	NMas24f	Numeric	8

Survey Question: What was the source of illegal drug presence?

Code	Label
0	No illegal drug presence determined
1	Yes, medical record determined
2	Yes, police determined
3	Yes, researcher determined
4	Yes, determined by other, specify:
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
OTC_meds_1	NMas25f	Numeric	8

Survey Question: Was the nonmotorist using Over-The-Counter medication? (First of up to two coded)

Code	Label
00	No OTC use
01	Advil
02	Advil cold medicine
03	Bayer aspirin
04	Ibuprofin
05	Laxative
06	Meijer aspirin- free
07	Motrin

08	No Doze
09	Perrigo
10	Sudafed
11	Travis D
12	Tylenol
13	Tylenol PM
14	Vicks Nyquil
15	Vitamins
97	Not applicable
98	Other, specify:
99	Unknown

Variable Name	Format	Type	Length
OTC_meds_2	\$2.	Char	2

Survey Question: Was the nonmotorist using Over-The-Counter medication? (Second of up to two coded)

Code	Label
00	No OTC use
01	Advil
02	Advil cold medicine
03	Bayer aspirin
04	Ibuprofin
05	Laxative
06	Meijer aspirin- free
07	Motrin
08	No Doze
09	Perrigo
10	Sudafed
11	Travis D
12	Tylenol
13	Tylenol PM
14	Vicks Nyquil
15	Vitamins
97	Not applicable
98	Other, specify:
99	Unknown

Variable Name	Format	Type	Length
RX_meds_use_1	NMas26f	Numeric	8

Survey Question: Was the nonmotorist using Prescription medication? (First of up to 3 coded)

Code	Label
000	No drug use
001	High blood pressure meds
002	Lipitor

003	Atenolol
004	Glucophage
005	Prozac
006	Benzodiazepines
007	Birth control
008	Synthroid
009	Zoloft
010	Norvasc
011	Diabetes medication
012	Paxil
013	Zocor
014	Glucotrol XL
015	Glyboride
016	Zyrtec
017	Albuterol
018	Claritin
019	Prilosec
020	Vioxx
021	Xanax
022	Insulin
098	Other, specify
099	Unknown

Variable Name	Format	Type	Length
RX_meds_use_2	\$3.	Char	3

Survey Question: Was the nonmotorist using Prescription medication? (Second of up to 3 coded)

Code	Label
000	No drug use
001	High blood pressure meds
002	Lipitor
003	Atenolol
004	Glucophage
005	Prozac
006	Benzodiazepines
007	Birth control
008	Synthroid
009	Zoloft
010	Norvasc
011	Diabetes medication
012	Paxil
013	Zocor
014	Glucotrol XL
015	Glyboride
016	Zyrtec
017	Albuterol
018	Claritin
019	Prilosec

020	Vioxx
021	Xanax
022	Insulin
098	Other, specify
099	Unknown

Variable Name	Format	Type	Length
RX_meds_use_3	\$3.	Char	3

Survey Question: Was the nonmotorist using Prescription medication? (Third of up to 3 coded)

Code	Label
000	No drug use
001	High blood pressure meds
002	Lipitor
003	Atenolol
004	Glucophage
005	Prozac
006	Benzodiazepines
007	Birth control
008	Synthroid
009	Zoloft
010	Norvasc
011	Diabetes medication
012	Paxil
013	Zocor
014	Glucotrol XL
015	Glyboride
016	Zyrtec
017	Albuterol
018	Claritin
019	Prilosec
020	Vioxx
021	Xanax
022	Insulin
098	Other, specify
099	Unknown

Variable Name	Format	Type	Length
NM_fatigue	NMas27f	Numeric	8

Survey Question: Was the nonmotorist fatigued?

Code	Label
1	Nonmotorist fatigued
2	Nonmotorist not fatigued
9	Unknown if Nonmotorist fatigued

Variable Name	Format	Type	Length
NM_illness	NMas28f	Numeric	8

Survey Question: Did the nonmotorist have an Illness?

Code	Label
0	No illness factors
1	Heart attack or stroke
2	Seizure (epilepsy related)
3	Seizure (other source)
4	Blackout (diabetes related)
5	Blackout (other source)
6	Severe cold/flu symptoms
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
vision	NMas29f	Numeric	8

Survey Question: How was the nonmotorist Vision?

Code	Label
0	Normal vision indicated
1	Legal blindness
2	Near-sighted condition, corrected with eyewear
3	Near-sighted condition, eyewear not used at time of crash
4	Far-sighted condition, corrected with eyewear
5	Far-sighted condition, eyewear not used at time of crash
6	Glaucoma
7	Not applicable (no driver present)
8	Other sight impairment, specify
9	Unknown

Variable Name	Format	Type	Length
hearing	NMas30f	Numeric	8

Survey Question: How was the nonmotorist Hearing?

Code	Label
0	Normal hearing indicated
1	Legal deafness
2	Hearing deficiency, corrected with hearing aid
3	Hearing deficiency, not corrected
4	Hearing deficiency due to environmental effects (noise)
5	Hearing deficiency due to induced factor (radio, headset)
7	Not applicable (no driver present)
8	Other hearing impairment, specify
9	Unknown

Variable Name	Format	Type	Length
other_physical_factors_1	NMas31f	Numeric	8

Survey Question: Did the nonmotorist have other physical factors? (First of up to 3 coded)

Code	Label
0	No additional physical factors
1	Prosthesis, specify
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Sleep disorder, specify
5	Recent period(s) of poor or inadequate sleep
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
other_physical_factors_2	\$1.	Char	1

Survey Question: Did the nonmotorist have other physical factors? (Second of up to 3 coded)

Code	Label
0	No additional physical factors
1	Prosthesis, specify
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Sleep disorder, specify
5	Recent period(s) of poor or inadequate sleep
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
other_physical_factors_3	\$1.	Char	1

Survey Question: Did the nonmotorist have other physical factors? (Third of up to 3 coded)

Code	Label
0	No additional physical factors
1	Prosthesis, specify
2	Paraplegia or wheelchair restricted
3	Requires the use of cane, crutches or walker
4	Sleep disorder, specify
5	Recent period(s) of poor or inadequate sleep

- 7 Not applicable
- 8 Other, specify
- 9 Unknown

Variable Name	Format	Type	Length
other_activities	NMas32f	Numeric	8

Survey Question: Did other activities affect the nonmotorist physical factors?

- | Code | Label |
|------|---|
| 0 | No additional activities affecting physical factors |
| 1 | Strenuous recreational activities |
| 2 | Strenuous household activities |
| 3 | Working multiple jobs |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
inattention	NMas33f	Numeric	8

Survey Question: Was the nonmotorist Inattention at the time of the crash?

- | Code | Label |
|------|--|
| 0 | Attentive to task |
| 1 | Not attentive - daydreaming/tuned out |
| 2 | Not attentive - preoccupied with personal problem(s) |
| 3 | Not attentive - troubled by recent argument(s) |
| 7 | Not applicable |
| 8 | Other inattention, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
distracted_by_conversation	NMas34f	Numeric	8

Survey Question: Was the nonmotorist distracted by conversation at the time of the crash?

- | Code | Label |
|------|---|
| 0 | Not distracted by conversation |
| 1 | Conversing with person physically present |
| 2 | Talking on phone |
| 3 | Talking on CB radio |
| 7 | Not applicable |
| 8 | Other, specify: |
| 9 | Unknown |

Variable Name	Format	Type	Length
distracted_by_other_factor	NMas35f	Numeric	8

Survey Question: Was the nonmotorist distracted by other interior or localized factors at the time of the crash?

Code	Label
0	Not distracted by other factors
1	While dialing/hanging up phone
2	While adjusting radio/CD player
3	While adjusting other controls
4	While retrieving object
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
dsitracted_by_person	NMas36f	Numeric	8

Survey Question: Was the nonmotorist distracted by person, object, or event at the time of the crash?

Code	Label
0	Not distracted by person, object, event
1	Looking at previous crash
2	Looking at approaching traffic
3	Looking for street address
4	Looking at outside person
5	Looking at building
6	Unspecified outside focus
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
inadequate_surveillance	NMas37f	Numeric	8

Survey Question: Did the nonmotorist have inadequate surveillance?

Code	Label
0	Surveillance was adequate
1	Failed to look far enough straight ahead
2	Failed to look either side ahead
3	Failed to look to side
4	Failed to look to rear (mirrors)
5	Other, specify
6	Looked, but did not see
7	Not applicable

- 8 Other, specify
- 9 Unknown

Variable Name	Format	Type	Length
line_of_sight_obstructed	NMas38f	Numeric	8

Survey Question: Was the nonmotorist line of sight obstructed?

- | Code | Label |
|------|---|
| 00 | Line of sight was not obstructed |
| 01 | Yes, view obstructed by roadway curvature |
| 02 | Yes, view obstructed by roadway grade |
| 03 | Yes, view obstructed by roadside appurtenance |
| 04 | Yes, view obstructed by tree(s), bush(es), etc. |
| 05 | Yes, view obstructed by building |
| 06 | Yes, view obstructed by person(s) outside vehicle |
| 07 | Yes, view obstructed by another vehicle(s) |
| 08 | Yes, view obstructed by vehicle passenger(s) |
| 09 | Yes, view obstructed by vehicle component(s) |
| 97 | Not applicable |
| 98 | Other, specify: |
| 99 | Unknown |

Variable Name	Format	Type	Length
line_of_sight_obscured	NMas39f	Numeric	8

Survey Question: Was the nonmotorist line of sight obscured?

- | Code | Label |
|------|---|
| 00 | Line of sight was not obscured |
| 01 | Yes, view obscured by sun glare |
| 02 | Yes, view obscured by headlight glare |
| 03 | Yes, view obscured by other glare, specify: |
| 04 | Yes, view obscured by rain |
| 05 | Yes, rain obscured by fog |
| 06 | Yes, view obscured by dark/night condition |
| 07 | Yes, view obscured by person(s) outside vehicle |
| 08 | Yes, view obscured by another vehicle(s) |
| 09 | Yes, view obscured by vehicle passenger(s) |
| 10 | Yes, view obscured by vehicle component(s) |
| 97 | Not applicable |
| 98 | Yes, other condition, specify: |
| 99 | Unknown |

Variable Name	Format	Type	Length
other_NM_recognition_factors	NMas40f	Numeric	8

Survey Question: Are there any other nonmotorist recognition factors?

Code	Label
0	No additional other recognition factors
1	Impending problem masked by traffic flow pattern
2	Nonmotorist focused on extraneous vehicle
3	Other recognition error, specify:
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
misjudge_gap_distance	NMas46f	Numeric	8

Survey Question: Did the nonmotorist have misjudgment of gap distance to, or velocity of, other vehicle?

Code	Label
0	No misjudgement of gap distance or velocity
1	Yes, misjudged gap or speed
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
false_asumption	NMas47f	Numeric	8

Survey Question: Did the nonmotorist have false assumption about other road user's actions?

Code	Label
0	No false assumptions of other party's actions
1	Assumed that other party would act differently
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
illegal_maneuver_1	NMas48f	Numeric	8

Survey Question: Did the nonmotorist complete an illegal maneuver? (First of up to 3 coded)

Code	Label
0	No illegal maneuvers identified
1	Crossed full barrier lines
2	Passed on right (drove off pavement to pass)
3	Turned from wrong lane
4	Initiated illegal U-turn
5	Failed to stop for TCD
6	Drove wrong way on one-way road
7	Not applicable

- 8 Other illegal maneuver, specify
- 9 Unknown

Variable Name	Format	Type	Length
illegal_maneuver_2	\$1.	Char	1

Survey Question: Did the nonmotorist complete an illegal maneuver? (Second of up to 3 coded)

- | Code | Label |
|------|--|
| 0 | No illegal maneuvers identified |
| 1 | Crossed full barrier lines |
| 2 | Passed on right (drove off pavement to pass) |
| 3 | Turned from wrong lane |
| 4 | Initiated illegal U-turn |
| 5 | Failed to stop for TCD |
| 6 | Drove wrong way on one-way road |
| 7 | Not applicable |
| 8 | Other illegal maneuver, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
illegal_maneuver_3	\$1.	Char	1

Survey Question: Did the nonmotorist complete an illegal maneuver? (Third of up to 3 coded)

- | Code | Label |
|------|--|
| 0 | No illegal maneuvers identified |
| 1 | Crossed full barrier lines |
| 2 | Passed on right (drove off pavement to pass) |
| 3 | Turned from wrong lane |
| 4 | Initiated illegal U-turn |
| 5 | Failed to stop for TCD |
| 6 | Drove wrong way on one-way road |
| 7 | Not applicable |
| 8 | Other illegal maneuver, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
inadequate_evasive_action	NMas49f	Numeric	8

Survey Question: Did the nonmotorist have an inadequate evasive action?

- | Code | Label |
|------|---|
| 0 | No inadequate evasive action identified |
| 1 | Insufficient steering inputs |
| 2 | Insufficient braking input |

- 4 Combination of insufficient steering and braking inputs
- 7 Not applicable
- 8 Other inadequate evasive action, specify:
- 9 Unknown

Variable Name	Format	Type	Length
other_decision_factors	NMas51f	Numeric	8

Survey Question: Did the nonmotorist have other decision factors present?

- | Code | Label |
|------|---|
| 0 | No additional decision factors identified |
| 1 | Crossed/turned with obstructed view |
| 2 | Stopped when not required |
| 3 | Proceeded with insufficient clearance |
| 4 | Turned without signaling |
| 5 | Failure to turn on headlights |
| 6 | Legal, but unsafe actions, specify |
| 7 | Not applicable |
| 8 | Other decision error, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_upset	NMas52f	Numeric	8

Survey Question: Was the nonmotorist upset prior to crash?

- | Code | Label |
|------|--|
| 0 | No indication that nonmotorist was upset |
| 1 | Nonmotorist appears to have been upset |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_in_hurry	NMas54f	Numeric	8

Survey Question: Was this nonmotorist in a hurry prior to crash?

- | Code | Label |
|------|---|
| 0 | Nonmotorist did not appear to be in a hurry |
| 1 | Yes, due to work related schedule |
| 2 | Yes, to make up time |
| 3 | Yes, late for business appointment |
| 4 | Yes, late for social appointment |
| 5 | Yes, late for start of work shift/school |
| 6 | Yes, always in a hurry |
| 7 | Not applicable |

- 8 Other, specify
- 9 Unknown

Variable Name	Format	Type	Length
other_emotional_factors	NMas55f	Numeric	8

Survey Question: Did the nonmotorist experience any other emotional factors?

- | Code | Label |
|------|---|
| 0 | No additional emotional factors |
| 1 | Nonmotorist clinically depressed |
| 2 | Nonmotorist has a diagnosed psychosis, specify: |
| 7 | Not applicable |
| 8 | Other factors, specify: |
| 9 | Unknown |

Variable Name	Format	Type	Length
comfort_with_road_and_enviro	NMas59f	Numeric	8

Survey Question: Was the nonmotorist comfortable with roadway & environment?

- | Code | Label |
|------|--|
| 0 | Comfortable with roadway & environment |
| 1 | Uncomfortable with roadway surface |
| 2 | Uncomfortable with roadway terrain (mountains/urban) |
| 3 | Uncomfortable with surrounding traffic densities |
| 4 | Uncomfortable with general traffic speeds |
| 5 | Uncomfortable with general traffic flow, specify: |
| 6 | Uncomfortable with climate/weather (not from area) |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_under_work_related_pressure	NMas60f	Numeric	8

Survey Question: Was the nonmotorist under work-related pressure?

- | Code | Label |
|------|---|
| 0 | Not under work-related pressure |
| 1 | Learning new position |
| 2 | Work schedule |
| 3 | Forced to accept jobs with little/no advance notice |
| 4 | Forced to accept jobs when ill |
| 7 | Not applicable |
| 8 | Other pressure, specify: |
| 9 | Unknown |

Variable Name	Format	Type	Length
traffic_flow_interrupt_1	NMas64f	Numeric	8

Survey Question: What are the nonmotorist's traffic flow interruption factors? (First of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
traffic_flow_interrupt_2	\$1.	Char	1

Survey Question: What are the nonmotorist's traffic flow interruption factors? (Second of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
traffic_flow_interrupt_3	\$1.	Char	1

Survey Question: What are the nonmotorist's traffic flow interruption factors? (Third of up to 4 coded)

Code	Label
0	No traffic flow interruptions
1	Previous crash nearby
2	Construction work zone
3	School zone or designated student crossing zone in use
4	Designated pedestrian crossing zone in use
5	Emergency vehicle approaching
6	Congestion

- 8 Other, specify
- 9 Unknown

Variable Name	Format	Type	Length
traffic_flow_interrupt_4	\$1.	Char	1

Survey Question: What are the nonmotorist's traffic flow interruption factors? (Fourth of up to 4 coded)

- | Code | Label |
|------|--|
| 0 | No traffic flow interruptions |
| 1 | Previous crash nearby |
| 2 | Construction work zone |
| 3 | School zone or designated student crossing zone in use |
| 4 | Designated pedestrian crossing zone in use |
| 5 | Emergency vehicle approaching |
| 6 | Congestion |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
road_related_factors_1	NonMas65f	Numeric	8

Survey Question: Did the nonmotorist a roadway related factors? (First of up to 2 coded)

- | Code | Label |
|------|---|
| 00 | No roadway related factors |
| 01 | Traffic signs/signals missing |
| 02 | Traffic signs/signals misunderstood/unclear to driver |
| 03 | Roadway view obstructions |
| 04 | Roadway geometry (e.g., ramp curvature, median width) |
| 05 | Road sight distance insufficient |
| 06 | Lane delineation problem (not present, worn, etc.) |
| 07 | Narrow shoulders |
| 08 | Narrow road |
| 09 | Ramp speed |
| 10 | Roadway condition (potholes, deteriorated road edges, etc.) |
| 11 | Slick surface (low friction value due to icy condition, loose debris, or any other cause) |
| 12 | Road under water |
| 13 | Road washed out |
| 97 | Not applicable |
| 98 | Other roadway problem, specify: |
| 99 | Unknown |

Variable Name	Format	Type	Length
road_related_factors_2	\$1.	Char	1

Survey Question: Did the nonmotorist a roadway related factors? (Second of up to 2 coded)

Code	Label
00	No roadway related factors
01	Traffic signs/signals missing
02	Traffic signs/signals misunderstood/unclear to driver
03	Roadway view obstructions
04	Roadway geometry (e.g., ramp curvature, median width)
05	Road sight distance insufficient
06	Lane delineation problem (not present, worn, etc.)
07	Narrow shoulders
08	Narrow road
09	Ramp speed
10	Roadway condition (potholes, deteriorated road edges, etc.)
11	Slick surface (low friction value due to icy condition, loose debris, or any other cause)
12	Road under water
13	Road washed out
97	Not applicable
98	Other roadway problem, specify:
99	Unknown

Variable Name	Format	Type	Length
weather_factors_1	NMas69f	Numeric	8

Survey Question: Where there weather related factors? (First of up to 3 coded)

Code	Label
0	No weather related factors
1	Rain
2	Snow
3	Fog
4	Wind gust
5	Hail
6	Sleet
7	Not applicable
8	Other, specify
9	Unknown

Variable Name	Format	Type	Length
weather_factors_2	\$1.	Char	1

Survey Question: Where there weather related factors? (Second of up to 3 coded)

Code	Label
0	No weather related factors
1	Rain
2	Snow

- 3 Fog
- 4 Wind gust
- 5 Hail
- 6 Sleet
- 7 Not applicable
- 8 Other, specify
- 9 Unknown

Variable Name	Format	Type	Length
weather_factors_3	\$1.	Char	1

Survey Question: Where there weather related factors? (Third of up to 3 coded)

- | Code | Label |
|------|----------------------------|
| 0 | No weather related factors |
| 1 | Rain |
| 2 | Snow |
| 3 | Fog |
| 4 | Wind gust |
| 5 | Hail |
| 6 | Sleet |
| 7 | Not applicable |
| 8 | Other, specify |
| 9 | Unknown |

Variable Name	Format	Type	Length
other_envir_factors_1	NMas70f	Numeric	8

Survey Question: Are there any other environmental factors? (First of up to 3 coded)

- | Code | Label |
|------|---|
| 0 | No other factors |
| 1 | Glare |
| 2 | Blowing debris |
| 3 | Smoke |
| 7 | Not applicable |
| 8 | Other sudden change in ambience, specify: |
| 9 | Unknown |

Variable Name	Format	Type	Length
other_envir_factors_2	\$1.	Char	1

Survey Question: Are there any other environmental factors? (Second of up to 3 coded)

- | Code | Label |
|------|------------------|
| 0 | No other factors |
| 1 | Glare |
| 2 | Blowing debris |

- 3 Smoke
- 7 Not applicable
- 8 Other sudden change in ambience, specify:
- 9 Unknown

Variable Name	Format	Type	Length
other_envir_factors_3	\$1.	Char	1

Survey Question: Are there any other environmental factors? (Third of up to 3 coded)

- | Code | Label |
|------|----------------------------------|
| 0 | No other factors |
| 1 | Glare |
| 2 | Blowing debris |
| 3 | Smoke |
| 7 | Not applicable |
| 8 | Other sudden change in ambience, |
| 9 | Unknown |

Codebook – NonMotorist Interview Data Set

NonMotorist Interview Data Set

The NonMotorist Interview data set contains interview information on non-motorists who were involved in the crash. One record is stored for each non-motorist interview. The NonMotorist Interview data set contains the variables Case_Number and NM_Number. NM_Number is assigned to each non-motorist (i.e., pedestrian, pedal cyclist, etc.) interview involved in the crash. Crash_Number and NM_Number uniquely identify each record in this data set and should be used to merge the NonMotorist Interview data set with the crash data set.

Variable Name	Format	Type	Length
how_do_you_feel	NMInt3f	Numeric	8

Survey Question: How do you/did you [nonmotorist] feel overall?

Code	Label
1	Great
2	Good
3	Fair
4	Poor
5	Terrible
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
do_you_wear_glasses	NMInt4f	Numeric	8

Survey Question: Do you [nonmotorist] wear glasses or contacts?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
lenses_correct	NMInt5f	Numeric	8

Survey Question: If you [nonmotorist] do wear glasses, what do the lenses correct?

Code	Label
1	Myopic (near sighted condition)
2	Hyperopic (far sighted condition)
7	Not applicable

8 Other
9 Unknown

Variable Name	Format	Type	Length
corrected_vision	\$5.	Char	5

Survey Question: What is your [nonmotorist] corrected vision level (e.g. 20/20, 20/40, etc.)

Code	Label
/	Actual vision level
97/97	Not applicable
99/99	Unknown

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
wearing_glasses	NMInt7f	Numeric	8

Survey Question: Were you [nonmotorist] wearing glasses or contacts at the time of the crash?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
sight_impairment	NMInt8f	Numeric	8

Survey Question: Do you [nonmotorist] have a sight impairment? (e.g., need to get glasses, cataracts, colorblind, glaucoma)

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
hearing_deficiencies	NMInt9f	Numeric	8

Survey Question: Do you [nonmotorist] have any hearing deficiencies?

Code	Label
1	Yes

2 No
7 Not applicable
9 Unknown

Variable Name	Format	Type	Length
hearing_aid	NMInt10f	Numeric	8

Survey Question: Were you [nonmotorist] using a hearing aid device at the time of the crash?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
RX_meds	NMInt11f	Numeric	8

Survey Question: Are you [nonmotorist] taking any prescription medications?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
OTC_meds	NMInt12f	Numeric	8

Survey Question: Are you [nonmotorist] taking any over the counter medications? (e.g. cold medicines, no-doze, etc)

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
doc_aware_of_meds	NMInt13f	Numeric	8

Survey Question: Is your [nonmotorist] doctor aware of all of the medications you are taking?

Code	Label
1	Yes
2	No
9	Unknown

Variable Name	Format	Type	Length
alert_before_trip	NMInt14f	Numeric	8

Survey Question: How alert were you [nonmotorist] just before this trip?

Code	Label
1	Very alert
2	Alert
3	Tired
4	Fatigued
5	Asleep
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Daydreaming	NMInt15f	Numeric	8

Survey Question: Prior to the crash, were you [nonmotorist] inattentive, day dreaming or tuned out?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
thinking_of_problems	NMInt16f	Numeric	8

Survey Question: Prior to the crash, were you [nonmotorist] thinking of personal, family, financial employment concerns/problems/events?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Disagree_in_6_hours	NMInt17f	Numeric	8

Survey Question: Had you [nonmotorist] been in a disagreement or argument within the last 6 hours?

Code	Label
1	Yes
2	No

7 Not applicable
9 Unknown

Variable Name	Format	Type	Length
Disagree_in_12_hours	NMInt18f	Numeric	8

Survey Question: Had you [nonmotorist] been in a disagreement or argument within the last 12 hours?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Distraacted	NMInt19f	Numeric	8

Survey Question: Were you [nonmotorist] distracted?

Code	Label
01	Not distracted
02	Looked, but did not see
DISTRACTED	
03	By other nonmotorists
04	While using a cell phone
05	While conversing with occupant of another vehicle (not striking vehicle)
06	While reading book/magazine
07	By thoughts of recent arguments or other problems (health, finances, marriage?)
08	While eating or drinking
09	Smoking related
10	Looking at buildings
11	Looking at other vehicles
12	Looking for street address
13	Retrieving fallen object
98	Other
99	Unknown

Variable Name	Format	Type	Length
looking_prior_to	NMInt20f	Numeric	8

Survey Question: Where were you [nonmotorist] looking prior to the start of collision course?

Code	Label
1	Looking right
2	Looking left

- 3 Looking straight ahead
- 4 Looking rearward
- 7 Not applicable
- 8 Other
- 9 Unknown

Variable Name	Format	Type	Length
direction_of_attn	NMInt21f	Numeric	8

Survey Question: Nonmotorist direction of attention after start of collision course?

- | Code | Label |
|------|------------------------|
| 1 | Looking right |
| 2 | Looking left |
| 3 | Looking straight ahead |
| 4 | Looking rearward |
| 8 | Other |
| 9 | Unknown |

Variable Name	Format	Type	Length
understand_signs	NMInt22f	Numeric	8

Survey Question: Can you [nonmotorist] read and understand road signs and traffic control devices present?

- | Code | Label |
|------|---------|
| 1 | Yes |
| 2 | No |
| 9 | Unknown |

Variable Name	Format	Type	Length
comm_in_English	NMInt23f	Numeric	8

Survey Question: How well can you [nonmotorist] communicate in English?

- | Code | Label |
|------|-------------|
| 0 | Not at all |
| 1 | Poorly |
| 2 | Fairly well |
| 3 | Very well |
| 4 | Excellently |

Variable Name	Format	Type	Length
look_for_traffic	NMInt24f	Numeric	8

Survey Question: Did the nonmotorist check/look for traffic prior to initiating action or continuing into the collision course?

Code	Label
0	No, did not look or check
1	Yes, looked and saw
2	Yes, looked, but did not recognize
3	Yes, looked, but did not see
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
focus_on_destination	NMInt25f	Numeric	8

Survey Question: After checking for traffic, did you [nonmotorist] focus on your intended destination?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
line_of_sight_obstructed	NMInt26f	Numeric	8

Survey Question: Was your [nonmotorist] line of sight to the vehicle obstructed?

Code	Label
1	Line of sight was clear
2	Obstructed by roadway curvature
3	Obstructed by roadway grade
4	Obstructed by building
5	Obstructed by trees/shrubbery
6	Obstructed by other roadside object
7	Not applicable
8	Obstructed other
9	Unknown

Variable Name	Format	Type	Length
view_clear	NMInt27f	Numeric	8

Survey Question: Was your [nonmotorist] view of the striking vehicle clear? (Not obscured by glare, etc.)

Code	Label
1	View was clear - not obscured
2	View obscured by sun glare
3	View obscured by headlight glare
4	View obscured by other glare
5	View obscured by rain/fog condition

- 6 View obscured by dark/night viewing condition
- 7 Not applicable
- 8 View obscured by other condition
- 9 Unknown

Variable Name	Format	Type	Length
location_of_veh	NMInt28f	Numeric	8

Survey Question: What was the location of the vehicle prior to the maneuver, with respect to you [nonmotorist]?

- | Code | Label |
|------|----------------|
| 01 | Left front |
| 02 | Left side |
| 03 | Left rear |
| 04 | Right front |
| 05 | Right side |
| 06 | Right rear |
| 07 | Rearward |
| 08 | Forward |
| 97 | Not applicable |
| 98 | Other |
| 99 | Unknown |

Variable Name	Format	Type	Length
NM_speed	NMInt29f	Numeric	8

Survey Question: Nonmotorist speed prior to start of collision course

- | Code | Label |
|------|------------------------------|
| 0 | Stopped |
| 1 | Accelerating, did not stop |
| 2 | Constant speed, did not stop |
| 3 | Decelerating |
| 7 | Not applicable |
| 8 | Other |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_stoped	NMInt30f	Numeric	8

Survey Question: If stopped, what was the period of time stopped prior to start of collision course?

- | Code | Label |
|------|---------------------------------------|
| 0 | Did not stop |
| 1 | Rolling stop prior to proceeding |
| 2 | Stopped <1 second prior to proceeding |

- 3 Stopped 1-2 seconds prior to proceeding
- 4 Stopped 3-4 seconds prior to proceeding
- 5 Stopped 5-10 seconds prior to proceeding
- 6 Stopped more than 10 seconds
- 7 Not applicable
- 9 Unknown

Variable Name	Format	Type	Length
Veh_speed	NMInt31f	Numeric	8

Survey Question: What was the other vehicle travel speed prior to start of collision path?

- | Code | Label |
|------|------------------------------|
| 0 | Stopped |
| 1 | Accelerating, did not stop |
| 2 | Constant speed, did not stop |
| 3 | Decelerating |
| 7 | Not applicable |
| 8 | Other |
| 9 | Unknown |

Variable Name	Format	Type	Length
veh_stopped	NMInt32f	Numeric	8

Survey Question: If stopped, what was the period of time other vehicle stopped prior to start of collision course?

- | Code | Label |
|------|--|
| 0 | Did not stop |
| 1 | Rolling stop prior to proceeding |
| 2 | Stopped <1 second prior to proceeding |
| 3 | Stopped 1-2 seconds prior to proceeding |
| 4 | Stopped 3-4 seconds prior to proceeding |
| 5 | Stopped 5-10 seconds prior to proceeding |
| 6 | Stopped more than 10 seconds |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
in_a_hurry	NMInt33f	Numeric	8

Survey Question: Were you [nonmotorist] in a hurry prior to the crash occurrence?

- | Code | Label |
|------|----------------|
| 1 | Yes |
| 2 | No |
| 7 | Not applicable |
| 9 | Unknown |

Variable Name	Format	Type	Length
Driver_in_hurry	NMInt34f	Numeric	8

Survey Question: Did the other driver/nonmotorist appear to be in a hurry prior to crash occurrence?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Hearing_restricted	NMInt35f	Numeric	8

Survey Question: Was your [nonmotorist] hearing restricted by anything before the crash?

Code	Label
0	No hearing restrictions
NONMOTORIST'S HEARING RESTRICTED BY:	
1	Use of portable radio/cassette/CD player
2	Wind noise
3	Traffic noise
4	Construction noise
5	Helmet configuration
8	Other
9	Unknown

Variable Name	Format	Type	Length
misjudge_approach	NMInt36f	Numeric	8

Survey Question: Did the nonmotorist attempt an action (turn, cross, etc.) and misjudged the approach speed of the other vehicle(s)?

Code	Label
0	No
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
misjudge_gap	NMInt37f	Numeric	8

Survey Question: Did the nonmotorist attempt an action (turn, cross, etc.) and misjudge the gap distance to the other vehicle(s)?

Code	Label
0	No

1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
NM_stated_speed	NMInt38f	Numeric	8

Survey Question: What was the nonmotorist stated speed before start of collision course?

Code	Label
00	Stopped
**	Code actual speed in MPH
98	98+ MPH
99	Unknown

Note: Asterisk in code column indicates that the stored value is the same as the value in the label column.

Variable Name	Format	Type	Length
gap_or_speed_related_to_hurry	NMInt39f	Numeric	8

Survey Question: Was either gap distance or speed related to being in a hurry?

Code	Label
1	Yes
2	No
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
Lane_change	NMInt40f	Numeric	8

Survey Question: Did the crash involve a lane change maneuver?

Code	Label
0	No
1	Yes, by this nonmotorist
2	Yes, by other vehicle
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
alter_speed_during_lane_change	NMInt41f	Numeric	8

Survey Question: Did you [nonmotorist] alter your speed during the lane change maneuver?

Code	Label
1	Yes, accelerated
2	Yes, decelerated
3	No, traveling at constant velocity
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
other_alter_speed_lane_change	NMInt42f	Numeric	8

Survey Question: Did the other driver alter speed during the lane change maneuver?

Code	Label
1	Yes, accelerated
2	Yes, decelerated
3	No, traveling at constant velocity
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
risk_taking_beh	NMInt43f	Numeric	8

Survey Question: Did you [nonmotorist] exhibit any risk taking behavior during the pre-crash phase?

Code	Label
0	Did not exhibit risk taking behavior
1	Nonmotorist exhibited risk taking behavior
9	Unknown

Variable Name	Format	Type	Length
assume_about_driver	NMInt44f	Numeric	8

Survey Question: Did you [nonmotorist] make any assumptions concerning the actions of the driver of the striking vehicle?

Code	Label
0	No assumption involved
1	Assumed driver of striking vehicle would stop/yield the right-of-way
2	Assumed driver of striking vehicle was aware of nonmotorist's presence
7	Not applicable
8	Other faulty assumption
9	Unknown

Variable Name	Format	Type	Length
make_decision_errors	NMInt45f	Numeric	8

Survey Question: Did you [nonmotorist] make any other decision errors?

Code	Label
0	No other decision error
1	Yes
7	Not applicable
9	Unknown

Variable Name	Format	Type	Length
beh_assoc_with_performance	NMInt46f	Numeric	8

Survey Question: Did you [nonmotorist] exhibit behavior associated with performance errors

Code	Label
0	No performance error
1	Nonmotorist panicked/froze
2	Nonmotorist overcompensated
3	Nonmotorist maintained poor directional control
4	Alcohol and/or drug use caused impaired performance
5	Physical impairment affected performance (specify)
7	Not applicable
8	Other performance error (specify)
9	Unknown

Variable Name	Format	Type	Length
NM_age	NMInt47f	Numeric	8

Survey Question: What was the Nonmotorists's age at time of crash?

Code	Label
00	Less than one year old
97	97 years and older
99	Unknown

Variable Name	Format	Type	Length
NM_race	NMInt51f	Numeric	8

Survey Question: Non-Motorist's race/ethnic origin

Code	Label
1	White (non-Hispanic)
2	Black (non-Hispanic)
3	White (Hispanic)
4	Black (Hispanic)
5	American Indian, Eskimo or Aleut
6	Asian or Pacific Islander
7	Other

- 8 No driver present
- 9 Unknown

Variable Name	Format	Type	Length
NM_injured	NMInt52f	Numeric	8

Survey Question: Were you [nonmotorist] injured?

- | Code | Label |
|------|---------------------------|
| 0 | No injury |
| 1 | Possible injury |
| 2 | Non-incapacitating injury |
| 3 | Incapacitating injury |
| 4 | Killed |
| 5 | Injury, severity unknown |
| 6 | Died prior to crash |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_transported	NMInt53f	Numeric	8

Survey Question: Were you [nonmotorist] transported directly from the scene for medical treatment?

- | Code | Label |
|------|---------|
| 1 | Yes |
| 2 | No |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_relative_to_veh	NMInt54f	Numeric	8

Survey Question: Nonmotorist body (chest) orientation relative to striking vehicle prior to avoidance actions?

- | Code | Label |
|------|-----------------------|
| 1 | Facing vehicle |
| 2 | Facing away |
| 3 | Left side to vehicle |
| 4 | Right side to vehicle |
| 8 | Other |
| 9 | Unknown |

Variable Name	Format	Type	Length
NM_1st_avoidance	NMInt55f	Numeric	8

Survey Question: Nonmotorist first avoidance action?

Code	Label
01	No avoidance action
02	Stopped
03	Turned away from vehicle
04	Dove or fell away
05	Accelerated pace
06	Reduced pace
07	Jumped
08	Turned toward vehicle
98	Other
99	Unknown

Variable Name	Format	Type	Length
Ped_hand_use	NMInt56f	Numeric	8

Survey Question: Pedestrian's hand use in avoidance action

Code	Label
0	No pedestrian involved
1	No hand use

USED HANDS TO

3	Vault corner of vehicle
4	Vault onto vehicle
5	Brace against vehicle
7	Not applicable
8	Other
9	Unknown

Variable Name	Format	Type	Length
veh_under_driver_s_control	NMInt57f	Numeric	8

Survey Question: Was the vehicle under the driver's control?

Code	Label
1	Vehicle under control
2	Vehicle not under control
8	Other
9	Unknown

Variable Name	Format	Type	Length
driver_avoidance	NMInt58f	Numeric	8

Survey Question: Did the driver of the vehicle take any avoidance actions?

Code	Label
1	Yes
2	No

7 Not applicable
9 Unknown

Variable Name	Format	Type	Length
veh_ped_interaction	NMInt59f	Numeric	8

Survey Question: Vehicle/Pedestrian Interaction

Code	Label
01	Carried by vehicle, wrapped position
02	Carried by vehicle, slid to windshield
03	Carried by vehicle, position unknown
04	Passed over by vehicle
05	Thrown straight forward
06	Thrown forward and left of vehicle
07	Thrown forward and right of vehicle
08	Knocked to pavement, forward
09	Knocked to pavement, left of vehicle
10	Knocked to pavement, right of vehicle
11	Knocked to pavement, run over or dragged by vehicle
12	Shunted to left (corner impacts only)
13	Shunted to right (corner impacts only)
14	Bumped or pushed aside
15	Snagged, rotated
16	Snagged, dragged by vehicle
17	Foot or legs run over
98	Other
99	Unknown